

TRANSPORTATION  
RESEARCH

Number 391, March 1992

# CIRCULAR



## Port-Land Access: Public Policy Issues



**PORT-LAND ACCESS: PUBLIC POLICY ISSUES**

**Proceedings of Session Number 93**

**70th Annual Meeting of the  
Transportation Research Board  
January 15, 1991  
Washington, D.C.**

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Subscriber Category  
VIII freight, marine, and intermodal transportation

Transportation Research Board  
National Research Council  
2101 Constitution Avenue, N.W.  
Washington, D.C. 20418

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**The Transportation Research Board** is a unit of the National Research Council, which serves as an independent advisor to the federal government on scientific and technical questions of national importance. The Research Council, jointly administered by the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, brings the resources of the entire scientific and technical community to bear on national problems through its volunteer advisory committees.

## ACKNOWLEDGEMENTS

The TRB Committee on Ports and Waterways wishes to recognize the direct support, assistance and counsel of several individuals and organizations.

The Transportation Research Board staff member, Ken Cook, encouraged the Roundtable from the start and provided valuable guidance in its formation. Christina Casgar was very helpful in the post-Roundtable publication process.

Organizational assistance was also provided by the Graduate Center for Public Policy and Administration, California State University, Long Beach, and the University of California Transportation Center, Berkeley.

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## INTRODUCTION

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The Transportation Research Board (TRB), a unit of the National Research Council, seeks to broaden the understanding of the complex, interdependent U.S. transportation system. It works to inform decision makers through expert panels, studies, and a broad dissemination of information and research findings on transportation policy, planning, design, maintenance and operating practices. The TRB is a respected source of facts on which policy decisions are based. This proceeding addressing port-land access is a product of the Ports and Waterway Committee (A1B08), one of three hundred committees, panels and task forces carrying out the work of the Board.

The "Port-Land Access: Public Policy Issues" panel convened on January 15, 1991, as part of the TRB Annual Meeting, to address the complexities of this key issue currently before decision makers. Ports and their linking of highways, railways, and waterways take world trade beyond the dock to and from U.S. industry and agriculture. The waterfront environment of the port is designed, not just for cargo handling, for there is no substitute for this function, but for its aesthetics and ecological values as well. Hence, its use must be shared and carefully allocated to insure that both cargo handling

capability and landside access are maintained for future generations. Successful transportation links from the cargo handling port are based on numerous partnerships, some contractual but most from established conventions. Today the partners -- the local governments, the neighborhoods, the unions, the states and the federal government -- are reassessing their priorities for land use. The successful transportation partnership, so critical in resource-scarce times, must be fostered and nourished. The catalyst may be the port, the shipper, the ocean carriers, the rail industry, the longshoreman unions, or the governments, among many other players. The key to adequate access is communication of mutual port and linking transportation needs followed by careful participatory planning.

This TRB panel of regional and national experts representing private and public interests addressed access to the ports, and related problems, solutions and most importantly, the dialogues necessary to realize workable long-term alternatives.

Arlene L. Dietz  
Chairman, Ports and Waterways Committee

## OVERVIEW

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The nation's ports, both coastal and inland, are facing a dilemma. It is a challenge to a large degree resulting from their own successes.

In most cases, ports were one of the very first transportation systems developed. As their role of point-of-entry to unexplored or undeveloped areas grew, so too did their surrounding populations. Eventually, competing interests were bound to converge, or even collide.

Today, ports must conduct business in an increasingly complex and difficult urban arena. It involves far more than loading or unloading the cargo and getting to or from the port. Ports must be a good neighbor, contributor to the community, job creator, and tax revenue generator.

Such dual-purpose roles are also expected of the entire transportation industry serving ports. For some, it is a new task and somewhat unexpected. For others, it is a familiar responsibility necessary to conducting business in the area.

It is in this multipurpose, sometimes conflicting, set of requirements, responsibilities and expectations that ports and the surface transportation community find themselves operating.

The timing of the subject, **Ports-Land Access: Public Policy Issues**, is especially important, when viewed against parallel trends:

- growing U.S. international trade;
- intense international economic competition;
- worsening urban traffic congestion in port regions;
- increasing awareness of environmental quality in port regions; and
- acceptance of leadership position by seaports for land access issues.

At the same time, certain policy windows of opportunity should be considered:

- reauthorization of the U.S. Surface Transportation Assistance Act (passed October 1991);
- new national Transportation Policy Statement;
- new state-level Transportation Policy Statements;
- technological developments in transportation, service hardware and software; and
- indications of improved communication and cooperation between transportation labor and management.

With the growing focus on port-land access issues, more coordinated approaches and solutions will be developed and applied. To be successful, they must address a broad spectrum of issues, including:

1. transportation system supply and future capacity
2. transportation system demand
3. equipment
4. rights-of-way
5. technology
6. environmental needs
7. safety
8. permits
9. labor
10. management
11. funds
12. land use competition

Consider what the benefits are from successfully negotiating such challenges: more efficient logistical systems, newer technologies, less urban and highway disruption, fewer railroad delays, cleaner air and energy savings; and for the consumer: lower transportation costs. The bottom line for the nation is a stronger, competitive trade position.

Peter L. Shaw, PhD.  
California State University, Long Beach

## PRESENTATIONS

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*California and the Pacific Rim Trade*  
 Robert I. Remen<sup>1</sup>, Executive Director  
 California Transportation Commission

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### Introduction

California's commercial ports are major generators of jobs and income, and provide a vital link to the nation's trading partners in the Pacific Rim and throughout the world. During Fiscal Year 1988, over 166 million metric revenue tons of cargo flowed through California's ports. This volume is expected to grow to over 524 million metric revenue tons by 2020.

To keep pace with the burgeoning Pacific Rim trade, harbor facilities -- wharves, docks, etc. -- must expand. Expansion and modernization of harbor facilities are meaningless, however, without adequate highway and railroad access to move the cargo to and from the docks.

Port access studies conducted in several regions have identified critical issues that need to be addressed regarding the rail and highway infrastructure serving harbor areas. Significant improvements in port access are essential if California's ports are to maintain a leadership role in world trade.

### The Economic Impact of the California Public Port Industry

The economic significance of California's ports can hardly be overstated, both in terms of their current economic impact in the state, as well as their anticipated growth and development plans. The ports not only play a vital role in the distribution of goods, but they also provide substantial economic benefits to the State and the nation, in terms of jobs, personal income, business revenue, and taxes.

Major economic impacts of California's deep-water commercial ports are:

The ports represent a \$50-\$75 billion industry in the state, measured in terms of the direct, indirect, and induced effects on business revenues.

Approximately 600,000-750,000 jobs statewide are directly or indirectly related to port activities.

Port-related operations generate approximately \$2.0-\$2.5 billion in State and local taxes.

Federal customs receipts from California Customs Districts exceeded \$4 billion in 1988, up by more than 39 percent since 1984.

Combined total tonnage for California's ports amounts to more than 166 million metric revenue tons per year.

Nearly 14,000 vessels called at California's ports in 1988.

Over the next 5 to 10 years, the ports will direct as much as \$1.8 billion of capital investment into the construction of port facilities. Much of this investment will be for additional capacity to port terminals and support facilities in anticipation of sustained long-term demand for cargo handling facilities.

### Goods Movement

California has benefitted tremendously from a dynamic and competitive port industry. The State's ports would compare favorably in terms of tonnage, dollar value of cargo, and containers handled with most of the major trading countries in the world. No other State in the U.S. exceeds California in the variety of import/export commodities, the number of trading partners, or the value of world trade.

The business revenue and employment impacts encompass the maritime industry (firms located within a port or with operational interests in a port) as well as firms that use ports for importing or exporting of goods.

The maritime industry includes firms engaged in cargo handling and services, shipbuilding and repair, port development, government maritime services, and U.S.-flag shipping company headquarters. Industries which use ports are many and varied. Some major industries which use ports are agriculture, high technology, petroleum, metals, textiles and apparel, food processing, chemicals, and transportation equipment.

### Non-Goods Movement

In providing the interface between the water and land modes of transportation, ports play a vital role in the

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<sup>1</sup>Presented by Dr. Charles C. Oldham, Deputy Executive Director, California Transportation Commission

movement of cargo. But California ports also make an important contribution to our nation's defense. Many U.S. Navy vessels use Home Port Status at California ports. The U.S. Navy also uses the ports for ship repair, logistical support, and training. The economic impact of military spending, when combined with the economic benefits which result from commercial cargo operations, is quite formidable.

California ports also play a role in the promotion of tourism and recreational activities. Notable ports in this regard include the Port of San Francisco (Fisherman's Wharf/Pier 39), Port of Oakland (Jack London Square), Port of Long Beach (Queen Mary/Spruce Goose), Port of Los Angeles (Ports O'Call) and the Port of San Diego (Seaport Village).

#### *Landside Improvements*

When the non-cargo-related operations are considered together with the cargo-related activities, it is clear that the economic impact of the public port industry in California is very significant. However, these economic benefits are threatened by the increasing traffic congestion on highway facilities in the state. Therefore, support for access improvements to the ports is clearly in the State's interest.

The benefits of improving the land side access to the ports are many and varied. They include increased business revenues, income and jobs, time saved, greater safety, an improved environment, and quality of life.

Providing modern port facilities and upgrading port access is critical to economic growth, considering that up to 50% of the total delivered cost of any cargo is transportation-related (ocean shipping, rail, truck, transfer, and handling costs). State-produced exports and foreign imports simply would not be moved in the same volume or be available at reasonable prices if it were not for the vital interchange in transportation modes that the ports in California provide.

#### **Basic Congestion Problems in California**

Congestion on California highways and roads has made the management and operation of the state's transportation system a critical issue for government and business leaders and the public. California's quality of life and economic vitality will depend on ensuring adequate mobility with an improved and modernized-statewide transportation system.

Several factors will determine the quality of transportation in California after the year 2000, including an estimated 27% increase in the State's population, a 16% increase in the number of licensed drivers, a 23%

increase in registered vehicles, and a 30% increase in vehicle miles of travel.

Changing land use and traffic patterns will increase miles of travel between home and the workplace. These factors have already made congestion problems severe in many metropolitan areas of the State:

Californians lose 400,000 hours per day due to congestion on freeways, and that delay is projected to increase 74% by 1995 and climb another 65% by 2005. Currently, 300 miles of the state freeway system are subject to recurring congestion, compared with an average of 30 miles of daily freeway congestion in 1963.

On the Los Angeles and San Francisco freeways congestion is increasing at annual rates of 15 and 27%, respectively.

Increasingly, the State's congestion problem affects the economy. Economic vitality depends on the ability to move goods and services efficiently and the ability of commuters to get to and from their places of employment in a timely manner. Often, unmanaged congestion generates a hostile reaction by the electorate against preparing for, let alone encouraging, future growth.

Transportation problems take on national and international dimensions when traffic delays begin to affect the State's economic competition with other states. In particular, international shippers and port-related businesses are quick to relocate to other West Coast states when California's transportation system does not provide convenient access to port facilities.

#### *Responding to Congestion*

The increasing volume of port-related traffic must be considered when addressing the broad problem of congestion on the State's highways and roads. Plans to improve ground access to ports must compete with other proposed transportation improvements designed to alleviate congestion.

To address immediate traffic demand, the State must cooperate with regional and local government agencies, the ports, and the business community in implementing Transportation System Management (TSM) projects. These entities should also work closely to move capacity enhancement projects through the planning, environmental review, design and construction processes expeditiously.

The opportunity for port authorities to address their highest priority ground access problems exists through similar partnerships with local, regional, State, and

federal government agencies. Given the congestion problem and the limited amount of transportation revenue, a partnership approach is essential to port access improvements.

### **Port Access Problems**

Managing port growth in times of increasing urbanization, heightened environmental awareness, and limited financial resources is perhaps the greatest challenge facing California's ports today. The success of port expansion efforts depends on the development of feasible plans to facilitate port access while mitigating negative impacts of truck and rail traffic.

Over time, urban areas have grown up around the ports and the ports themselves have contributed much to this economic development. Maritime activities must compete with other commercial, industrial, and residential activities for land and transportation access. Building consensus among the ports and competing interests in the surrounding areas has become a key objective in port strategic planning.

Communities have become more and more concerned about the environmental impacts of port growth. For example, air quality compliance program advocates have proposed truck restrictions during peak hours. These programs may have beneficial impacts on air quality and congestion, but could have serious impacts on port operations.

Conflicts between economic and environmental interests will surely escalate unless significant improvements to port access infrastructure are made. Port access improvements, such as grade separations and highway widening projects, not only facilitate goods movement but they help to mitigate adverse environmental impacts of port growth, making it more likely that ports will receive community support for port expansion projects.

