Proceedings of the Transportation Research Forum

Volume 5 **1990**

32nd TRF Annual Forum
Long Beach, California
October 10-12, 1990

distance charges because of the unfairness of their impact on intra-state operators, and for other reasons. The proposals to increase gasoline and diesel taxes were of great concern to the trucking industry.

Robert W. Poole, Jr., President of the Reason Foundation, Santa Monica, said that there were serious structural problems with the way U.S. infrastructure was financed, and he did not believe that they could be solved only by raising charges. He identified three problems: (a) Spending is on the wrong priorities, because of political influences; (b) The existing system is not used efficiently, because users are not charged market prices; and (c) Roads are badly maintained, because the political process favors new construction. To deal with these problems, Mr. Poole suggested that the following four principles be followed: (a) Roads should be funded directly by users, rather than out of tax revenues; (b) Each segment of highways should have its source of dedicated revenues, the revenues coming either from users or from property owners; (c) Users should pay market prices, that reflect actual costs imposed (including congestion costs), rather than "user charges" which often are only faintly related to them; and (d) Private capital should be encouraged to finance roads, on terms as good as those available to the public sector.

Mr. Poole described how the private sector was invited to finance new highway schemes in California, and reported that four were selected for implementation, at no cost to public funds.

- *A Motorist's View of Highway Financing*
  by Keith Gilbert, Manager, Highway Engineering Dept., Automobile Club of Southern California

- *The Case for the Private Provision of Roads*
  by Robert W. Poole, Jr., President, Reason Foundation, Santa Monica, CA

- *A Trucking Industry View of Highway Financing*
  by John Reith, Director, Highway Policy, American Trucking Associations

- *Road User Charges Should Be Based On Costs Imposed*
  by Kenneth Small, Professor of Economics, University of CA, at Irvine

Ports: Competition and Labor Issues

Session Moderator: Carl A. Scheraga, University of Maryland

- *Port Competition For Imported Automobiles: National and Regional Analyses*
  by James Crew, Transportation Research & Analysis Center, Kevin H. Horn, University of North Florida

Total U.S. car sales, domestic and foreign, have fluctuated between 11.3 million units in 1978 to eight million units in 1982. Most of the cyclical variability in car sales has been limited to domestic vehicles. Sales of imported vehicles have been relatively consistent, exhibiting an upward trend despite cyclical market fluctuations which tend to dampen the overall rising trend. Import sales have nearly doubled over ten years, increasing import market share to nearly one-third of total U.S. sales.

Development of auto processing facilities at Colonel's Island, Georgia in Brunswick Harbor resulted in a new port of entry for foreign vehicles. Imports of vehicles through Brunswick grew rapidly following the first

shipment in October, 1986. In the last three months of 1986 a total of 9,600 vehicles were unloaded, processed and distributed through Brunswick. A forecast prepared in early 1988 projected substantial growth for Brunswick automobile imports. It was estimated that the port would handle 160,000 vehicles in 1987 based on pending commitments from importers. Imports through Brunswick were projected to nearly double to 300,000 vehicles in 1988.

In 1986 Brunswick attracted BMW vehicles away from Jacksonville. The estimated annual volume of the BMW account is 10,000 vehicles. In 1987 the port attracted three additional accounts from Jacksonville (annual vehicles in parenthesis): Hyundai (40,000); Peugeot (200), and; Saab (10,000). In 1988 Volkswagen relocated processing of vehicles from Jacksonville to Brunswick (14,000 vehicles). Other Jacksonville importers have considered Brunswick, such as Volvo and Isuzu. Jacksonville handled approximately 29,000 Isuzu and 13,000 Volvo vehicles in 1989.

The number of vehicles actually imported through Brunswick was substantially less than the projected units. Brunswick handled 66,000 and 82,000 vehicles in 1987 and 1988. The volume of vehicles discharged at Brunswick in 1989 declined to 61,300 units. Clearly, had Brunswick handled the units that were projected in 1988, 300,000 vehicles, it would have become a major port for automobiles. Growth of this magnitude would most likely have come from diversion of current automobile imports from other ports, particularly Jacksonville, Florida, 67 miles south of Brunswick.

The wide disparity between projected and actual number of vehicles handled through Brunswick cannot be reconciled. Opinions differ widely about the potential for growth of automobile imports through Brunswick. A national study of competition between Brunswick and other ports was conducted to identify the relevant port hinterlands and analyze the sensitivity of these hinterlands to observed and anticipated changes in production and distribution. The distribution of imported vehicles is similar to containers in that there are substantial substitution possibilities between ports for interior markets. Economies of scale in vessel size, auto processing, and improvements in intermodal distribution have changed traditional port competition for automobiles from a regional or coastal basis to an inter-coastal basis. Automobile importers are initiating or contemplating national distribution from a limited number of strategically located load centers.

