

California Marine Transportation system plans for future

By Robert L. Wallack, AJOT

California transport and logistics officials are outlining projects and funding possibilities in order to handle the steady growth of cargo volumes expected over the next five to 15 years. Infrastructure and operational solutions in terminal, railway, and waterway plans seek to facilitate increasing trade flows for factory, retail, and farm customers. Recent port operational disputes and security concerns underscore California's need to improve intermodal interfaces for national economic reasons.

Cargo movements passing through California marine ports serve the far reaches of the entire continent by north-south and west-east routes, intermodally, by rail, and interstate highways. The California Marine Transportation System Advisory Council (MTS), comprised of statewide transportation stakeholders, reported their needs for infrastructure projects and funding in February, 2003. The California MTS is lobbying US Congress over reauthorization of the 2003 Transportation Equity Act (TEA-3). "Cargo interests are entering the fray for the first time in an organized fashion to compete for funding," said Rick Wiederhorn, Director of the Office of Strategic and Policy Planning at the Port Oakland.

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1992-97, and The Transportation Equity Act of the 21st Century (TEA-21) of 1998-2003 for \$155 billion and \$218 billion, respectively, fund projects to improve the national transportation network. "Unfortunately, investments in transportation infrastructure that enhance freight movements have taken a back seat to commuter-oriented alternatives," the California MTS report stated.

The MTS Advisory Council report finds that California ports account for 40% of the national total for ocean trade whereby Los Angeles, Long Beach, and Oakland are among the top container ports in the country by volume. In 2000, trade between California and all states was over \$453 billion in addition to California's intrastate trade of \$1.3 trillion.

Primary users of the transportation system are logistics service providers who add value to the movement of goods by taking inefficient links out of the supply chain.

Logistics companies and terminals rely on efficient intermodal connections free of congestion for pre and post production customer requirements of sourcing, inventory, and finished goods delivery, nationally and globally. The reliability of the port facilities and intermodal infrastructure are already showing signs of stress as a prelude to growth forecasts.

"Managing growth will be a major challenge in that containerized cargo through Los Angeles and Long Beach is expected to grow from 9.6 million teus in 2001 to over 36 million teus by 2020. Furthermore, the Port of Oakland handled 1.6 million teus in 2001 and expects 4.8 million teus by 2020," according to the MTS Advisory Council. Douglas Tilden, President and CEO of Oakland based Marine Terminals Corporation, a leading provider of stevedoring and cargo information systems in California ports, told the *American Journal of Transportation*, "Port facilities will max out and the infrastructure that supports them is maxing out."

CIRIS RAIL SYSTEM

In response, the Port of Oakland has formed a partnership with several private companies and public agencies in the San Joaquin Valley to test the feasibility of the California Inter-Regional Intermodal System (CIRIS). CIRIS proposes to ease container truck traffic between the Bay Area and the Central Valley with a container shuttle

train which would connect the Port of Oakland and the Port of Stockton.

"The Port of Oakland is always looking for other efficient ways to carry cargo. The CIRIS rail system shows the most promise. If successful, the shuttle service could be expanded to a loop system to as far South as Fresno and as far North as Sacramento," said Wiederhorn.

However, Wiederhorn is skeptical about receiving funding under TEA-3, "...because rail projects are usually privately financed and the competition among modes for federal funding is extremely intense. The availability of TEA-3 for the CIRIS program is a longshot," he said. The Port of Oakland, "...could underwrite some of the cost of CIRIS, but the Port itself is highly leveraged by outstanding

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bonds. We would prefer to quilt together a coalition of different funding sources from the private sector stakeholders, or have associated agencies find funding in federal programs," said Wiederhorn.

The CIRIS project is considered a high priority "strategic investment" in the MTS Advisory Council report, estimated as \$48 million for capital and operating expenses.

All of the Port of Oakland's infrastructure needs total \$898 million of the total \$6.9 billion in Northern California and total \$16.5 billion in Southern California-recommended MTS projects.

The Port is also considering other alternatives which include barge and cargo feeder systems to inland ports and within San Francisco Bay. "Inland waterway systems typically carry high operational cost, low cargo volume, and complicated technical issues so it is premature to assume that these projects can pay for themselves," according to Wiederhorn.