Financing these improvements will require a public/private partnership, yet historically, ports have been responsible only for the facilities needed to transfer cargo between water and land transport. Channel deepening projects were the responsibility of the federal government, while landside access was provided by state and local government and by railroads. In 1986, the federal government significantly reduced its level of responsibility for channel improvements.

### **Highway Access Issues**

Some ports are served by state highways, either arterials

or freeways, but others are served by local streets and roads. Trucks share roadways with all other forms of vehicular traffic, and are subject to peak period congestion in urban areas typical of port environments. The degree to which ports are a major contributor to truck traffic and highway congestion can seriously impact the ability of a port to expand, with a resulting loss in economic benefits to the surrounding community.

### **Specific Rail Access Issues**

Rail access to some ports is via branch lines connecting to rail yards or trunk lines at some distance from the waterfront. In a few cases, rail line-haul routes directly service the port complex.

A major change in the maritime industry in the past few years is the increasing substitution of overland rail for water transit through the Panama Canal, for Pacific Rim cargo moving to Gulf and East Coast regions of the U.S. This combined sea-rail movement is shifting a greater percentage of U.S. import/export cargo to West Coast ports.

"On-dock" and "near-dock" intermodal rail yards can significantly reduce the amount of trucks on the roadways in urban areas. By reducing the distance containers must be trucked to rail yards, truck vehicle miles of travel, truck accidents, and truck emissions can be substantially reduced.

One obstacle to increased rail service can be the vertical clearance of key railroad tunnels. "Double stack" trains, which consist of special low-slung rail cars designed to carry one container stacked on top of another, require greater vertical clearance than the traditional single stack or trailer on flatcar trains. Although the Port of Oakland has already participated financially in tunnel improvements far outside the port area, obtaining funds for other tunnel improvement projects is a key concern of Bay Area ports.

Environmental trade-offs must be addressed in increasing rail traffic at ports. Communities are increasingly concerned about traffic delays at grade crossings and the ability of emergency vehicles to cross the tracks. Train noise is another problem, in areas where railroad tracks traverse residential areas.

For San Pedro Bay ports (Los Angeles and Long Beach) the provision of on-dock and near-dock rail yards will result in more trains impacting highway traffic at grade crossings. These ports are in the process of consolidating all train traffic to the ports onto a single corridor, allowing funds for mitigating the environmental impacts of increased train traffic to be concentrated in this one corridor.



## **Dredging/Port Operational Improvements**

The ability to fund ongoing costs related to dredging is a major issue. Without required depth to handle new generation and/or specialized deep-water vessels, the economic impacts to port areas and the state are significant. Dredging is not state funded under current law. However, current state policy regarding environmental, mitigation and disposal issues in some cases is dramatically affecting ports' ability to maintain and expand cargo handling capability.

For inland ports, such as Sacramento, the ability to fund dredging is critical. Without dredging, some ports may close or become non-viable for efficient cargo movement. Cargo could be diverted to other California ports causing more highway congestion in those areas, or cargo and the associated economic benefits could leave California altogether.

It is important that California maintain its current statewide port system to successfully facilitate the distribution of goods. To the extent that non-highway improvements can positively impact the state highways, such improvements should be considered for state financial assistance. Operational improvements, such as barge systems, are an alternative to truck transport, and therefore could relieve traffic congestion, facilitate safety, lessen maintenance and improve air quality.

## **Port Improvement Costs**

The estimated cost of port access improvements in California is beyond the capacity of any realistic combination of current local and state funding sources. It should be noted, however, that to the extent these projects are not completed, the ongoing costs, in terms of dollars and environmental impacts associated with congestion and delay, will continue to escalate.

For example, a study conducted by the Southern California Association of Governments indicates that elimination of 16 at-grade railroad crossings and consolidation of rail traffic on the Alameda Street corridor north of the ports of Los Angeles and Long Beach, would result in a savings of 8,200 vehicle hours of delay per day. Failure to adequately address port access could ultimately have a serious adverse impact on California's participation in the economic benefits of water-borne commerce.

To put the level of funding in perspective, the estimated current value of investment in port waterside facilities in the state exceeds \$5 billion. Port development projects currently programmed within the

next 5 to 10 years alone will require from the ports' own funds expenditures estimated at over \$1.8 billion. Additional port access needs will approach \$1 billion. These facility and access expenditures are of very substantial benefit to the citizens of California.

Given the magnitude of identified port access improvements, it is clear that a combination of state, federal, local, and private sources of funds will be required. Public financing for port access projects should be vigorously pursued, but it must be recognized that no single funding source will be sufficient. A public-private partnership will be essential.

## **Recommendations**

To move port access projects forward, several key actions need to be taken:

1. Ports should work closely with the State Department of Transportation, regional planning agencies, and local transportation commissions to clearly define port access projects in terms of scope, cost, delivery schedules, etc., and have those projects proposed for state funding.

The ports must take the initiative and promote projects of importance to them. Successfully obtaining funding for a port access project requires a thorough knowledge of the funding process and the various organizations that interact within that process. Competition for state transportation funds is intense, and ports must present their case effectively.

2. Conversely, the state, regional planning agencies and local transportation commissions should become more aware of port ground access issues and the relation of port growth to the economic well-being of the State.

The State and regional/local transportation agencies should develop a cooperative and responsive approach to port access issues. These agencies should establish a port liaison to act as the principal contact/coordinator for port access improvements.

The coordinators should assist the ports to present their case to decision makers, thus making sure that port access projects are considered for state funding.

3. Ports should propose new laws that would allow projects not eligible under current law to be considered for State funding.

There are a number of specific port access problems that are not eligible for State funding under current California law. The ports must take the initiative and propose specific legislation to allow State funds to be used for railroad projects, and other operational improvements that could relieve congestion on State highways.

4. The ports, the State, and regional/local agencies should develop a joint approach in seeking additional federal funding for port access projects.

Because of the overriding national interest in ports and port access, the possibility of obtaining additional federal funds for port access through the Surface Transportation Reauthorization legislation of 1991 should be explored. To be effective, however, the ports and the State and local agencies should coordinate their efforts in this regard. The State is seeking increased flexibility in how federal funds are spent. The definition of increased flexibility should include the possibility of using federal funds for port access projects, whether or not these projects are on state owned/operated facilities.

5. The ports, in consultation with the State, and regional/local transportation agencies, should explore possibilities for leveraging State funds with local/private monies.

Even if additional state and federal funds can be secured, it is certain that a mix of public/port/private monies will be required to finance the port access projects that are necessary. This kind of partnership has many precedents in California. Individual cities, counties, and private developers have committed approximately \$5 billion for projects programmed during the seven years of California's 1990 transportation plan.

While the State is ready and willing to help those who help themselves, the ports must be prepared to compete for limited state resources by helping to leverage those resources through a State-Local Partnership.

6. Ports should employ Transportation Systems Management Techniques

Transportation Systems Management Techniques (TSM) are emphasized in state and regional transportation plans. While adequate funding is certainly the basis for improving California's transportation system, all users of that system must continue to seek ways to utilize the existing facilities more efficiently.

The ports could contribute greatly in this area by investigating the feasibility of coordinating truck and

train traffic to avoid heavy commute hours and by developing ride-share programs and flex-time working schedules for employees in order to further reduce peak-time commute traffic. While this might increase operating costs, efficient use of the system has already proven to be effective during the 1984 Los Angeles Olympics and in most cases is less expensive than building new infrastructure.

The ports should work with local planning agencies, public works departments, the State, and private freight companies to implement TSM where applicable.

### *The San Francisco Bay Area*

Lawrence D. Dahms, Executive Director  
Metropolitan Transportation Commission

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### Introduction

The San Francisco Bay Area Seaport Plan is a joint product of the Metropolitan Transportation Commission (MTC) and the San Francisco Bay Conservation and Development Commission (BCDC). Completed in 1982, it was last revised in 1988. A task force composed of representatives of six seaports, maritime business interests and the Save the Bay Association gave policy direction to preparation of the plan and its revisions.

The plan is long on facts, figures and projections and short on major policy decisions. There have been and remain several political conflicts that surface from time to time, such as:

1. The competition between cities and their Ports for capital funds.
2. The tension between use of port lands money and energies in commercial real estate development vs. marine terminals.
3. The longer range goal of preserving lands not now devoted to port use for port expansion that is projected to be necessary in the future. (This is one policy question receiving significant attention in the Port Plan which is producing positive results).
4. The challenge of dredging channels and disposing of the spoils in keeping with stringent environmental regulations by multiple jurisdictions.
5. The practice of intra-regional port competition in the face of increased competition from other West Coast ports.

While these are sometimes critical public issues, they do not always lend themselves to meaningful examination or resolution in the MTC/BCDC port planning process. Further, these issues have little to do with the question of land access. So where does MTC fit into the port-land access question?

### **Economic Viability**

MTC is concerned with the economic vitality of the Bay Area and its strategic plan examines the contribution of the several transportation systems to this goal. One economic objective is to "maintain the international competitiveness of the Bay Region by investing in the Region's international airports, seaports and related transportation infrastructure". The Golden Gate Ports Association estimates that the maritime industry is catalyst for \$3 billion in regional sales transactions, \$1.7 billion in regional gross product, \$192 million in state and local taxes and 45,000 jobs with a \$1.2 billion payroll.

West Coast container cargo more than doubled in the 1976-1985 decade. While Bay Area containerized cargo grew 64% during this period, its West Coast market share declined from 26 to 20 percent. Its strength is in exports, especially agriculture products from the Central Valley.

Its lesser share of West Coast growth can be traced to the local market being smaller than Los Angeles-Long Beach, a slightly less competitive rail connection to the east -- especially the Gulf-Coast states -- and looking to the future, unresolved dredging problems.

### **Highway Access**

With this brief background, consider the port requirement most relevant to MTC: highway access. Here the story is positive. Except for the problems caused by the 1989 earthquake, highway access is not a limiting factor for Bay Area port development. The nearly completed Knox freeway provides access to the Port of Richmond, the largest Bay Area Port without convenient freeway access. Trucks serving ports constitute only about 2% of nearby freeway volumes, thus not representing a major contributing factor to our peak-hour congestion problems. Most local arterials serving ports have ample capacity. A recent analysis of Bay Area port competitiveness hardly mentions highway access as a factor. CTC's recent "Improving Access to California's Ports" report presented here today by Bob

Remen finds only about \$50 million in highway project improvements required to serve all seven port sites in the region.

Absent the earthquake, then, we don't really have a port-highway access problem. On October 17, 1989, the San Francisco Bay area was hit by the Loma Prieta earthquake measuring 7.0 on the Richter scale. It caused widespread and heavy damage to buildings and other structures, including several major transportation facilities. The Cypress double-deck viaduct, through the city of Oakland, was severely damaged and 1.5 miles of the eight-lane I-880 link between 18th and 34th streets in Oakland were destroyed.

I-880 is a critical interstate freeway. In close proximity to the Port of Oakland, it connects San Jose and the East Bay area to San Francisco, Sacramento and the Sierra Nevada. This eight-lane freeway route provides truck access to the Port of Oakland, the Southern Pacific and Union Pacific railyards, and many industrial/commercial distribution facilities.

### **Earthquake Impacts**

Interviews with a broad cross-section of persons, including public officials, distribution company managers and owners and managers of trucking companies, confirm that the closure of the Cypress viaduct has adversely affected business. The consensus is that traffic congestion on alternate routes such as I-980/I-580 and on local streets has disrupted neighborhoods and delivery schedules as well as adding to the costs of doing business.

According to reports from several trucking companies, the closure of the Cypress viaduct has resulted in increased travel time of between 20 and 30 minutes per trip. This has raised labor, fuel, maintenance and inventory costs, which are ultimately borne by consumers in the form of higher prices.

Representatives of the regional trucking industry were asked for examples of how the closure of the Cypress Freeway adversely impacts their businesses. One company, Bob Rich-Schroeder Trucking, Inc. of Hayward, used the Cypress viaduct to ship goods from the Port of Oakland to San Francisco, Richmond and neighboring cities. A company representative indicated that over half their 25 trucks used the Cypress viaduct two to three times daily. Since the earthquake, an extra 20 minutes is needed, on average, to make the same trip on alternate routes.<sup>2</sup>

<sup>2</sup>Charles Ramorino, Bob Rich-Schroeder Trucking, Hayward, also Chairman of the Bay Area Off-Peak Delivery Program (organized by the California Trucking Association).



