NEEDS FOR FREIGHT TRANSPORTATION DATA IN A DEREGULATED ENVIRONMENT: PART I

Moderator: Dabney T. Waring, Jr., Motor Common Carrier Association

Speaker: Harvey A. Levine, Association Of American Railroads

My remarks focus on three aspects of the transportation data issue being addressed today: (1) how changes in the railroad environment have lessened the need for government-collected data, (2) what data the government is still collecting, and (3) how the government should change its policies in the data collection area.

Because the railroad industry is highly competitive, public policy toward data collection should not be based on the traditional monopoly mentality. More than 90 percent of railroad rates are deregulated (due to below-the-threshold revenue-cost ratios, contracts, and/or exemptions); railroads face increasing competition from deregulated motor carriers, among others; and the industry has shrunk to a size below that of some individual companies in this country. This competitiveness is reflected by a general decline in freight rates during the 1980s.

Yet, the Federal government still collects an abundance of information from the railroad industry. The industry maintains a second accounting system for regulatory purposes, submits an R-1 annual report to the ICC, which is much more extensive than the normal 10-K report, and also is required to submit to the ICC, the following: Quarterly Report of Revenue, Expenses and Income, Quarterly Condensed Balance Sheet, Monthly Report of Number of Employees, Report of Railroad Employees, Service and Compensation, Quarterly Commodity Statistics, Freight Commodity Statistics, and participation in a comprehensive Waybill Sample. Because of these burdensome data requirements, it is probably that more is known about the railroad industry than any other industry in the United States.

In view of the changed, and changing nature of the railroad industry, the federal government should

1. Reexamine its data collection policy every several years in order to collect only what is absolutely necessary for the purpose at hand, and not collect data because "its interesting."
2. Allow the industry's trade association to collect the needed data; the government could audit the process. This type of arrangement already exists with the Rail Cost Adjustment Factor, Freight Commodity Statistics, and Waybill Sample. The association is efficient and effective in collecting data from its own members.
3. Concentrate on quality, not the quantity of data.
4. Use the data only for what it was intended to be used for.

Speaker: Russell B. Capelle, Jr., Regular Common Carrier Conference

ATA's recent petition to the ICC (to begin a rulemaking to "establish a formal annual reporting mechanism") is a positive step toward inducing equality of reporting among carriers. However, annual expense data should also be collected. Then we would have operating ratios for myriad carriers about whom we know nothing. Since deregulation, the carriers that have grown the most are the ones we know the least about!

In the safety arena, the University of Michigan Transportation Research Institute (UMTRI) has been doing laudatory work over the past decade. Their Trucks in Fatal Accidents (TIFA) database sets an excellent example of meticulous database construction and data quality enhancement that others in the research community should heed, including federal agency personnel. Shouldn't DOT itself have been merging and enhancing its own accident databases long ago, without UMTRI showing what needed doing?

The UMTRI exposure database, National Truck Trip Information Survey (NTTIS), is a giant leap forward. Accident rate calculations too often use "apples" in the numerator and "oranges" in the denominator (FHWA's Highway Statistics for Vehicle Mile Trips (VMT) in the denominator and Fatal Accident Reporting System (FARS) accidents in the numerator, for example). The best of all worlds is to have matched data, but accident rates using NTTIS and TIFA matchable data are far more reliable than rates using unmatched data. Those latter rates when picked up by the media are often counterproductive; the necessary explanation of the caveats surrounding their use obfuscates the public's understanding. Another possible source of exposure data will be FHWA's Nationwide Truck Activity and Commodity Survey (NTACS) after its completion.

The National Highway Traffic Safety Administration's (NHTSA) National Accident Sampling System (NASS) system is the only one that provides "us and them" accident data (comparisons of personal-use-vehicle and heavy-truck accident trends). Budgetary

cutbacks reduced Primary Sample Units (PSU) from a level that would assure reliable generalizations to the whole accident population. A more reliable NASS sample should receive higher priority.

One last positive note: in the early 1980s the Census Bureau was asked to add a number-of-accidents data element in the quinquennial Truck Inventory and Use Survey (TIUS). TIUS had plenty of data for the denominator of an accident rate calculation but nothing on accidents for the numerator. That simple addition will provide unique insights when the 1987 TIUS data are available in 1990. TIUS question number 32 asks about number of fatal, injury and property-damage-only accidents and provides a quantum leap forward toward having matched data--mileage data and accident data from the same trucks. That is a "first"!

As researchers and database builders, we need to keep lofty objectives in our sights and walk the fine lines between comprehensiveness and detail, accuracy versus expediency, and objectivity weighed against subjectivity. We need to promote greater interagency/interorganiz-ational cooperation; to keep the big picture of society's needs in mind; and to build databases that are flexible for an unknown future. Only then can we move toward greater database concinnity.

Speaker: Kyungwoo Kang, Port Authority of New York and New Jersey

Data collection at the Port Authority of New York and New Jersey is both multimodal and multiregional and involves "multi-millions" of dollars. We need data to support our customers: the airports, the sea port, the tunnels and bridges, and the World Trade Center. Our three major airports, Kennedy, LaGuardia and Newark handled about 1.8 million tons of cargo in 1988. Our seaport handled 12 million long tons in 1988. Our two tunnels and four bridges handled about 7.6 million trucks in 1988.

