INSTITUTIONAL OPPORTUNITIES AND CONSTRAINTS FOR DATA COLLECTION

Moderator: Diane A. Pecor, Perryplace

Speaker: Paul Bugg, Office of Management and Budget

Through balancing the multiple and often conflicting forces that exist within any decentralized statistical system, the Statistical Policy Office provides general policy guidance to government agencies on statistical matters. I would like to focus on five areas where balancing is necessary: data collection, dissemination of data, confidentiality, autonomous agencies vs. a government-wide agenda, and quality of our statistical system given the reality of the budget deficit.

Data collection in a democracy is essential for making informed choices about issues of the individual citizen as well as the public policy level. In addition, the fact that federal statistics are a "public good," products that would not be provided by the private sector but which benefit the society as a whole, justifies federal provision of data. However, the burden of providing such data costs the taxpayer and those on whom the requirement is imposed.

OMB tries to balance data needs with data costs. Public dialogue between users and producers has proven to be the best way of achieving an acceptable balance. To improve the quality of our information, we need to continually establish a current consensus among those who use and those who provide information about what, when, and quality of information is needed.

Federal statistical agencies must present their information in ways accessible to a wide range of users. Even with technological advances, information in "hard copy" will continue to be available and accessible. Increasingly, though, agencies will provide information that is electronically accessible, searchable for ad hoc queries with a database language, and provided in graphical form.

Federal agencies, however, should not attempt to compete with entrepreneurial products of the private sector. A fine line between public and private roles exists, and the line changes as technology and societal needs change. A balance must be struck between them. Products with the characteristics mentioned in the paragraph above are appropriate to agencies' development of entrepreneurial products to the private sector.

An increasing tension exists between the responsibility to maintain the confidentiality of data with the requirement to disseminate data. We think this tension will be a central issue facing the statistical community during the 1990s. In general, we believe

confidentiality takes precedence over dissemination. Without it, we simply would not have data of sufficient quality to use.

Some believe these conflicts can be worked out over time through developing disclosure avoidance techniques (security) and increased user ethical requirements. We support efforts being made in these arenas, but it must be understood that solutions will only evolve over time and will require the participation of the academic community, businesses, states and others.

The U.S., to a degree not found in most other countries, enjoys a decentralized statistical system. Its statistical agencies are organizationally manageable, personnel are knowledgeable about program content, and products are generally relevant and focused. A decentralized system does, however, create coordination problems. Thus, coordination is one of the principal responsibilities of the Statistical Policy Office. It tries to balance the benefits of autonomous expertise with those of interagency coordination to achieve an overall statistical program that is coherent, consistent, and working on the right problems.

Not including the Decennial Census, the annual budget for statistical agencies in FY1990 will be between \$1.5-1.7 billion. While that sounds like a lot, some would argue that it is not, given the size of our economy, and the need to resolve problems about the quality of the data being collected. Our system was designed to collect information about an economy in place 30 years ago but has not kept pace with the one operating today. For example, we need to increase basic research on concepts and definitions about the domestic service sector and international trade.

Speaker: Fritz R. Kahn, Verner, Liipfert, Bernhard, McPherson and Hand

A central theme pervading this conference is the drastic reduction of available transportation data resulting from substantial deregulation of the transportation industries. The ICC's reliance upon the marketplace to restrain the excesses of railroad and motor carrier entrepreneurial initiatives has been greater than expected post deregulation, and its enthusiasm for suspension of statistical and economic reports cannot be ascribed to the agency's diminishing workforce and

budgets alone. Indeed, the ICC has so reduced its data collection and analysis activities that it would be difficult, if not impossible, to replicate the statistical and economic reports issued by the agency. By its decision in Docket No. 39953, Elimination of Accounting and Reporting Requirements for Motor Carriers of Passengers (served May 29, 1987), the ICC relieved Class II and III bus lines of filing any reports at all, and reduced to a single page the quarterly and annual reports that Class I bus lines must file.

Under its new agenda, the ICC called on affected industries to pick up where it was leaving off. It stated, "The Commission now believed that it is incumbent on the rate bureaus and carriers to develop a data collection system capable of sustaining any ratemaking process utilized in the present free market environment."

Mostly, it got what it hoped for: carriers, through their rate bureaus and trade associations adopted alternative data collection systems supporting their rate proposals. However, their rate proposals, except for across-the-board general rate increases, no longer call for any supporting data. Much rail and motor carrier traffic is exempt, meaning rates thereon are not published generally. The balance of traffic increasingly moves under contracts, the terms of which need not be divulged, much less justified. In short, the preponderance of today's rail and motor carrier rates are the products of negotiations with shippers. As such, the carriers' interests dictate less transportation data, not more.