Another trucking industry representative confirmed the adverse impact to Cal Cargo, a trucking, container freight and warehouse business located on Coliseum Way in Oakland that moves between 80 to 100 containers per week, and averages 40 trips per day. The additional time required to meet business commitments is estimated at 8 to 10 truck hours per week. As a result of the disruption in this corridor, the company was forced at great expense to open a new warehouse in West Oakland to accommodate new delivery schedules.

Caltrans just released its environmental impact report describing alternatives for replacing the Cypress freeway section. Four alternatives are under consideration. The No-Build Alternative would consist of the currently existing, post-earthquake freeway network as modified to include operational improvements instituted since October 17, 1989. The remaining portion of the I-880 between 7th Street and Adeline Street would be removed.

The Cypress Corridor Alternative is a 10-lane freeway with two high-occupancy vehicle (HOV) lanes on an elevated structure at the connection with I-980, which comes to grade between Market Street and Adeline

Street and enters a 3,700-foot tunnel. The Railroad Corridor Alternative is a 10-lane freeway with two HOV lanes within a portion of the Southern Pacific Oakland Yard.

The Transit/Transportation Systems Management (TSM) alternative consists of increased intercity passenger rail service; increased AC Transit express and local bus service, BART shuttle service; and increased ferry and ferry feeder-bus service. It also includes a freeway component consisting of six lanes plus two HOV lanes on either the Cypress Corridor Alignment or the Railroad Corridor Alignment. MTC has not yet advised Caltrans of our analysis of the alternatives. It is obvious, however, that community support and adequate funding are still questionable.

Exhibit A is a drawing of the alternative alignments. If the replacement decision were governed in terms of port access alone, the Railroad Alternative would be selected because it provides the best access to the rail intermodal yards and to all maritime operations and businesses. Whether this alignment or another, the Port management favors some form of replacement.

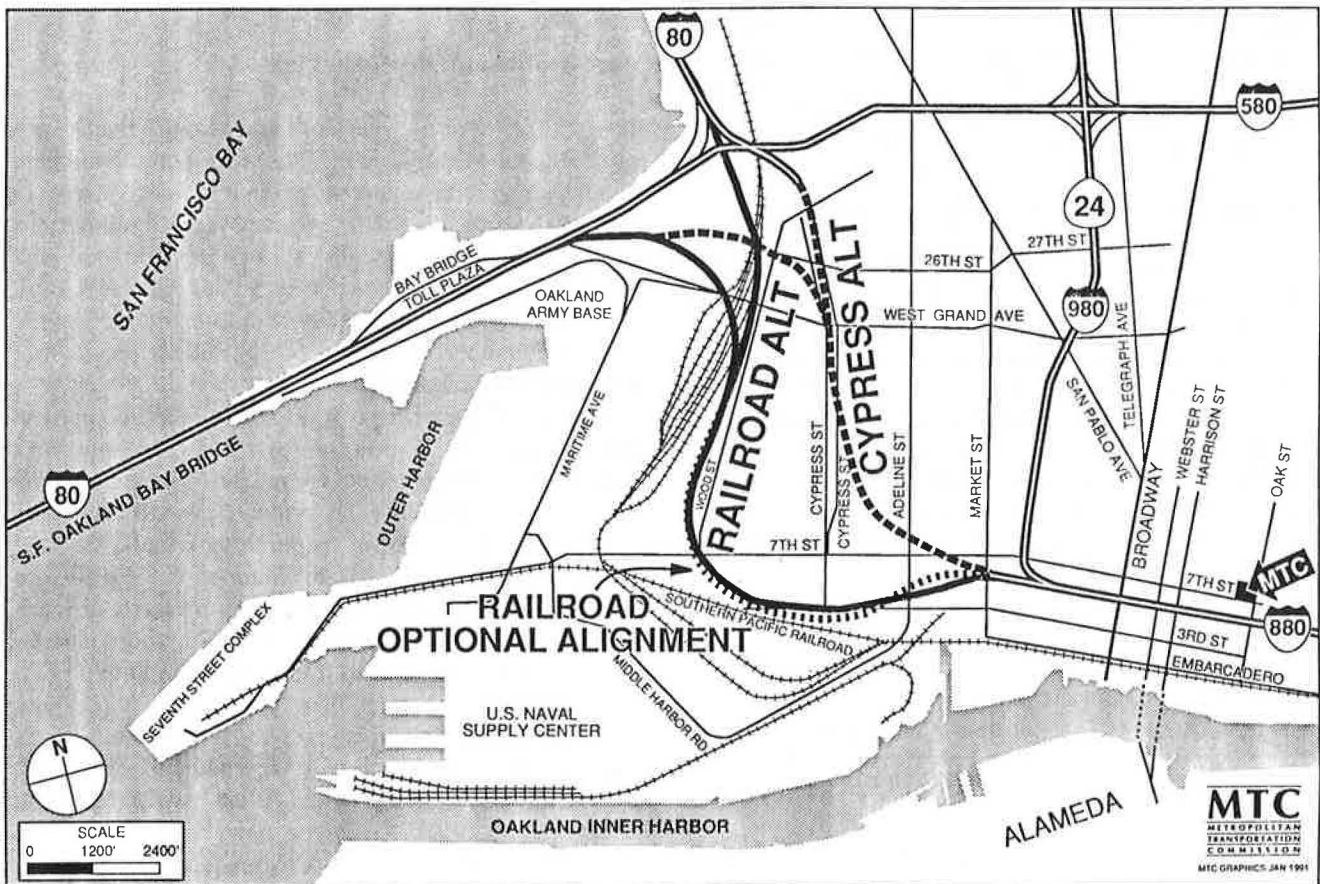


EXHIBIT A I-880/Cypress replacement project, location of alternatives under consideration by Caltrans.

The earthquake damaged freeways in San Francisco as well, several of which remain closed pending repair. The damaged section of I-280 section is in proximity to the container terminal at Hunters Point. Closed Bay Bridge offramps affect commercial development on San Francisco Port property stretching from downtown to Fisherman's Wharf. And in San Francisco's case, real estate development generates more than half of the Port's revenue. Here too, then, the long-term prospects of the Port are dependent to some degree on the repair or replacement of the Embarcadero freeway extension from the Bay Bridge and the repair of I-280.

Return now to port access as it is seen through our kaleidoscope at MTC. Repair of earthquake-damaged facilities remains high on the region's agenda and is required to solve port access problems as well as a host of even larger problems in other sectors of the local economy.

### Conclusion

Aside from earthquake repair, highway access to ports is a minor challenge in contrast to current issues of suburban and exurban growth. Here the result is widespread congestion which has caused our voters to rank transportation as the #1 problem in the region for eight straight years. Growth also threatens to reverse the trend of cleaning the air. State and federal laws governing air quality have us scrambling to determine how to comply in the future and in court defending ourselves for not having complied in the past.

As noted, our consultants tell us that highway access in the Bay Area is not on the critical list of deficiencies affecting port competitiveness. For this we are grateful, given these other unsolved and pressing problems. If we fail to address these other problems, however, the region's economy and port prosperity may all suffer.

We understand that congested highways may be more critical to ports in Los Angeles, Long Beach and elsewhere. These differences highlight the uniqueness of every region and the reason for encouraging each to make its own priority decisions regarding transportation investment and operations.

### *The Alameda Corridor*

Gill V. Hicks, General Manager  
Alameda Corridor Transportation Authority

### Introduction

The Ports of Los Angeles and Long Beach, often referred to as the San Pedro Bay Ports, represent by many key measures the largest port complex in the

United States. Directly and indirectly the Ports of Los Angeles and Long Beach account for 363,000 jobs in Southern California. The Los Angeles Customs District also generates approximately \$3 billion in revenue for the federal government.

The ports are playing a major role in Pacific Rim trade, yet future growth may be slowed because of environmental problems associated with truck and railroad traffic to the ports. Indeed, perhaps the greatest challenge facing the ports is resolving community concerns about the impacts of truck and rail traffic on congestion delays at grade crossings, air pollution, and noise and vibration in residential areas.

Over the last several years, the ports have been working with neighboring communities, the Southern California Association of Governments (SCAG), the Los Angeles County Transportation Commission, Caltrans, the California Transportation Commission, other transportation agencies, and the private sector in developing a long-range plan for improving rail and highway access to the ports. A strong consensus has emerged for the development of an improved rail and highway corridor along Alameda Street (the Alameda Corridor).

### Port Growth and the "2020 Plan"

The Ports of Los Angeles and Long Beach are experiencing rapid growth. The two ports combined handled 139 million metric revenue tons of cargo in 1989, up 6 percent from the previous year. Containerized cargo, which represents about 46 percent of total port tonnage, grew 14 percent between 1988 and 1989. Both ports combined handled about 64 million metric revenue tons of containerized cargo, or 3.6 million twenty-foot container equivalent units.

Port economists have assumed annual compound growth rates of 3.1 percent for total cargo and 4.17 percent for containerized cargo for the period 1989 through 2020. Although the assumed growth rates over this period are moderate compared to actual 1988-1989 rates, the projected cargo volumes for 2020 are substantial. Total cargo volumes are expected to reach 367 million metric revenue tons by 2020, and container throughput is projected to approach 13 million TEU'S by 2020.

To accommodate this growth the Ports of Los Angeles and Long Beach will need additional land and more terminals. The "2020 Plan" calls for the construction of 2400 acres of new landfills south of Terminal Island, as shown in Figure 1. Representing a \$5 billion investment, the 2020 Plan is a joint project of both ports and the U.S. Army Corps of Engineers.

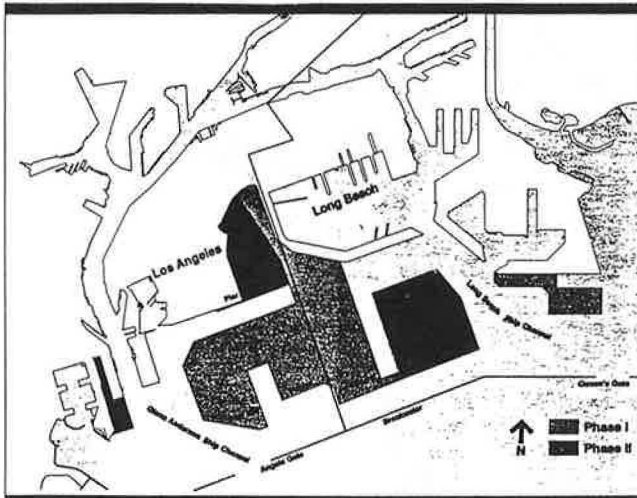


FIGURE 1 2020 plan proposed landfills.

### Truck and Railroad Traffic to the Ports

Currently, the two ports combined generate approximately 19,000 truck trips per average weekday. Given projected cargo growth, truck traffic is expected to reach 49,000 truck trips by 2020, of which about 34,000, or 70 percent, will be container trucks. Congestion in the ports area and throughout Southern California is already a serious problem. Significant improvements in highway infrastructure will be required to properly mitigate the impacts of port traffic.

The ports are working cooperatively in various programs designed to reduce truck traffic. One project that has significantly reduced truck traffic is the Intermodal Container Transfer Facility (ICTF), which opened for business in 1986. Last year this facility, which is a joint project of the two ports and operated by the Southern Pacific Railroad, handled about 500,000 containers. The ICTF is 4.5 miles from the ports, in contrast to other intermodal rail yards near downtown Los Angeles, which are approximately 25 miles from the ports.

Both ports are also actively pursuing the development of "on-dock" or "near-dock" railroad yards. If trains can be brought directly to the port terminals, truck trips to distant rail yards can be substantially reduced. The Port of Long Beach currently has one operational ondock yard which generates three trains per week -- one on the Santa Fe and two on the Union Pacific. The Port of Long Beach has plans for five additional on-dock yards.

The Port of Los Angeles has plans for three "near-dock" intermodal facilities. These yards will be larger than the Port of Long Beach yards, but will require containers to be trucked a short distance from the dock to the yard.

The on-dock and near-dock yards will be capable of handling double-stack container trains. A double-stack train can be 28 cars long, with each articulated intermodal car capable of handling 10 forty-foot containers. Each car is approximately 270 feet long; thus, the length of the entire train including the locomotives can approach 8,000 feet.

The on-dock and near-dock yards will remove significant volumes of trucks from nearby freeways, but the major tradeoff is that additional trains will delay vehicles at grade crossings and cause additional noise impacts in residential areas.

### Rail Lines Serving the Ports

As shown in Figure 2, the Ports of Los Angeles and Long Beach are served by four railroad branch lines: the Union Pacific San Pedro Branch on the east, the Santa Fe Harbor Subdivision on the west, and the Southern Pacific Wilmington and San Pedro Branches in the center.

