

PRESENTATIONS

California and the Pacific Rim Trade

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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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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

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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.