Our freight data needs are driven by our line department operational purposes, such as traffic information for strategic planning. Therefore, we need not only current data but future projections covering origins, destinations, commodities, and types of vehicles. The most difficult but most important part of the data interpretation is how commodities moved, what services the different businesses need, and who is making the freight decisions.

To gather the necessary data we interviewed about 10,000 truckers. To assess transportation needs we interviewed over 2,000 firms in our area. In addition to gathering our own data, we also rely on traditional government sources.

Assembling a huge body of professionally skilled survey agents to supplement our policy efforts is a real problem. You can imagine what is involved in stopping an 18-wheeler at midnight at the George Washington Bridge to ask some questions. Of course, changing data needs and data sources in a deregulated environment further complicate things.

I think the solution to these problems lies in identifying the key data needs and focusing the effort there, compromising objectives where it is necessary. Next, a public and private partnership in data collection should be in the future.

Speaker: Jerold B. Muskin, Drexel University

At a time when the demand for information is increasing, at a time when the ability to access, store, transmit and process information has ballooned beyond belief, at a time when the competitive nature of the motor carrier industry is as it is, the quality, the availability of that information shrinks. For the same reasons that deregulation has set in, data availability has shrunk.

There are three principal areas of demand for motor carrier information: first is safety, second is public policy (insurance, entry, size and weight regulations and other related activities), and third (and this is critical) so that companies can conduct their affairs appropriately. Companies need data upon which to choose strategies, to achieve or choose positions they wish to occupy in the marketplace, to make capital investments, and to make marketing decisions. For these purposes, valid data is required.

The expected source of this information is the government. However, the census of transportation is, for all intents and purposes, gone, and with it, commodity flow information is gone. The U.S. Industrial Outlook says, "Data for most of the industry's activity measures were available only through 1986, making it necessary to estimate data for 1987 an 1988. Data for 1989 are forecasts." I do not know the difference between estimates and forecasts, but that is "officialese", and in any event none of it deals with traffic flow.

As for safety data, we do not know the kinds of accidents, and separating heavy trucks from others is flimsy at best. And yet, we make decisions without any insight into the social costs of accidents and without any knowledge of the marginal social costs or benefits.

Privately available data is derived, by and large, from government data, which means a lot of manipulation is required to compensate for the drying up of government data.

The third source of data is the carriers. Carriers can derive that data from observing or surveying the

marketplace, but observation yields only that which is observed. Inquiries from prospects and customers are subject to error and may be colored by their desire to put themselves into a position of negotiating strength with the surveyors--the carriers.

Furthermore, carriers are reluctant to represent all the information that is available to them and tend to couch it in language that may disguise proprietary information. This is more so as carriers become more competitive in the deregulatory climate. Further, exchanged information among carriers raises the specter of antitrust, absent government involvement.

There is an immense gap between information needs and the opportunity to deal with information that has been handed to us by the computer and information transmission industries and the availability of valid, reliable information, and I would ask you, what are we going to do about it?

Speaker: David E. Lichy, U.S. Army Corps of Engineers

The U. S. Army Corps of Engineers through its Navigation Data Center collects, processes, manages, and disseminates a variety of statistical data relating to foreign and domestic waterborne commerce, vessel and port facility descriptions, and navigation lockages. The reports include annual statistical tabulations of domestic and foreign commodity movements on U. S. waterways and within ports; annual directory of operating domestic vessels, periodic revisions of ports facility descriptions, and quarterly detailed statistics for each Corps of Engineers operated lock. Information is provided both in published reports and on data processing software.

The WATERBORNE COMMERCE AND VESSEL STATISTICS consists of the "Waterborne Commerce of the United States (WCUS), Parts 1-5", which contains statistics on the commercial movement of foreign and domestic cargo, available in both hardcopy and computer tape. "Public Domain Data Base of WCUS", contains aggregated information on waterborne commodity movement by 26 geographical areas, available both in hardcopy and computer tape. "Principal Ports Tonnage Reports" ranks U. S. ports for a calendar year by total tons, domestic and foreign. "State Tonnage Report" contains total waterborne commerce by state. "Transportation Lines of the United States" lists vessel operators and their addresses, type and physical description of vessels, principal service, location, and commodity served. NDC handles special requests for commerce and vessel statistics on a case-by-case basis which are not contained in standard products. A charge for these will depend upon the nature and complexity.

The PORT FACILITIES data consist of the physical and intermodal characteristics of the coastal, Great Lakes, and inland ports in the United States. Fifty-six Port Series Reports are published at intervals of approximately seven years, covering over 200 individual port areas. Reports consist of complete descriptions of a port area's waterfront facilities, including detailed information on berthing accommodations, petroleum, and bulk handling terminals, grain elevators, warehouses, cranes, transit sheds, marine repair plants, fleeting areas, and floating equipment. A special 1988 report, "Summary of Commodity Handling Terminals of the United States Inland Waterways", groups the various terminals by type of commodity handled and includes location, berthing length, cargo direction, operating rate and storage capacity for each facility.

The LOCK PERFORMANCE MONITORING (LPM) data consist of information describing the traffic through the locks as well as the physical aspects of lockages. Specifically, data is collected regarding shift and significant weather or navigation condition changes; lockage data, including vessel name, number, river direction, number of cuts, lockage, entry and exit type, arrival time, and lockage time; and vessel data including vessel name and number, flotilla dimensions, number of passengers, barge types, number, and tonnage. Quarterly "Summary of Lock Statistics, Lock Performance Monitoring System" and "Overview of the Lock Performance Monitoring System" are two available products.