As shown in Table 1, there are important differences in these lines, in terms of the number of people living near the railroad tracks and the number of unseparated grade crossings. The Santa Fe line has 92 unseparated rail-highway crossings. The other lines have between 33 and 39 unseparated crossings.

The Santa Fe line has nearly 26,000 people living within 500 feet of the tracks. The Union Pacific line and the Southern Pacific Wilmington Branch are also highly residential, with 15,800 people and 21,000 people living within 500 feet of the tracks, respectively. The Southern Pacific San Pedro Branch, which is immediately adjacent to Alameda Street, has only 7,900 people living within 500 feet, and most of these residents are protected from train noise by intervening warehouses and factories. Because it is largely industrial in character, the Alameda corridor is clearly more compatible with heavy truck and train traffic.

TABLE 1 THE NUMBER OF UNSEPARATED GRADE CROSSINGS AND THE NUMBER OF PEOPLE LIVING WITHIN 500 FEET OF THE TRACKS

|               | No. of<br>Crossings | Population |
|---------------|---------------------|------------|
| Santa Fe      | 92                  | 25,700     |
| Union Pacific | 33                  | 15,800     |
| SP Wilmington | 39                  | 21,000     |
| SP San Pedro  | 34                  | 7,900      |

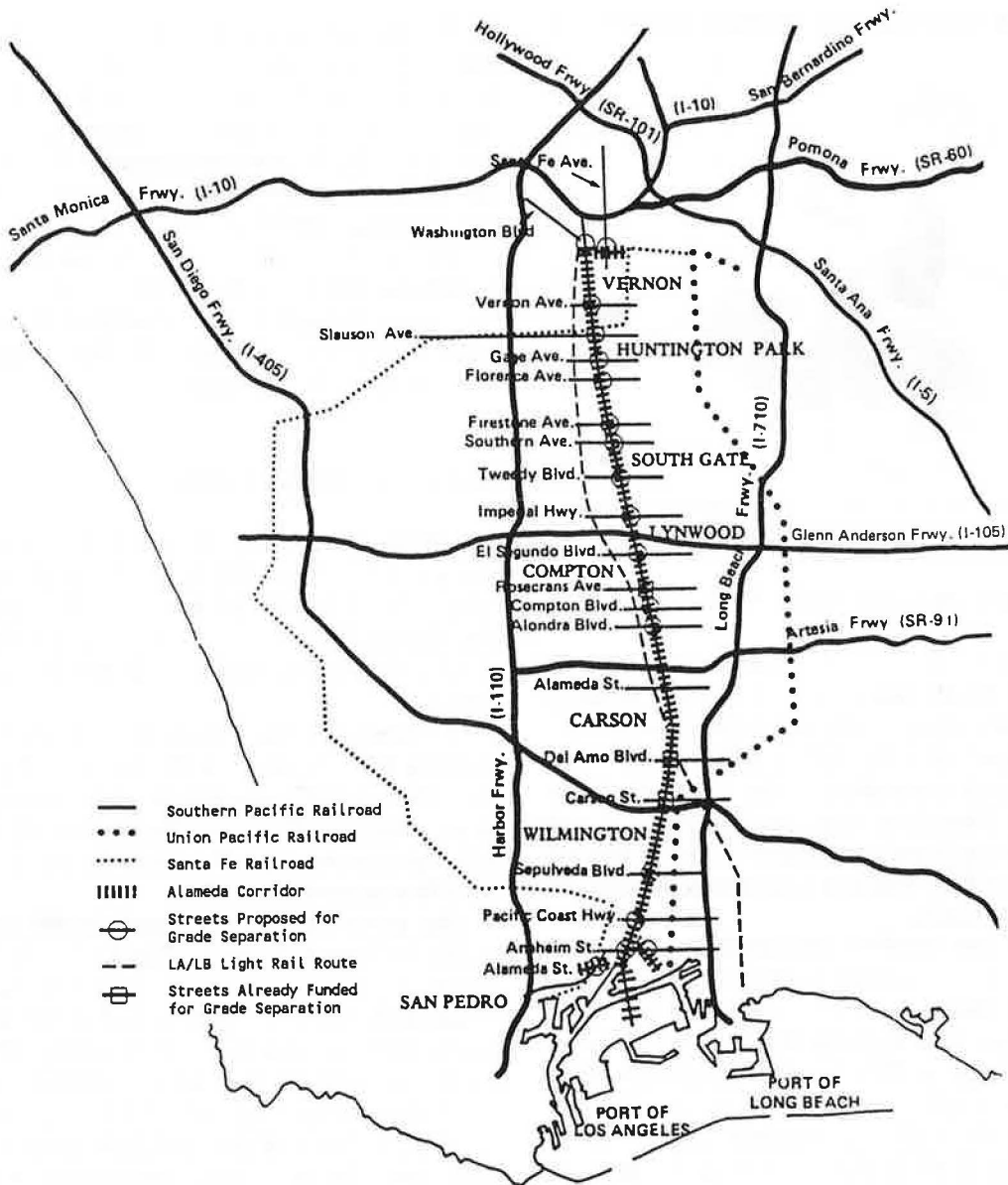


FIGURE 2 The Alameda corridor.

**The Alameda Corridor**

The Alameda Corridor Project is a \$500 million program of highway and railroad improvements between the San Pedro Bay ports and downtown Los Angeles. The project is designed to facilitate port access while mitigating potentially adverse impacts of port growth, including highway traffic congestion, air pollution, vehicle delays at grade crossings, and impacts of train noise in residential areas.

The Alameda Corridor represents a significant step forward in facilitating goods movement, while assuring

that neighborhood quality of life is preserved. The project will create a highway and rail system of national significance, connecting the economic center of the San Pedro Bay ports -- the largest port complex in the United States -- to the Interstate Highway System and the national railroad system, thereby facilitating the movement of international cargo.

Major elements of the project include:

Alameda Street, from the ports area to I-10, will be developed into a "truck expressway", which should relieve truck congestion on parallel freeways.

The Southern Pacific San Pedro Branch will be double-tracked, with Centralized Traffic Control. All port-related trains of the Southern Pacific, Union Pacific, and the Santa Fe railroads will operate over this improved corridor.

Mitigations, including grade separations and sound walls, will be concentrated along this one corridor.

Although rail traffic to the ports would be diverted to the SP San Pedro line, the other tracks (the Union Pacific, Santa Fe, and the SP Wilmington Branch) would still be needed for rail service to industries along those tracks.

### **Specific Benefits of the Alameda Corridor**

The principal benefits of the Alameda Corridor are summarized below:

#### **Reduced Freeway Congestion/Improved Freeway Safety**

The Alameda Corridor will facilitate the development of on-dock rail. This will divert cargo from truck to rail, leading to reduced freeway congestion and improved safety.

The Alameda Corridor will divert truck traffic to Alameda Street, resulting in less congestion and improved safety on parallel north-south freeways.

#### **Reduced Noise and Traffic Delays Along Existing Corridors**

The project will result in an estimated 50 percent reduction in train-related noise and vibration impacts in residential areas.

Sound walls, continuously welded rail, and heavy-duty ballast will minimize the noise and vibration impacts of trains along the Corridor.

The Alameda Corridor will save approximately 6,300 vehicle hours of delay per day, due to the rerouting of trains and the elimination of grade crossings. This represents a 90 percent reduction in train-related traffic delays.

#### **Improved Traffic Circulation Along Alameda Street**

The project will result in an additional savings of 2,000 vehicle hours of delay, due to improved operations on Alameda Street.

The widening of Alameda Street to a six lane major highway will increase access to and through the corridor cities.

#### **Improved Railroad Operations**

The project will result in an estimated 30 percent reduction in train operating hours, and a 75 percent reduction in the number of times trains have to stop for other trains to pass. (Stopped trains cause severe traffic tie-ups on streets.)

The Alameda Corridor will allow train speeds to increase from 10-20 miles per hour to 30-40 miles per hour.

#### **Improved Air Quality**

Smoother flowing freeways and a reduction in truck traffic will reduce emissions.

The reduction in traffic delays at grade crossings and the improved traffic flow along Alameda Street will further reduce emissions.

The project increases the feasibility for electrification of the rail lines, which will reduce emissions.

#### **Increased Economic Activity**

The Alameda Corridor will allow the Ports of Long Beach and Los Angeles to implement the "2020 Plan", a \$5 billion program to expand the land and terminal areas of the two ports.

The project will result in an estimated increase of \$46 billion in economic output (gross sales) in the Southern California area, over a 20-year period (2000 - 2020).

By the year 2020, the Alameda Corridor will have generated an additional 37,000 trade-related jobs.

In the year 2020, the Alameda Corridor will generate an estimated \$966 million in additional wages, and \$2.9 billion in additional economic output.



Because of improved access along the Corridor, redevelopment and employment opportunities will be enhanced.

Development of the Alameda Corridor will generate approximately 5,000 construction-related jobs.

**The Alameda Corridor Transportation Authority Plan**

In August of 1989, a new Joint Powers Authority was formed to take the lead in implementing the Alameda Corridor. The Authority's Governing Board has 15 members, representing the cities of Los Angeles and Long Beach, each of the six cities along the corridor, the Los Angeles County Board of Supervisors, the Los Angeles County Transportation Commission, the two ports (with two representatives each), and Caltrans.

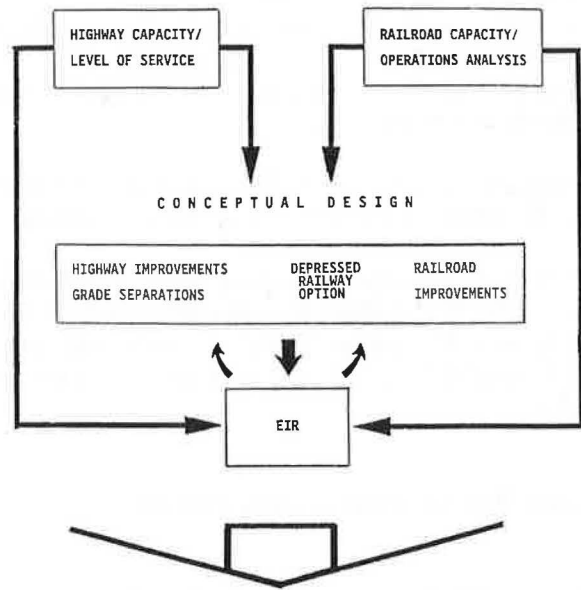
The Alameda Corridor Transportation Authority recently awarded a planning, conceptual design, and environmental evaluation contract to the consulting team of Daniel, Mann, Johnson & Mendenhall/Moffatt & Nichol, a joint venture. The study's cost is being funded through contributions made to the Alameda Corridor Transportation Authority by the Port of Long Beach and the Port of Los Angeles. Work on the study began in May of 1990, and final environmental approval for the project is expected by July 1992.

A flow chart of the various elements of the consulting contract is shown in Figure 3. The results of the capacity studies will be needed by the engineers to design the project. To complete the Environmental Impact Report, the consulting team will require information from both the capacity studies and the design effort. All of this work will be used in developing the "Plan of the Alameda Corridor."

**Project Costs and Schedule**

As shown in Figure 4, the first two years of the project will be devoted to completing the conceptual design for the corridor, evaluating its environmental impacts, and developing financial and operating plans. Final engineering will be conducted between mid-1992 and mid-1993. A preliminary agreement with the railroads for use and access to the corridor should be in place prior to the Preliminary Engineering phase. Construction would begin in the summer of 1993 and would last four to five years.

Costs of the project by major element are shown in Table 2.