The Association of American Railroads publishes a wealth of useful statistical and economic data: weekly carloads, freight commodity statistics, cost recovery index, and analyses of Class I railroads. The American Trucking Association publishes financial and operating statistics, trucking trends, and a directory among its reports. They and other industry groups might well do more. The law is not a significant constraint; it is a convenient crutch.

On the grounds that it prohibits disclosure of "information about the nature, kind, quantity, destination, consignee, or routing of property tendered or delivered," industry groups and carriers cite 49 U.S.C. 11910 as disallowing additional data collection efforts. The section, though, is intended to protect shippers and consignees in their business relationships, and its strictures can be waived by them. The section was decidedly not designed as a means for carriers to avoid surrendering data, particularly if aggregated sufficiently to safeguard proprietary information. Finally, it bears noting that this section does not cover a carrier's rates, fares or charges, and costs. These are well within the carriers' power to divulge, should they choose.

Regulated common carriers must, of course, publish and file their rates with the ICC, but not their exempt or contract rates. The law, whether 49 U.S.C. 10713 covering railroad contracts or 49 U.S.C.10762(c)(2) pertaining to motor carrier contracts, does not prohibit disclosure of exempt and contract rates. Rather, the carriers themselves are directly responsible for current inaccessibility of contract rate data.

Carriers also say the Sherman Act prohibits carrier exchange of information about rates, charges and costs. An association's collection and dissemination of trade statistics could be unlawful if determined to be part of a plan to curtail production or raise prices, but mere gathering and reporting of information about prices and costs, even if it brought about a measure of uniformity among competitors, does not necessarily violate the Sherman Act. Indeed, the effect could be enhanced competition.

There may be good and ample reasons for rail and motor carriers not to divulge more transportation data than currently do. The constraints of the law, however, are not foremost among them.

Speaker: Linda B. Morgan, Staff of Senate Committee on Commerce, Science and Transportation

This panel is about opportunity and constraints with and to data collection. I would add a third word, "challenges." The challenge is to define and maintain useful data in the changed environment created by deregulation. Constraints are policies and resources that get in the way of collecting useful data for policy decisions. Opportunities are the chance to restructure positively, even given some of the constraints and challenges that face us.

When Congress passed the transportation regulatory reform measures, it did so from the view that a process, cumbersome regulatory including cumbersome information gathering process that existed mostly to sustain itself, was stifling healthy competition in the marketplace. One clear result of the reform efforts was reduction of information collection. Probably the clearest example of showing this is aviation deregulation. With it, Congress eliminated economic regulation, its regulatory agency, the Civil Aeronautics Board, and its fare and service structure. Congress treated the railroad and motor carrier industries differently and kept in place (partly, at least) the Interstate Commerce Commission and some elements of the regulatory and data collection system.

Since passage of the reform legislation, both Congress and the executive branch have been in transition, i.e., busy implementing the reform measures. Over time, I think, a conflict among objectives has

emerged. Regulatory reform's philosophy called for reduced federal involvement. At the same time, oversight responsibilities warranted some level of involvement and access to reliable information. Some members of Congress wonder whether we have regulated too far, and have asked the General Accounting Office to perform studies on some of these questions.

Some specific examples might help here. First with aviation, Congress has found itself struggling with oversight of the airline industry because information to evaluate, especially fares and service, does not exist post-deregulation. For lack of information, we cannot get a handle on perceived problems, and that frustration has led to several legislative proposals. No legislation has been passed recently, but members have introduced several bills focusing on service, fare re-regulation, and leveraged buyouts of air lines.

With regard to rail and Congress' oversight responsibilities, Congress wants to know what is the financial health of the rail industry and whether more or less regulation is warranted. Once again, it has asked GAO to analyze the issue so that Congress has the appropriate data from which to make a decision.

After reducing common carrier economic regulation, Congress' focus shifted to the commitment of the deregulated industries to safety. It asked what philosophy would guide federal involvement in safety. The Office of Technology Assessment performed several studies on this issue: aviation safety, motor carrier safety, hazardous materials safety, and, data collection requirements for assessment. Two points about the ICC that reflect the conflict alluded to above are the electronic tariff filing procedure and the motor carrier proceeding involving information collection from smaller carriers. The first conflict stems from a need to implement an efficient, useful, electronic system vs. a need to have information for policy decisions. What should the federal role be here? Should the ICC be actually issuing guidelines about how the tariff should work and how filings should be made? A similar conflict exists in the second case: a need for oversight on the financial health of the whole motor carrier industry, and deregulation's objective of reduced federal involvement.

