The Perfect Freight and Passenger Transportation Data Program

Many people like to talk about how long they've been in transportation research or in the transportation industry in general. I try not to do this because it reveals my age! I do this now because I believe my experience is significant to our discussion.

I remember when transportation arrangers (also shippers' associations at one time) sent telexes to carriers and shippers regarding the status of their cargoes. I remember reading telexes from carriers confirming the arrival of shipments (with quantity) at ports and writing telexes relaying these notices to shippers to let them know to arrange for truck pick up. I also remember sending notices to carriers confirming receipt of payments from shippers for release of cargoes at said ports. What a day.

Later, I would receive invoices from carriers which were then keyed into a financial system which matched the shipment amount and charges with the payments received from the shippers. Any discrepancies meant a phone call to a carrier or shipper or both. Money was not sent to the carrier until shipment amount and payment were confirmed equal.

As you can imagine, this approach took quite a bit of time and people to manage. I even remember preparing on time vessel reports every week! These reports compared the carriers' vessel schedule with the actual.

Why do I say all this? It's because private industry has journeyed leaps and bounds from this time to a world of communicating seamlessly between all parties involved in a transport transaction, including transportation arrangers, carriers, shippers, banks, etc. In this streamlined and efficient business world, the federal government has not kept up. Systems for collecting transportation data remain disjointed. Domestic and international shipment data tend to be collected separately. Some still rely on information provided on paper. Many federal agencies have regulatory authority over the safe and secure import, export and transits of cargoes through and around the United States. This effort requires an efficient and effective window into the activity itself.

In light of this very basic comparison, we need to consider a federal transport data program just as efficient and seamless as its industry counterpart. Private industry does not wish to share all of its business data with the federal government and I understand why they would not wish to do so. However, federal and state entities must have a way to determine traffic in and around their regions in order to make appropriate transportation investment decisions.

This is a particular dream of mine as a retired employee from a statistical agency. I've thought about this issue quite frequently in my career and even in retirement. A perfect transportation data program might be far reaching. How about an appropriate, efficient and manageable transportation data program? One with various components from existing data which are updated as needed. Well, first of all what would this look like? We've talked about this for so many years. I can't count them all nor can I recollect all the diagrams of the proposed versions' contents.

Many, if not all, approaches separate freight and passenger transportation. Others even get more separation than this. Freight transportation is then dissected or reported by mode of transport, i.e. truck, rail, maritime, pipeline, and multimodal/intermodal. What freight transport now is not at the very least multimodal?

To make this even more complex, passenger transport generally includes long distance and short distance travel, commuter travel/travel to work, vacation, travel on public transportation. Passenger transport can even further be delineated by ferry, taxi or bike. These distinctions are probably appropriate. I believe these can fit into a data system with long distance and local truck transport and even may compare to freight rail transport.

It follows that with these disparate data and potential or existing data programs there comes various individual data collection efforts and the suitable staff, expertise, software, databases, etc. for each. Some of these data programs have long standing and consistent history and very supportive constituents.

Now I do have the veritable what ifs. What if we start with a clean slate and consider an umbrella of transportation data needed to make safety, security, monitoring, maintenance and other relevant investment decisions? How about considering a transportation system that meets the needs of the people, be it the need for goods, services, or travel?

Think of it. We have a transportation system that moves people and goods on a continuous basis. How in the world would we really know where to invest in this system if we don't know the complete picture, even a segment of it? For example, how do people and freight move together on this nation's highways? How does freight rail transport impact passenger rail transport? Both have to happen and be on schedule while operating on the same rail system. Even a data program with a vision of getting there would be awesome and inspiring.

We can't get anywhere near it if all we say is we can't because it's too complex and too expensive. How often do we spend millions or billions collecting data that are not enough, not accurate nor representative? How about adding up the cost of the attempts at collecting transport data at the state or segment level that are not maintained? Even this task is daunting.

All I ask is that we open our collective minds and consider alternatives to our current approaches.