**FIGURE 3 Major elements of consultants contract.**

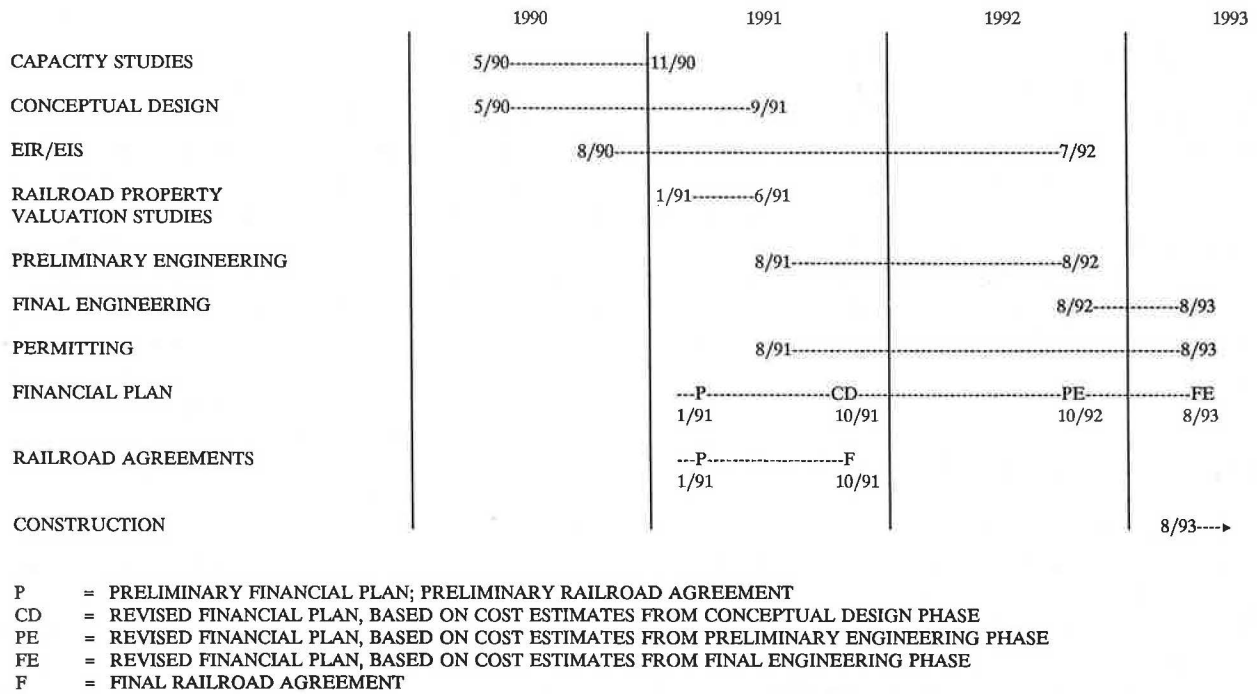
**TABLE 2 ESTIMATED COSTS (MILLIONS OF 1989 DOLLARS) FOR THE ALAMEDA CORRIDOR**

|                                       |              |
|---------------------------------------|--------------|
| Track and Signal Improvements         | \$100        |
| Grade Separations (16 @ \$13 million) | \$208        |
| Alameda Street Widening N/O Rt. 91    | \$ 50        |
| Contingencies                         | \$ 72        |
| Engineering, EIR, Permitting, Study   | \$ 72        |
| <b>TOTAL</b>                          | <b>\$502</b> |

**Project Financing**

One of the most important tasks of the Alameda Corridor Transportation Authority will be to develop a detailed financial plan for the corridor. Potential sources of funds include mitigation fees collected by the ports, federal highway funds, State Transportation Improvement (STIP) funds, contributions from the railroads, and the State Clean Air and Transportation Improvement Act of 1990 (Proposition 116), which will provide \$80 million for grade separations along Alameda Street.

Federal demonstration programs in 1982 and 1987 provided approximately \$125 million in federal funds for San Pedro Bay ports access improvements. The widening of Alameda Street, from the ports to State Route 91, and three grade separations on Alameda Street, were a few of the projects funded by the federal demonstration programs.



**FIGURE 4 The Alameda Corridor project schedule.**

The Alameda Corridor Transportation Authority has requested \$332 million in federal assistance for the Alameda Corridor. While the feasibility of obtaining additional federal funds is by no means certain, federal assistance is clearly justified. The Ports of Long Beach and Los Angeles play a vital role in international trade, economic development, as well as national defense. Thus, there is a strong argument for specific federal attention to this project in the next highway re-authorization bill.

**Conclusion**

While seeking to expand their role in international trade, the Ports of Long Beach and Los Angeles are paying careful attention to community concerns about potentially adverse impacts of port growth, such as increased traffic congestion and air pollution. The Alameda Corridor represents a "win-win" solution for all concerned. The project will result in significant improvements to air quality and regional mobility, and assure continued economic development associated with port growth.

Southern California is not the only region in the United States attempting to meet the challenges of port growth through improvements in inland transportation facilities. Other areas could potentially benefit from similar consolidation efforts where more than one rail

carrier is involved. Other port areas could also benefit from the consensus-building process that has been used in Southern California. Developing and implementing a complex plan such as the Alameda Corridor requires an extensive communications network, and a structured approach to resolving conflicts among governmental agencies and the private sector. The Alameda Corridor Transportation Authority can perhaps be seen as a model for other port areas facing similar challenges.

**Energy and Port Access**

Jerry A. Aspland, President  
 ARCO Marine, Inc.

**Introduction**

Today my comments will be about energy. And as a ship operator, I find that in many of these forums, all we talk about is containers, real estate, and money, but we very seldom talk about the ship operator and what happens when policies are made within port authorities that may affect the ship operator.

Additionally, as you may know, a couple of years ago we had a very tragic affair in the state of Alaska, and to say the least, the transportation of hazardous materials and oil has been under the microscope ever since.

Perhaps today I will irritate some people, but as long as it gets people to think, I'm very happy. And in fact to start off, as a third generation Californian, I just figured out how to solve all these problems of access and containers. All those containers that come through our golden state of California, and wish to get out of the state, should be charged a big tariff. The receipts would be placed in our state coffers, there would be less pollution and fewer automobiles and trucks on the highways. Now I'll probably hear something about that later on, but I think that's a wonderful idea, because my taxes are getting too high.

### **Energy and Transportation Facilities**

Let's talk about energy first. Consumption of energy in the United States continues to grow. I don't think the present situation in the Middle East is going to make one iota of difference. There's plenty of oil around. But consumption continues to grow. Gasoline use on the West Coast is increasing at about three percent; across the nation, it's about 1.5 percent. And as long as that continues, it will be necessary to import energy.

In the U.S., crude is dwindling, and as a result you're going to see more crude imported. We're now back to approaching the 50 percent mark of imported crude to meet our energy needs. This means foreign-flagged vessels. This also means we're going to have to have improved port facilities.

Along with the same issue of energy, we also have the issue of hazardous substances and chemicals. They're going to increase. We just had a very interesting conversation in our port complex about "cold ironing." We're going to shut down the boilers and the engines and plug in a great big, long electric cord, and that big, long electric cord is going to cut down the amount of pollution. I think it's a novel idea, but the Coast Guard recently said that you cannot cold iron any ship that has hazardous materials or energy.

Then a very interesting fact was learned which was that eighty-five percent of all ships coming into the port complex have hazardous substances aboard. In containers, however else they're hauling them, but they're there.

So I hope today to just offer some ideas about energy, and hazardous substances and chemicals, as they affect your port complex. As you plan, you think about it.

In energy handling, of course, we need a dock or a mooring. Moorings are becoming a very easy way in fact to move very large amounts of energy.

Pipelines. The Alameda Corridor Project and many of your ports will be faced with what to do about pipelines.

Many pipelines are old and may need to be replaced, and as you develop your projects you might want to set aside land for pipeline corridors.

Storage tanks. Where are we going to have the storage tanks for the surge? Are we going to pump all the way? Or, are you going to leave space in your port complex so that we can store oil?

Last is truck transportation. In my opinion, local port authorities are not interested in energy, chemicals, hazardous waste in the aspects of safety of port operation. Quite frankly, I don't think anybody cares until we have an accident. I think it's time to think about the handling of these commodities.

At the same time, operators need to think about safe handling. We go on every day doing our job, but we have let safety kind of go by the wayside. Why do we have these attitudes?

One reason is that the facilities are in place. They've been there for a long, long time. Our particular facility, an ARCO facility within the Port of Long Beach, has been there since 1925.

Many facilities are owned by oil companies, therefore the local port authorities say well, "That's not my problem. Why should I get involved?"

Also, port authorities are not required to supply these places with service. In other words, the ship comes in, the ship leaves, maybe there is some fire protection that the city or the port authority might supply. There might be fireboats. There may be some type of health and safety plan put in for that port. But in general, I think if you look around, there is very little thought going into these issues.

### **Public Demand for Safety**

As a result of major oil spills, major accidents at shoreside complexes -- that's petroleum, chemical, hazardous waste groups, peoples' right to know and the general public perception that marine transportation is bad -- the public now demands safe transportation and storage of energy products.

If you go out and ask people about ships, the people who handle energy products, you will find in general that they're not very well thought of.

Demands by the public are for accountability and responsibility. They want to know who's going to be accountable and who's going to be responsible. It is no longer just the accountability and the responsibility of, in fact, the ship owner. Everyone has to share.

Now I realize that some of these issues are rather basic. But in fact, we don't pay too much attention them. People don't want to get hurt. We take it for granted, but we don't pay very much attention to them.



In addition, today, with the way the environment is, people do not want pollution on the water, on the land, and in the air. These environmental concerns have to be considered in any kind of a project and the way port complexes are operated.

The areas of concern in the port complex, from my perspective, center around operational safety. They include the local pilot organization. There are very few port authorities, and also state authorities, who really give a damn about the quality of pilots, their service and who they are. And it's time that people ought to start thinking about that, because they are the key people who bring the ships into our areas.

Tugboat escort has its place, but as a safety issue, there are other places where it does not apply. Tugboat escorts in some cases are just a matter of spending a lot of money on nothing. Because if you don't have the right type of escort, you're not going to save anything.

Every port ought to have speed limits. Not only for tankers and ships carrying hazardous materials, but also for container ships. We've had some horrible examples in our port complex of ships speeding in order to get to the longshoremen first. In fact we recently had a close call where a container ship trying to hurry to get inside the port almost collided with a passenger ship. The reason is because they assign the longshore gangs as to who gets to the breakwater first. Think about it, if a ship comes in at 22 knots and tries to slow to less than seven in less than a mile.

I am of the opinion that the only way to have excellent port safety programs is through excellent vessel traffic systems. Without them, there is no control. It is necessary for each regional or state or port authority to get in and take a look at what kind of a system they need.

At one time, we in fact had a lot of operational safety inspections on vessels: not only American-flagged vessels, but foreign-flagged vessels (e.g., how do they pump and discharge their cargo). This does not take place anymore. A friend of mine who deals in some offshore areas recently said to me, "You would be surprised what comes over the horizon." He said some can't even speak English. He said in some there's so many holes in the pipelines that you can't pump the cargo. Now as we go along, we need to get back to having some kind of inspection or some kind of guidelines set for operational safety.

### **The Consequences of Inaction**

The consequences, in my opinion, in not addressing these kinds of issues, especially as you talk about Alameda Corridor, especially as we talk about increased

land use and public policy, will be delay in projects. Because as you build more container terminals and as the oil facilities stay inside the port, you have a definite safety issue from a navigational standpoint.

I also see some ports becoming noncompetitive. Because if you stand up and face the issue, and decide that in fact you're going to require certain specific safety things, then in fact you could raise the rates so high that people won't use the port. You have a very delicate balance.

Liability is a big issue in my industry now. We are now operating in the State of California and in the State of Alaska, and before it's over with it we will probably be with every state that there is in the Union, with unlimited liability when it comes to oil spills. Do I like it? No! I think the federal government, as far as I'm concerned, turned their back on the problem and gave the states open access to liability. But we will continue to operate there. But I have a question for everyone: while liability to me is unlimited, what is the liability to port authorities for not supplying safety inspections, fire protection, vessel traffic systems and all these kinds of things?

I wonder what will happen when we have a major accident in one of the ports in this country, and in fact the port authority is named in the unlimited liability lawsuit.

Sadly enough, the way we're solving some of the problems is by legislation. We are not taking an active role in what I like to call a safe operating cooperation standpoint. Every time someone passes a law, it's another thing that we have to do. I'm not worried about that, because we can meet most of the guidelines. But the problem is that there's no coordination. I just recently read the State of Washington's new bill on oil spill protection. There are 10 competing agencies who will have something to do with oil spills. I'm a ship operator that operates into that area; it is almost impossible for me to be able to operate in that area, and do it safely, and know who to go to when I want assistance.

We have federal regulations. The Coast Guard has done a very good job with the resources that they have. I think they can do better. But the Coast Guard is responsible for ship safety on the navigable waters of the United States, and also for some facility safety. I don't think they have enough resources, and in addition to that, when we charge the Coast Guard with chasing drug runners, when we charge the Coast Guard with being involved in coastal protection, there is no way whatsoever, in my opinion, that in fact they can serve us as an operator, and you as a port authority, in pushing up the safety standards on vessels coming into our ports.

As I said when I opened, I think that local port authorities have turned their backs on safety issues. I think they're more interested in real estate, money and moving containers. And they'd better take a better look at regional safety issues. And what has happened, the state regulatory agencies have moved in. I'm seeing it now in California, I've seen it in Washington, and they will continue to move into these areas. It is to the detriment of the local authority, because you'll get state-wide rules and regulations that may not be adaptable to your particular port or area.