Public-private partnerships similar in scale and importance to when the Central Pacific joined the Union Pacific in 1869, which resulted in the transcontinental railroad, may be in order.

SHORT SEA SHIPPING SYSTEM

Captain William Schubert, Maritime Administrator for the Maritime Administration (MARAD) showed national leadership when he spoke at the Connecticut Maritime Association on March 18, 2003, proposing a Short Sea Shipping Initiative.

"We must investigate the development of a robust short sea shipping system to reduce growing freight congestion on our nation's rail and highway systems. And we need support for our commercial partners in short sea shipping start-up operations and vessel construction," said Schubert. In fact, wagon road toll fees from overland mining operations in the early 1860s assisted financing to build the transcontinental railroad.

Operational improvements at the terminals to bring more productivity to the transportation system are continuing, while new infrastructure capacity plans and financing are debated. "Part of our problem is our archaic work practices," said Marine Terminals Corporation's Tilden.

For example, ports in Asia make better use of land and labor than West Coast ports.

"We need to change work practices to bring West Coast ports up to world standards. Asia information flows and equipment moves are more efficient than the West Coast's," according to Tilden.

Southern California container terminal utilization in 2010 could have a shortfall of five million containers based on a throughput volume of 13 million containers as a result of poor moves per acre performance, explained Tilden. He states that changing trucker work habits with early morning runs to get more cycles per day, even though expensive to the terminal, and the use of automated data capture which eliminates unnecessary manual work processes, will result in better utilization of terminals. Tilden believes that terminal business is as much

about, "managing information as managing freight."

BUREAU OF CUSTOMS & BORDER PROTECTION

Overlaying the problems of capacity, operational efficiency, and financing are the security concerns brought on by the war on terrorism. Thomas O'Brien, Director of Field Operations, Bureau of Customs and Border Protection (CBP) under the newly formed US Department of Homeland Security oversees 1,300 CBP Officers from Hawaii through Northern California and east to Utah from San Francisco. O'Brien explains that securing the supply chain without sacrificing the flow of trade in the US is found through the Customs-Trade Partnership Against Terrorism.

"So far, 2,400 companies have applied such as importers, freight forwarders, customs house brokers, and steamship operators, and eventually, all in the supply chain are asked to conduct a self assessment (*FUTURE - continued on page 15A*)

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of their security. Customs and Border Patrol checks their security plans, and, if not up to CBP standards of compliance, then they are asked to meet it. So far, over 690 companies are approved," said O'Brien.

The Container Security Initiative (CSI) is part of the Trade Act of 2002 which involves targeting specific items in a shipment. "The top 20 ports in the world that ship 65-70% into the US are participating. We ought to be able to effectively screen 70% of containers coming to the US in the foreign port 24 hours before lading by running manifest data against US Customs databases and target against specific items in the shipment in a timely fashion before it gets on the ship," said O'Brien.

The National Targeting Center (NTC) on the East Coast supports the CSI program.

"We want to look at the cargo which is the most high risk. We don't need to look at 100% of cargo. The CSI-NTC system allows us to put our best resources to work to consolidate targeters for the whole country for seaport and air cargo," he said.

In fact, of the fully loaded containers from October, 2002 to January, 2003, six percent were looked at by physically examining the contents and 18.6% of empties were looked at by just opening them, according to O'Brien. "We want to increase the inspection of containers and the new technologies helps us a lot. A good inspection on a 40 foot container takes a team of inspectors three to four hours. With scanning equipment, it only takes two to three minutes," said O'Brien. Financing for the programs is from \$79 billion from the Wartime Supplemental Fund of 2003. The CBP is to receive \$333 million, \$35 million to CSI, and \$90 million to new technologies.

California transportation and logistics needs for infrastructure and operational improvements face hurdles from competing local interests for funding.

MTS efforts to organize transportation stakeholders are well underway as TEA-21 reauthorization progresses. "California ports are local entities and must be responsive to the local community. At the same time, they are also local, regional, state, and national assets vital to the nation's economic health," according to Tilden.