Where does this bring us today? First, from the perspective of policy makers, there is no question we need data to perform our jobs. Maybe, with the reduction of available executive branch data, using the GAO and OTA adds a new layer of analysis that we need. In any case, we are searching constantly for better data. Second, a frustration level exists that stems from the philosophy that the federal role should be minimal or lessened. Members of Congress sometimes have come to distrust federally collected data, feeling it has been "massaged" from a policy perspective.

Whether right or wrong, that distrust exists and we are looking to sources to supply the kind of data we need.

We hope that the discussion ensuing now will lead to a reevaluation of what the federal role is in data collection and what other sectors' roles should be. We now realize that reform did not mean getting rid of data or that a reduced federal role meant no federal role. We need to relook at these issues. This same discussion is going on outside transportation, e.g, trade, technology, and supercomputer initiatives. The issue of funding a National Supercomputer Network focuses on coordinating information needs of the government and private sector entities alike.

In closing, I would say during this transition period we should take this opportunity to reevaluate and refocus what our needs are with respect to data. The challenge, to me, is to derive a system that is useful for making the kinds of policy decisions we need to make down the road. Because we are in transition, NOW is the time to ask some of the hard questions.

Speaker: Edith B. Page, Office of Technology Assessment

Do we need better data at the federal level to make transportation decisions? Let's look at some recent experiences at the Office of Technology Assessment (OTA). In 1984, during its study of the transport of hazardous materials, a high level DOT official could not provide the basis for his answer to the question, "What is the annual level of shipments of chemicals and controlled products in this country?" During OTA's truck safety study, it could not get agreement among DOT agencies about the number of heavy truck accidents because the agencies do not collect data the same way or look for the same items. Furthermore, the reporting criteria for accidents has changed in the last few years, so historical comparison is difficult. And, no one in industry or government has a really good estimate of vehicle miles travelled by trucks, so no good denominators exist to analyze accident data. Even though U.S. data are among the best in the world, the barriers to collecting and analyzing good transportation data at the federal level are substantial. First is the cost of this labor-intensive and highly technically skilled process. The only research budget that has not collapsed over the past ten years is Federal Aviation Administration because its money is spent to monitor the air traffic control system, not to improve data collection.

As federal budgets have fallen, consulting firms and industry associations have become the main repositories for valuable industry data. Government quality control and priority setting are impossible under these

circumstances. The fees they charge, including those for policy makers, are very high, as OTA has learned. The major data firms would have been delighted to provide OTA with information, but at a cost far higher than OTA could afford. In some instances industry has shared proprietary data with OTA, providing it with some capability to estimate correction factors needed for federal data. The good news is OTA was able to make some correction factor estimates; the bad news is it discovered enormous gaps in the federal data, meaning federal decisions in a number of critical areas are based on poor information.

Second are two institutional issues: lack of consensus about priorities for gathering statistics, and lack of effective coordination among the many agencies that engage in collection and analysis of data. Each transportation agency, industry association and individual company has its own particular mission and policy goals, and business reasons for collecting data. Even within a single agency, the computers, software, and criteria for data collection are different. For example, despite FAA's major mission, safety, it has no centrally focused guiding philosophy, and what might be regarded as a "central data base" is a black hole from which historical records cannot be retrieved. It is small wonder that analysis of the transportation system is so difficult.

The 1980's goal of getting government off the back of the people, the A-76 order, the Paperwork Reduction Act, the budget deficit and changes in national spending priorities have all eroded our data capabilities. OTA's recent infrastructure study highlights in staggeringly clear terms how national spending priorities have changed. Transportation infrastructure and resources are getting a much, much smaller and continually shrinking piece of the pie. No wonder our data collection infrastructure is in such poor condition. These problems are compounded by rapid industry change after deregulation, an increasingly global economy that has spawned just-in-time delivery, and a huge increase in intermodal transport. Businesses have responded, but government is much slower to act. What are some positive steps to take? One, to continue working with state and industry groups that collect data to standardize their report criteria. Two, establish public/private partnerships for data collection. Three, perform specialized studies that require pulling together data from an assortment of agencies.

The key ingredient is agreement on what data are important. Here is where federal leadership, clear DOT statements of mission, and a focus on the need for better data could be extremely important. Industry cannot be expected to do this on its own, because each group has its own specific goals for meeting business priorities. We need to look at better forms of information sharing. In the long term, I hope that

exchanges of views, like the one represented at this conference, will lead to consensus on a more concerted effort to address these tough questions.