### **Recommendations**

We need to develop a land access policy relative to energy productions, and it must include all stakeholders.

Local port authorities ought to stop their infighting, and get together and decide that they are, once and for all, as entities, going to assume the role of local safety facilitators.

There needs to be developed, for each area, a general energy product safety plan, and a philosophy of how we're going to run the port from a safety standpoint.

Please let me remind you again that 85 percent of all container ships coming into our port complex have a hazardous substance on them.

Each port complex must have a port emergency response system. It is not good enough to rely on someone else's equipment. It is not good enough to not have mutual aid.

As you develop long-range plans, energy products issues must be considered, and they must be considered from an operator's standpoint.

Local port authorities must become involved in the pilot issue, the fire issue and the response issue. But above all, people like myself and other people who are operators also have got to stop complaining about all the regulations we have, clean up our operation, and cooperate with the authorities to make all port areas safe.

## **RESPONDENTS**

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### **HIGHWAY PERSPECTIVE**

**David J. Hensing, Deputy Executive Director  
American Association of State Highway and  
Transportation Officials**

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Water transportation has been important over the four centuries since European settlement on this continent and obviously dominated transportation of both agricultural commodities and manufactured goods in the early period.

The U.S. has a system of about 3,000 miles of coastal waterways, and some 22,000 miles of inland waterways. 38 of the contiguous 48 states of North America are served by water transportation by one or both of these systems. We have 1,600 terminals on the shallow draft inland waterway system and 188 deep draft U.S. ports on the Atlantic, Gulf, Pacific, and Great Lakes coasts.

Even with the advent of new forms of transportation (railroads, movement of motorized trucks over highways, air cargo), there still is a vital role to be played by water transportation given its unique characteristics of extremely high capacity and low unit costs.

### **AASHTO 2020 Consensus Transportation Program**

About three years ago, at the time of this meeting in 1987, there was a session involving several members of

AASHTO and some others that led to the creation of what we call the AASHTO 2020 Consensus Transportation Program. The stimulus at that time, even though the 1987 Surface Transportation Act had not been passed, was in looking ahead a few years beyond that year's reality.

Underpinning surface transportation debate was that the interstate highway system was in fact anticipated to be completed. It necessitated a more fundamental and a more strategic examination in the relative roles of the federal, state and local government in surface transportation. This strategic examination was basically the stimulus that created this program and allowed the success of the fundamental concept, to take a look at the long range future, to look out to the year 2020. That's the name of the AASHTO program. It was also to engage in substantial outreach and consensus building as part of that effort. Those two characteristics clearly lend themselves to the other modes as well, and so very quickly the program embraced rail, aviation and water transportation.

Principal responsibilities for water transportation were assigned to the Standing Committee on Water Transportation, (one of the five modal standing committees within the Association). The committee created the *Water Transportation Report: A Summary of Issues Affecting the Nation's Water Transportation System* (published in October of 1989).

Some other important information was provided by a special committee of the 2020 process structure called the Modal Technical Advisory Committee or MTAC as we came to call it. It conducted a survey in 1988 and I'll be talking about some of the results of that survey in a moment.

I'd like to establish a little bit of a context here with a couple of generalizations that I think most people in this room would agree with.

### **Decline of Investment in Transportation Infrastructure**

One of those is that national investment in transportation infrastructure generally declined steadily since the early 1960's at least. Dr. David Alan Aschauer estimated "...over the last two decades, non-military public investment, as a fraction of GNP, was only 65% of its average level during the preceding two decades, falling from 3.7 to 2.4%."<sup>1</sup> Given that, another element that I think needs to be acknowledged is the growing cognizance, certainly within our association, of the interdependence of the modes and the need to focus on how they connect one to another and how those interconnections and interfaces can be handled better. We recognized this officially a few years ago when we created a national special committee on intermodal issues, which has been participating in this process as well. Given those general assertions then, let's look at inland waterways.

Of the lock-chambers that are used by in the inland waterway systems about a third of those lock-chambers are twenty years old or less; however, over 40% of them are 50 years old with a median age of about 35 years, sort of a reflection of decline in investment generally.

Looking at the deep-draft ports, which is really the focus of this presentation, we have parallel deterioration in terms of port facilities generally, but this has been compounded and made more complex by some technological changes: the rapid growth of containerization and the advent of very large vessels.

The latest generation of containerships has a capacity of 4,500 TEU's, that's 20-foot equivalent units, and that's over four times the size of a typical containership of the early 1960's. These new ships require up to 50 acres of upland support area compared to about 12 acres for smaller vessels. We have bulk carriers now that handle 100,000 dead weight tons and these are becoming increasingly commonplace in our ports and harbors. These larger vessels need more berthing area, deeper channels, and much more shore-side infrastructure.

The economics of operating these extremely large vessels require shorter port times and fewer port calls which exacerbates the demand on the ports that are called upon, focusing more traffic on a fewer number of ports. These ports are usually in larger metropolitan areas where construction costs and land availability is much more difficult.

### **MTAC Study**

The Modal Transportation Advisory Committee did a needs survey in 1988 on highway facility needs for ports and harbors across the country. In response to that survey, some 32 states plus the District of Columbia responded and, of those, sixteen states indicated substantial needs that had not already been accounted for. Other surveys of estimates of needs supported that process, in total they amounted to about 1,416 lane miles of improved or added facilities that have a total cost nationally of a little bit over 3.06 billion dollars. A third of that need was on the interstate system and two-thirds of that was on non-interstate state highway facilities. Distributed among metropolitan areas as opposed to world port areas, 80 percent of the dollar needs were in the metropolitan areas and only 20 percent in rural in terms of dollar needs; however, in terms of lane mile needs, a very different distribution of 40 percent metropolitan and 60 percent in rural area was the result.

This information, along with a lot of other analysis and evaluation of the entire picture, led to a series of recommendations on a number of topics including disposal of dredge materials, the waterfront development problem -- mentioned by one of the speakers, research development technology, and several others. One of those was on the subject of intermodal connections, the subject of our topic here. It's a very brief recommendation that came out of this and appears in this report. I'd like to take a moment of your time to read it to you in its entirety:

The nation's ports had 1.8 billion long tons (2.08 billion short tons) of cargo annually. Their ability to sustain this activity depends not only on channel depth, berth, length, and on facilities available to handle cargo, but also on the landside connections through the nation's highway and rail networks.

Significant landside access improvement needs have been identified for ports. These needs are concentrated in urban areas and non-interstate highways.

<sup>1</sup>David Alan Aschauer, Public Investment and Private Sector Growth: The Economic Benefits of Reducing America's Third Deficit (Washington, DC: Economic Policy Institute, 1990, p.2.)

Improvements to both highways in rail access to ports is necessary to alleviate traffic congestion and speed the flow of cargo through the ports to its final destination.

Containerization of goods for shipment has placed special demands on port facilities, and supporting transportation facility systems.

Increased investments are required for landside facilities, on-dock rail-lines, and large storage areas, cranes, and so forth to permit rapid movement from ship to intermodal connections.

In the rural areas, large volumes of bulk-products rely on rail and highway access to the ports to permit timely distribution to product users and to allow for efficient movement of export products.

To summarize, the AASHTO intermodal connection recommendations reasoned as follows:

AASHTO urges the federal government to recognize the need for landside access improvements to our nation's ports. The existing funding services are inadequate to meet current highway/port and rail/port connector needs.

An integrated surface transportation program must consider port-landside access improvements as part of the federal funding program for highway and rail transportation modes.

## **RAILROAD PERSPECTIVE**

**D. Henry Watts**

**Executive Vice President - Marketing  
Norfolk Southern Corporation**

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I would like to try and contribute by enlarging on the issues at hand with some rather specific observations. First about the private industry sector and secondarily about the East Coast.

### **Private Industry Sector**

Certainly we all know why we're here, and the great economical globalization that has occurred in the last twenty years. We now find ourselves -- Norfolk Southern Corporation (basically an East Coast railroad or Southeastern U.S. and Midwest U.S. railroad) with 20 percent of our overall revenue coming from international traffic.

We have a service to six ports on the East Coast. On the Gulf Coast, we serve the major ports in Mobile and New Orleans. Our principal bulk cargo is coal.

We have a break-bulk commodity pier that we own and operate in Norfolk. In addition, we have vast containerized operations which really are the new kid on the block. I understand the concern about containers getting so much attention, but it's just a little bit like intermodal and the railroad business. That's the growth part of the business and that's the part of the business for us that requires a great deal of attention and nurturing.

I'm often asked the same question (in a different guise) that was posed this morning by our own management; "why do you pay so much attention to container and intermodal businesses, when in fact, it only represents about 15 percent of our revenue stream?" That's because it's a very large growth opportunity.

We serve not only the ports that I mentioned in the Atlantic and the Gulf, but also numerous river terminals at numerous places on the railroads and we serve Great Lakes ports.

### **Bulk Cargo Business**

Starting with the first of these and talking about private sector investment and landside infrastructure operations, I would start with the bulk business, the one we've been in the longest in the railroad, the export of coal, which is a very important business to us.

In 1990, we loaded about 40 million tons of coal at Lambert's Point, Virginia, which is in the port confines of Hampton Roads. That is a private terminal; we operate it totally. We coordinate the many activities with the port people and with various agents within the port complex. We also interface with the Virginia port authority which operates all the non-bulk businesses except our break-bulk terminal called Lambert's Point, within the general port area.

### **Coal Support Services**

Coal is a very important business on which we are spending each year in the neighborhood of 100 to 200 million dollars for our coal support services. Everything from infrastructure in terms of upgrading our track, to cars and locomotives required to move the coal and to port structures themselves as it relates to our coal loading pier at Hampton Roads.



The plan that we have (given that we can satisfy all of the permitting requirements) is for a ground storage facility, which will be located about 25 miles inland from the port of Hampton Roads at a place called Windsor, Virginia in Isle of Wight County. We hope to invest about 100 million dollars for a ground storage facility for coal which will continue to make U.S. coal more attractive on the world market.

I don't want to stay too parochial on this. Certainly we have made private investment in the container business and it's primarily been in the nature of terminals and in the clearance of obstructions on our railroad which prevent the handling of double-stack trains out of Charleston, Savannah, Brunswick, Jacksonville, New Orleans, and Mobile. We now have double-stack clearances throughout our railroad.

### **Double Stack**

More importantly in terms of Pacific Rim traffic, we have cleared our railroad of obstructions for double-stack handling from our river connections with the western railroads at Kansas City, Chicago, Memphis and New Orleans.

The one place where we have not and are currently not providing a double-stack route is from the Port of Hampton Roads. As you know the Appalachians serve as a tremendous barrier to the east. We are going to skirt that problem by using a route that we own in the south of the main Appalachian ridges. We will be able to handle double-stack trains into and out of the port of Hampton Roads by the end of 1992.

### **Inland Port at Front Royal**

Turning to the account of a confluence, if you will, of a private interest and public monies, the Virginia Port Authority about two years ago committed to build an inland port at Front Royal, Virginia with a significant at-risk investment for the first year or so of that operation. It was very disappointing to the Virginia Port Authority, but they kept at it. I'm very pleased to say that they are now on target with their operation at that terminal. We run a dedicated train from the Port of Hampton Roads to that terminal three days a week. It's running about 18 spine cars now (about 90 containers in each direction) three times a week. The service certainly is expandable and we would be happy to see it expand beyond its current train service levels.

### **Railroad's Interest in Foreign Investment**

On the investment side, as we talk about globalization of economies, we address trade -- the primary focus of the ports. But there's an underlying point that is very important, which is on the investment side.

Let me just say a little bit about Norfolk Southern, and I think it is typical of railroad industry's interest in foreign investment in the U.S. We have encouraged that investment. Obviously we have encouraged it along the rail lines where they need rail service. It has been successful for us in the location of three automobile assembly facilities: Toyota at Georgetown, Kentucky; Subaru at LaFayette, Indiana; and Mitsubishi at Bloomington, Illinois. All of these are primary examples. Of course, there are many other industrial development activities and successes we've had in bringing people on line that go beyond these three very large investments of 500-600 million dollars each in the automobile plants. That side of it, the investments side, is something that has to be worked on as hard and has as much direct impact on ports.