An analysis of the competitive position of Brunswick for imported cars relative to other U.S. ports was performed in five steps: (1) Identify alternative ports; (2) Identify distribution costs through alternative ports; (3) Identify institutional constraints affecting port competition; (4) Analyze competitive hinterlands, and; (5) Assess port shifts based on current and expected changes in distribution costs.

- *Satisfying the Customer in International Water Transportation: Do Ports Know What Shippers Really Want?*
  by Paul R. Murphy, Douglas R. Dalenberg, and James M. Daley, John Carroll University

The growing importance of international trade, combined with expanding international transportation opportunities, places a premium on symbiotic relationships between international trade participants. This paper presents the results of a study comparing the views of international water ports and large U.S. industrial corporations on 1) important factors in water port selection and 2) contemporary trade issues in international water transportation.

The survey results establish that large U.S. industrials (shippers) play a strong role in evaluating, selecting and negotiating with international water ports. Although there is agreement between ports and shippers that equipment availability and good loss and damage records are the most important port evaluation factors, shippers place more emphasis than ports on customer service variables such as assistance in claims handling.

As for contemporary trade issues, port and shipper respondents markedly disagree as to the influence of labor regulations on efficient port operations, with shippers perceiving labor regulations to be a major problem. The two groups also have different viewpoints concerning port pickup and delivery times, with shippers suggesting that PU and D times take too long.

This study argues that port management should be a strategic marketing approach, which focuses on satisfying customer needs and wants as well as maintaining advantages over competing transportation organizations. Failure to adopt a strategic marketing approach will result in lost traffic, which becomes difficult, if not impossible, to recover.

- *Agreeing to Share: The West Coast Longshore Industry 30 Years Later*
by Robert C. Waters,
George Washington University

The 1960 contract between the International Longshoremen's and Warehousemen's Union (ILWU) and the Pacific Maritime Association (PMA) was the formal agreement that represented a historically different approach to changing technology and work conditions. This contract was entitled the Mechanization and Modernization (M&M) Agreement. It removed formal union opposition to work rules changes and significantly contributed to the containerization of ocean freight. The rules and been won over 60 years of labor strife. The bargain was criticized by some on both the left and the right.

In retrospect, the agreement appears to have been a win-win situation. The parties have been very satisfied with the results; there has been only one major strike since 1948. Moreover, longshoremen have obtained annual income over two times that of average U.S. manufacturing workers at the same time keeping the flexibility historically associated with longshoring. Labor productivity in tons/manhour has increased 1300%, while longshoremen's annual wages increased from about $6000 to $50,000 and include a pay guarantee. Job requirements changed from manual to machine operations. Longshoremen have become comfortable members of the middle class.

Pipelines

Session Moderator: James G. Beierlein, Pennsylvania State University

Summary by Session Moderator

Each of the papers presented dealt with different segments of the pipeline industry. Leonard Coburn's paper provided an elegant background for the development of this session. In his paper he discussed the origins of pipelines and their exploitation by firms such as Standard Oil, the heavy handed regulation by the federal government during the first half of this century, and finally the slow deregulation of the industry since the early 1970s. Won Koo's paper looked at the economic feasibility of using a capsule pipeline for Montana grain that could successfully compete with other modes of transportation and move grain to barge ports. He showed that within a certain window of costs and distances there was a place for a pipeline that could effectively compete for grain traffic.

The presentation so these papers set a good foundation for the discussion of the pipeline industry and the role of government regulation. The discussion that followed first dealt with various elements surrounding the operation of pipelines in the United States. National pipelines for both natural gas and petroleum move a significant proportion of both products at competitive prices and with little potential for environmental damage. These give pipelines a strong competitive advantage in the market. The discussion then moved to the role of transportation regulation in general and what constituted "light handed" regulation. This led to a conversation of how to determine effective competition and where pipelines fit in the overall transportation picture. The topic of whether re-regulation is likely to occur anytime in the future was the next subject addressed.

In all cases the discussions were lively and informative to all involved. The session ended with a round of applause from the audience for the speakers in appreciation of their fine presentations.

- *Historical Turning Points In U.S. Oil Pipeline Regulation*
by Leonard L. Coburn,
U.S. Department of Energy

Oil pipeline regulation developed through three major periods. In the first from 1865 to 1906, the period of monopolization, pipelines grew from their inception in the 1860s to exploitation by the Standard Oil Trust as part of the monopolization of the oil industry. The agitation over further regulation of the railroads and the abuses of the Standard Oil Trust, swept oil pipelines under the regulatory umbrella of the Interstate Commerce Commission (ICC).

In the second period, the period of regulatory development from 1906 to 1948, pipelines were regulated by the federal government and rate regulation developed. The