When we started with the Toyota plant, as an example, most of the steel was going to be imported because the quality of U.S. steel was not satisfactory to Toyota. It turns out now, that U.S. steel makers have improved their quality to the point where the proportion of U.S. steel going into those Camrys being made at Georgetown has improved significantly, well past the 70 percent mark. Lo-and-behold, the ports are not out of the question because what's happening now is automobiles assembled in Georgetown, Kentucky are being exported. So that while this does change the mix of freight across the ports, it is continuing to lead to additional port activity.

### **Inland vs. Ocean Ports**

The two last points I would make is that we in the railroad business have the opportunity to be multiple port observers -- ocean, river and lake. I think that what we find is that the ports are different. They need to be dealt with as different ports.

We as a railroad try to deal even-handedly with every port that we serve. One of the ways we deal even-handedly with a port which we serve, is to be in more of a reactionary mode than perhaps we'd really prefer to be because of competitive factors outside of the ports themselves. But the ports that we serve are each competitive with the other, so that we put ourselves in

the position of being available, of wanting to serve, and when a port comes up with an idea, such as the inland terminal that the port of Hampton Roads has developed, we are glad to participate in that.

We won't trade one port against the other, and we are obviously reluctant to appear to be favoring any one of the many fine ports that we serve over the other, so we have maintained that. We indirectly serve some ports that are very significant to us, for example, our rail lines do not directly access New York, but we have a service to New York, working with joint-line routes to Buffalo and then on to New York via other rail lines.

So we have all these kinds of interest that lead us to making our own private investments in places where we can facilitate the flow of traffic and make our own public statement in terms of port support.

I will just conclude by saying that I think the private sector has a very clear role to play in the development of the infrastructure of our ports. But I would hope that you would agree that it's fair that the private role can and should be driven by competitive factors within the transportation business and by the ability to make a return on the investments that are required to serve the competitive traffic. I thank you very much for the opportunity of participating in this segment.

## **TRUCKING PERSPECTIVE**

**Robert E. Farris**

**Vice President, Policy**

**American Trucking Associations**

Isn't this an exciting time to be involved in transportation? We are going through a metamorphosis in this country, unlike any generation has dealt with in the past. It's disturbing to some, challenging to others and provides windows of opportunities to still others.

We're in this global village whether we like it or not. We're going to be using products that we will not know where all the parts came from. It may be assembled in the U.S., it may be assembled in Canada, it may be assembled in Colombia and we need to get accustomed to that. We need not wring our hands over the fact that some foreign-owned company may serve us a hot-dog in Yellowstone. These symbolic, parochial barriers are going to have to come to an end, and it's going to have to happen in transportation also.

My good friend from Norfolk and Southern and the industry that I now represent, the trucking industry, seem to have a quadrennial dance that we go through, where we kick dirt on each other's shoes and point fingers and have big fights, then when it's finished, we end up doing business with each other!

## **Call for Efficiency**

It's a strange environment we find ourselves in and I listened this morning to the very fine presentations that we had, and one of the things that came at me as I listened to the California scene is that what we're really talking about is the movement of products.

In or out of ports, by truck, by rail, by air, we're looking at taking products to be assembled somewhere, that involved the movement of raw materials to that point and then the transportation of the finished product to the point of purchase. How we execute this interesting little phenomenon is what we depend upon in our capitalistic system; that is, the transportation of a product to someone else at a price slightly higher than it costs for us to produce it. That produces a profit and that's what drives the whole machinery in this great country of ours. So what we're really talking about is trying to perform that movement of goods and product in the most efficient fashion we possibly can.

In the U.S., we do not have a nationalized rail system. Thank heaven for that, and for darn sure we don't have any government-owned trucking company. We compete, and it's competition that has produced one of the most efficient movements of product that this world has ever seen. In the last decade, the cost of moving product in this country has gone down, in real terms about 18 percent.

There are those in the trucking industry who complain that their margins are very thin, much thinner than the railroads'. That is true and it is hoped that margins will improve in the future. But what has happened is that we are now producing products that are competitive in the international market. We are making good products, and we are moving them to market efficiently.

## **Foreign Investment Stimulates the U.S. Economy**

I listened to a presentation just yesterday from a major tire manufacturer, owned by the Japanese conglomerate. They are producing tires in the U.S. of higher quality than that same conglomerate is producing in their homeland. They now want to bring to their homeland the key American engineers and managers from the U.S. company to help the Japanese produce a better product. Isn't that interesting?

I watched in Nashville, Tennessee, the development of the Nissan plant and now watch General Motors take them on with Saturn. Very healthy!

But what we have got to do in the transportation field is to make sure that we are giving every opportunity for these growing facilities and product producing entities in

the U.S. to move their products and goods not just as well as they move them in our competing countries, but better. We are competing with Germany, which is about the size of the State of Wisconsin. The movement of product in their country is much less of a cost factor for production of a finished product than it is here. We move products long distances and we need to work as a body of policy makers and policy initiators and leaders in the private sectors, to not just have a collegial transportation system, but a better one. If in fact, we want our salaries to be collegial and our way of life at least collegial, if not better. That means that our percentage of costs of moving products needs to be less.

### **Time Factor is the Bottom Line**

One of the factors we are continually dealing with in this country is time. With all the facility requirements, the Alameda Corridor, as well as dredging up ports, building new docks, laying new rail lines, improving our highways, perhaps the most important factor being considered today in logistic cost is time! How fast can we get it there?

An interesting phenomena has occurred in this country. We're handling our products differently than we use to. Our warehouses have all but disappeared, we have developed real distribution power now. Products are now on the shelves and are not sitting in the back room. You walk through somebody's modern, new manufacturing facilities, and there's practically nothing sitting in storage in that plant. They're gauging the arrival of raw materials within very short time frames. The Saturn plant in Spring Hill, Tennessee has windows of delivery for their raw materials at their loading docks within 15 minutes. You walk through the Nissan plant in Smyrna, Tennessee; you see their products almost in constant movement. As they negotiate contracts with the manufacturers of windshields, windshield wipers, seats and other components that go into their vehicles, contained in these contracts are specific delivery commitments!

Now more than ever we're measuring the value of the products in this country in terms of time. So, in working together, we in the transportation business need to keep this in mind.

We're faced, however, with many incidents concerning the usage of some of our facilities and ports. That is, we've got a capacity problem. Yes, we've got a capacity problem that our growing economy has produced! Our nation's highways, our ports, and our airports all are straining to meet demands. In addition 65 percent of all communities in this country have no rail service because

the railroad companies condensed their rail corridors through market-driven management decisions. As a result, rail today is a highly efficient, regional-type rail structure. There is no transcontinental rail system in the U.S. today, but they interface. And we interface, the trucking side with rail. Intermodal movement is a growing factor for both of us, and it is becoming very profitable. It's an efficient system, generally, but we can and must make it better. The question is how do we do that? How do we take care of our highway systems, and how do we do it in a way that we can keep our time factors as manageable as we can, as efficient as we can, to provide this just-in-time inventory requirement that we're all dealing with?

Ladies' clothes are no longer stored anywhere, they're cut to order. I was in the "rag" business, and know a little bit about the textile industry. Today you go out and get orders and you bring the orders back and you cut to those orders. You don't build a big inventory in "hopes" of sales; no, that results in "closeouts" and a big sale at the end of the season. That's one of the things that may help us in this recessionary period, to have what we call a "soft landing" rather than a bust. We don't have a lot of excess inventory sitting around anywhere because of this trend toward just-in-time inventory management.

### **Infrastructure and Management Needs**

As we look at needing better port facilities, needing a new airport, fixing up our highways, what we're really getting down to now is dealing with domestic resource allocation.

We also have to face that we are unable to have an infinite capacity to produce capital wealth. The ability to do that has some finite limits. Maybe we have the opportunity to do it better than most places in the world, but we can't solve all our problems by throwing money at it. We've got to become better managers of our resources, and our capital, transportation systems, our trucking companies, our railroads, oil companies, and use of our energy resources. We've got to become more concerned with managing our resources because we are all going to be struggling within the public crucible of trying to get our little piece of those resources. That's part of the marketplace initiative that we've nurtured and try to protect in this country.

We've got to understand that if we want additional federal funds, we've got to say we'll be for additional federal taxes. We cannot continue the route we have laid out for ourselves of spending more money than we've got coming in. That's got to come to some reasonable end.

Please know that process was not a new-term phenomenon. Having been part of President Reagan's Administration, and having to defend the bashing that we got for contributing to the deficit (and we did our share), I hasten to point out that every budget we sent to the "Hill" was increased by the U.S. Congress. That process was first initiated in 1932, during very desperate times, when we were propelling ourselves into a serious depression. I think this was the first real indication that we had of this "inter-linkage" of the marketplace on a global basis.

When you go around the world, go to New Zealand or Australia, they talk about the Great Depression that occurred at the same time we were having ours. But in that process, we discovered that we could pump the economy up a little bit by shoving in some "borrowed" money. It worked, and we liked it! We've liked it so well we've kept it up since 1932, unabated except for eight times. We've borrowed money every year except those eight times and it's finally caught up with us. It's that cumulative debt that is choking us.

Keynes said that we could get away with this process for a while, and I think we did for a while. It is reasonable to fund major capital projects through debt financing. States do it, counties do it, cities do it, but the insidious problem we've got ourselves into in the U.S. is that we fund recurring expenses by debt.

When I served as your Federal Highway Administrator, we were borrowing money to pay my salary. We've got to understand that is an insidious consumption of our limited capital that we've got to bring under control. We know how to do it, it's not a magical formula, we just don't have the will to do it. But as we look at our needs factors, and new ports, new highways, new access, we've got to know that we are competing in a crucible where great demands are being placed upon our ability to produce wealth. And we've got to be a part of that factor, so I go around the country talking about the new highway bill and the needs that we have on our road systems in this country and they're enormous. I also remind people that governments at all levels are strapped for money.

We need to reach a \$100-billion-a-year level in total spending and today we're somewhere around \$65-70 billion. Where's the difference going to come from? Spend the money in the trust fund, is part of the answer. We need to know, however, that every time we advocate we are projecting ourselves into Medicare, Medicaid, aid to dependent children, research on AIDS, debate and all of the other service demands that are important to us as a nation. One of the things we have got to understand is that somebody has got to assume the responsibility of governance in this country. We must begin to deal with important public policy issues that relate to resource allocation. We've got to do it on the private side, and I think the U.S. industry, however, is out ahead of the government at this point.

U.S. industry today is leaner, tougher, and meaner than it use to be. It has made some tough decisions that Congress and the public sector seem unwilling to make. We've shed useless weight, people who are not productive are reassigned, retrained, or in some instances, relocated.

We're going to have to be smarter people as we enter in to this next century and part of that process is moving our freight and products in an efficient and productive fashion. The trucking industry will do its share. Trucks today move almost 70 percent of everything grown and produced in this country. Even in intermodal movements, it is the truck mode that makes the intermodal work. We're the ones that generally pick it up and deliver it. In that mix we may move some of it on rail, when rail can move it better than we do. In that instance, we ought to, and where we move it better than they do, we will. That's the way the system works.

### **Competition Improves Efficiency**

Public policy makers need to be very careful that they don't tinker too much with our economic system. Competition produces the best in what this country has got to offer. It's competition that builds double-stack trains. It's competition that produces more efficient trucks. It's competition that produces intelligent vehicle systems, EDI and all of the things that will ultimately make the cost of moving products less and more efficient in this country.

Ports have a role to play. Intermodal movements have a role to play, but it all boils down to the challenge of resources allocation.

### **PORT PERSPECTIVE**

**Erik Stromberg**

**President**

**American Association of Port Authorities**

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We welcome the timely focus on port access in this panel and the several panels which will be dealing with this issue within the course of the next several days. For the ports, there are few more important issues than efficient land-side access to our ports or marine terminals -- an issue which has emerged with our evolving integrated transportation system. These new land-side demands on ports are creating a tension in our industry that will affect the competitive dynamics in our port system for years to come.



## Port Efficiency Redefined

Once such pressure involves rethinking the definition of an efficient port, which now has to be seen in different terms. Efficiency can no longer be defined as how well the port moves cargo between point of rest and the vessel, or even in or out the terminal gate. An efficient and competitive port must now be described as one through which the cargo is moving at optimal efficiency from sea lanes to or from the surface transportation system, whether that be by rail or truck. Congestion, either in access to the port by sea or land, has efficiency implications affecting the competitiveness of that port. As the transfer platform at which cargo comes to a stop in its journey, ports are under pressure to operate with maximum efficiency. With inventory controls being exercised enroute by the cargo interest, but beyond their terminal areas, ports are reexamining the entire transportation system they ultimately depend on, even though these systems are often beyond their immediate control or jurisdiction.

The California we have just heard about is illustrative in many ways of the problem ports are either currently facing or will in the future.

## Port Diversity

The San Francisco Bay-area ports provide a very good example of the diversity of U.S. ports, with their various operational and institutional structures. Ironically, if there is one common denominator reflecting our ports it is, in fact, their diversity. Ports reflect their local culture, economy, and politics, all of which yields the unique entity known as the "public port authority."

I would like to address briefly the definition of a port, especially as a previous speaker has referred to expectations regarding the responsibilities of a port. In this regard, the fact that should be kept in mind is that, when you look at a harbor, the port agency owns and controls a very small percentage of the waterfront -- typically 5 to 10 percent. Ports, then, do not have the institutional authority to serve as a planning organization with unilateral decision-making authority over all harbor development and activities.

However, ports can play a role in identifying the need, and perhaps take the lead in facilitating, planning and communication among the various federal, state and local agencies and the private sector which owns or is responsible for the waterfront and navigation channels. If improvements in the safe and efficient operation of the port in its broadest sense are to be realized, the effective coordination of all public and private sectors organizations and interests is essential.

## The Public Side

Institutionally, ports have a split personality. Ports are created to achieve public goals, but they are set up to operate with business-like efficiency, ideally minimizing reliance on public subsidy, at least on the operational side. However, the long-sought autonomy from governmental/political control is unsteady. The result often reflects an erosion of the ports' business goals, as the ports' various publics seek to get their own special interests on the ports' agenda. Moreover, port managers and their governing board or commissions must deal with a generalized negative public image, which further confounds the ability of ports to address such politically complicated issues as land-side access. This negativism or at best lack of any awareness or appreciation has to be overcome if our ports are to continue to develop and maintain the infrastructure necessary to support the nation's waterborne commerce.

For example, consider dredging and dredge material disposal. Dredging has a negative connotation even though over 95 percent of the material is clean according to the U.S. Environmental Protection Agency and may even have beneficial uses. Yet, dredging is absolutely necessary for our ports. All of us who depend on our ports need to work together to heighten positive public awareness and appreciation of our ports for the role that they play in transportation, economic development, and national security.

In addition, as public agencies, we are vulnerable to the demands of a city or state in a fiscal crunch usurping the retained earnings the port has set aside for needed future capital development. However, most ports and our industry as a whole are not noted for profitability. This too leads to a potential for greater public involvement. If a port's market share drops down even a few percentage points, then the port is viewed as a failure and there's more public demand to control its operations to protect jobs and related businesses in the community.

## New Challenges for Port Managers

On the commercial side the challenges are consuming. Planning and strategic management are necessary if we are to successfully respond to the inevitable changes in technology, economic regulation and global trade patterns. Yet, we can't control the direction nor scope of these changes. I am not saying this to apologize for ports, but we need to understand their limitations.

As developers of infrastructure, whether or not they operate those facilities, ports play a critical role for which there is no substitute. Ports have invested over

five and a half billion dollars over the last decade and we are looking at another three and a half billion dollars in capital investment for infrastructure in the next decade. This scale of investment has not and cannot be achieved by the private sector. Consequently, ports need to continue to have the public financing tools available to them (such as tax-exempt financing) if this public investment in infrastructure is to meet future demand.

My remarks so far have been very general. Let me now look at the important issue of landside access to ports. While this issue is, as we have seen, critical to many of our ports operations, its successful resolution depends upon the acquiescence of people and organizations outside the port's jurisdiction, and therefore, often beyond the port's ability to directly control. Mr. Hicks talked about the time involved in the consensus building, the creation of coalitions in the L.A. - Long Beach Corridor. That project may be prototypical in that a very diverse array of interests and separate municipal governments must be aligned to support improvements in the flow of cargo. Gaining the appropriate attention paid to freight is difficult enough, let alone support in the face of financial and environmental hurdles.

Freight, unlike passengers, doesn't vote. As a result, it's not surprising that landside access to ports has not been successfully addressed in our public policy debates even though it has been brought up and formally listed as a priority in major federal transportation policy initiatives at the beginning of each of the last three decades. The ports, therefore, welcome the AASHTO conclusions which again indicate the importance of this issue. The question, however, remains: How can we close this issue at our individual ports? That is, how do you get the attention of the state departments of transportation? How do you create a political climate where the ports are a recognized player, especially in the area of surface transportation, so removed from the usual forum of debate on port issues?

### **Developing Future Policy**

It's a long process. One tactic may be to have a nationally recognized and academically unimpeachable entity, such as the National Academy of Sciences address this issue. AAPA is currently cosponsoring a study with

the U.S. Department of Transportation that is documenting the extent to which landside access represents a problem in our national freight distribution network. Another tactic is to gain recognition of this issue with potentially some positive public policy initiatives established in the reauthorization of the Surface Transportation Act. We believe we are also making some progress on the legislative front.

Port access is a critical problem, and it's not just a physical problem, although the physical limitations are certainly very real and need to be addressed. It's an institutional coordination problem, and we've talked about the layering of institutions which have regulatory control over environmental issues and over land-use issues. Such layering can too easily lead to gridlock-layering and I hope what comes out of sessions such as this is an appreciation for the need for better coordination and planning.

Clearly, ports over the last decade have come to appreciate the role of strategic planning in directing port capital development. Ports have no choice in this competitive climate with the shortage of capital but to be very careful in resource allocation.

The ports were among the first to agree to a significant cost share with the federal government of channel development. We've been concentrating on the waterside access for the last ten years or so. But to get those water projects moving we had to kick in between 35 and 60 percent of the cost of those traditionally federal projects.

All we ask concerning landside access is a realization by states and the federal government that this is an important national issue. There must be incentives for the states to place landside access high on their priority funding list. We'd like to have a separate account created for port access projects, but we recognize that that's not politically very feasible.

I would like to conclude with a reiteration of the need to coordinate. I think that with the increasing dependency on public/private partnerships we can look to creating an improved port system with better access on both the waterside and landside. I'm pleased to take part in this conference with the various modal interests. Hopefully out of this week, we'll have a better understanding of what we have to do in the years ahead to improve our transportation system. Thank you.

## SUMMARY COMMENTS

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### RAPPORTEUR

Carl W. Stenberg

President

American Society for Public Administration

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As you might have gathered, my job is to provide a bit of an overview, perhaps a public administration or an inter-governmental perspective on the issues that have been raised and addressed this morning.

That's going to be a challenge, because quite literally we've been all over the waterfront! But having said that, there are some major points that bear some repetition, and then I'd like to identify some trends that I think would be of some interest and concern.

We began talking about access to ports, and listening to some excellent case studies of experiences in California in dealing with some of the tough issues that are involved.

We ended talking about the new transportation system, the multi-modal system, which emerged during the '80s, characterized by perhaps reduced parochialism between the representatives of the ports, the railroads, and the trucking industry.

We also ended with a different definition of competitiveness. Competitiveness was not so much between the transportation modes, but competitiveness in a global environment, looking beyond the borders of individual cities, counties, states and regions -- and even this country.

The two words, globalization and competitiveness were mentioned several times this morning, quite appropriately.

Some important conflicts were identified by our speakers and respondents:

- Conflicts between economic growth and development issues on the one hand, and environmental concerns on the other.
- Conflicts between safety issues in terms of transport and cost factors.
- Conflicts between constrained resources, both public and private, and rising demands for more service and greater efficiency in the transport of product.
- Conflicts between the fragmentation of authority, particularly governmental authority, and the need for coordinated action and for authoritative decision making.

These are some of the conflicts that were identified. But back to the point about parochialism.

Our speakers indicated that there is very much a need for us to get our act together, to try and address some of the tough issues involved in a competitive, global society. Yet there's a classic public administration question that occurred to me as I heard this need expressed. The question is: "how can you get everybody in on the action and still have some action?" A subset of this issue from the standpoint of the ports, as in the '90s the new transportation policy and all the modal systems are developed: will the ports be senior partners, will they be silent partners, or will they be somewhere in between?

What about the '90s? There are three questions that were raised occasionally. They weren't answered in any great detail because they're extremely difficult. They're deceptively simple in fact. But yet they're questions that are going to have to be addressed in sessions like this and others that are occurring at this conference.

In terms of transportation policy, who should do what? Who should pay the bill? Who should be accountable?

That leads me to identify five trends that have emerged at the end of the '80s and are going to be very prominent as we enter the '90s.

1. There's no new money in Washington; no significant money to address many of the needs that have been identified today and earlier in this conference. In fact, some are saying that we are in a period of "fend-for-yourself" federalism.

Local governments, state governments, and the federal government are really looking out for their own interests, and not being willing or able to help out one another as was the case in the '70s and '80s. This environment, of course, is a crucial one. It affects how the Transportation Act of '92 is going to be addressed. And it raises the question: to what extent is our national commitment to infrastructure? And has there been, in fact, a disinvestment in infrastructure by local governments, states, and even the national government?

So the first trend, and it seems like it's going to be a long-term one, at least domestically, has been financial constraints. Financial constraints on the federal government's ability to help state and local governments, whether it's through providing grants-in-aid, or releasing trust funds. While that seems to be reality, at the same time it doesn't mean there's no role for national leadership.

2. There is debate over national policy leadership. Now how "leadership" is defined could probably take another panel session! One aspect of leadership gets to my second point. Leadership is defined by some as mandating, telling or ordering state or local governments, or the private sector, what to do with or without the money to compensate for the added costs.

One of the phenomena of the 1980's that has affected your industry and many others has been mandating by the U.S. Congress and by the state legislatures. My fearless forecast is that you're not going to see less of it. You're going to see more of it. Going back to the first point, you're going to see more mandates and less money. The mandates are coming from Congress as it tries to, in part, play a national leadership role. And they come from federal agencies as they try to play a national leadership role. And local and state officials certainly oppose, sometimes effectively and sometimes not so effectively, those mandates. Their cry, of course, is "no mandates without money". The response is "no money without mandates".

Some regulatory issues were raised by the presenters and by the respondents. During the '80s there has been a shift of emphasis, gradually, out of Washington and into state capitols.

Some of you have noted your frustrations in dealing with eight different state regulatory agencies. That tends to be the rule, not the exception, and that's a fact of life that you are going to have to come to grips with. State officials in many areas are eager to regulate. Some of you may say they are not very capable of regulating. In fact some of the dark clouds on the horizon are states cutting back and down-sizing as a result of the recession, and the regulators are being cut as well. The expertise that's needed to fully understand the complex issues like you're dealing with in transportation can't be brought in to state government. They can't pay enough to bring these people into public service. Or you can't, in the case of several states now, hire anybody, period. So you're going to have a shift of emphasis continuing, and some regulatory issues are going to be resolved at the state capitol, and the ability of the states to do so, in many cases, is going to be less than it was in the 1980's. From your standpoint, I would think that would be a big frustration. Certainly from the private sector's standpoint, it's a high cost, because you face the prospect of perhaps 50 different regulatory answers to some of these questions, rather than a single, stable, uniform national response. And that kind of debate and dilemma is going to characterize the early years of the '90s.

3. Some raised the issue of flexibility, and the need for it. It seems to me there is growing recognition that this makes sense. Whether it's in the form of the so-called block grant approach to providing federal aid as opposed to the old style of categorical aid, or whether it's in the form of incentives, which was mentioned as well.

Using the increasingly limited federal and state resources to leverage private sector investment will increase in the '90s. We saw it for a while in the late '70s and early '80s in terms of community development investment. Perhaps we're going to see this rather skillful use of financial incentives in the '90s.

4. We are going to have to be more creative. I don't know about tariffs on containers, but I think that this group could probably come up with some ways of generating increased revenues to meet the needs that are not going to diminish, but in fact are going to grow. Whether it's a "revenue enhancement" or "user charge," call it what you will, it's going to come from the taxpayer or consumer. It seems to me an inescapable conclusion. That's not necessarily bad.

5. All of the speakers, in one way or another, have indicated not only a need but a desire for cooperation in the '90s as these questions and conflicts are addressed by different industries, by different levels of government.

H.L. Menken once had a statement that went something like this, "For every complex public policy problem, there's a solution that's simple, neat, and usually wrong." I don't think our speakers today presented simple and neat solutions. If anything, the level of complexity was raised and appropriately so in a session like this. At the outset it was mentioned that we have a window of opportunity here as negotiations on The Surface Transportation Act are occurring, as states are struggling to balance their own budgets and at the same time flex their regulatory muscles. Representatives of the different modes are looking at one another perhaps not quite as suspiciously as they once did.

The window of opportunity is open. For how long, it's difficult to say. But the issues that you have raised and addressed this morning are important ones, and I wish you well in addressing them in the months and the years ahead.