

By William B. Cassidy

TRACKING HIGHWAY CONGESTION

A public-private system analyzing the movement of 650,000 trucks will help the DOT better plan infrastructure spending

A NATIONWIDE information system that can track the locations and speeds of hundreds of thousands of trucks on U.S. highways is much more than a wild-eyed notion.

For eight years, the American Transportation Research Institute and Federal Highway Administration have been building a system that tracks 650,000 trucks — most of them heavy rigs hauling industrial freight — on major interstate highways.

The data they collect, with the cooperation of trucking companies and other equipment operators, is helping to pinpoint the worst highway bottlenecks, primarily on urban interstate exchanges, but that's just the beginning of its potential benefits.

Increasingly, the Freight Performance Measures initiative will help federal, state and local governments use truck-generated data on congestion and traffic flows to support transportation policy decisions, including where to spend infrastructure dollars.

Eventually, it will help motor carriers improve their own operations by providing data that can be used to analyze routes in a number of ways, ATRI says.

The FPM initiative will support broad efforts at the Department of Transportation to collect hard data on trucking and other transportation modes to better plan infrastructure spending. "In order to best understand what corridors need the most work, we need to understand existing and emerging flows of freight," Peter Appel, head of the DOT's Research and Innovative Technology Administration, said in April.

States are just as eager for reliable data. "This type of analysis represents important progress toward incorporating real truck operations data into freight transportation planning and decision-making," Keith Bucklew, director of freight mobility at the Indiana Department of Transportation, said of ATRI's analysis.

"Timely and accurate information on freight movement will benefit both government and the private sector in making transportation decisions," Federal Highway Administrator Victor Mendez said last month.

Within a year, the private sector and general public will have access to that infor-

WORST U.S. TRAFFIC BOTTLENECKS

RANK	LOCATION	EXCHANGE
1	CHICAGO	I-290 at I-90/I-94
2	CHICAGO	I-90 at I-94 (North)
3	FORT LEE, N.J.	I-95 at SR-4
4	AUSTIN, TEXAS	I-35
5	ATLANTA	I-285 at I-85 (North)
6	ST. LOUIS	I-70 at I-64
7	LOS ANGELES	SR-60 at SR-57
8	DALLAS	I-45 at I-30
9	CHICAGO	I-90 at I-94 (South)
10	PHILADELPHIA	I-76 at US 30

To see the full ranking of 100 chokepoints, see http://www.atri-online.org/index.php?option=com_content&view=article&id=248&Itemid=75.

Source: American Transportation Research Institute, www.atri-online.org

mation through FPMWeb, a free tool that will be available on the Internet, said Daniel Murray, ATRI's vice president of research.

FPMWeb is in the beta testing stage, he said. "Our initial target was government, but probably a third of our requests (for access to FPMWeb) have come from the private sector, including large trucking companies that want to use it to develop more efficient routing. They can request a user account and play with 25 corridors worth of data."

Until now, truck and travel data on that scale hasn't been available. "If you're going to focus on freight management, you need freight data," Murray said.

ATRI and the FHWA began tracking trucks in 2002. "We started some preliminary data collection to test the viability and feasibility of setting up a software system that could process truck position data," Murray said. The system expanded over the years to its current size through agreements with truck operators that include "rigid nondisclosure" clauses that protect company data, he said. "We have all fleet sizes in all sectors," he said. "It's slightly weighted toward larger truckload carriers, but not dramatically so."

The data is transmitted from satellite positioning systems already installed in truck cabs and used by carriers to track their fleets and communicate with drivers. Using data from the carriers, the FPM program tracks trucks and their speeds. That alone provides a wealth of opportunity to analyze when and where freight is moving, and why it's not.

"Recently, we've been looking at where trucks are parked legally and where they're parked illegally," Murray said. "We can use

BOTTLED UP IN CHICAGO

CHICAGO is not only the nation's crossroads, but also its chokepoint. Three of the top 10 traffic bottlenecks are in the Windy City, according to a study released May 26 by the American Transportation Research Institute.

Altogether, Chicago made ATRI's 2009 list of 100 bottlenecks five times. Atlanta and Los Angeles top that number, both appearing on the list six times. But Chicago is the only city to have three highway interchanges in the top 10.

The worst congestion hotspot is downtown Chicago's Circle Interchange, where I-290 meets I-94/I-90. At the height of the evening rush hour, traffic at the exchange slows to about 15 mph. Average peak hour speed at the interchange is 23 mph.

The good news for Chicago is that last year's biggest U.S. bottleneck, the I-80/I-94 interchange, ranked 85th on this year's list. Reconstruction smoothed and sped the flow of traffic at that interchange last year, said Daniel Murray, the ATRI's vice president of research.

— William B. Cassidy

By John D. Boyd

that data to go to a state and say, 'Look, you need to add truck parking here because there's not enough legal parking available.'"

The system's biggest benefit to date is the annual analysis of congestion bottlenecks on the interstate highway network. This year, ATRI and the FHWA used the FPM data to produce congestion severity rankings for 100 locations, up from 30 locations last year. "Next year, we're hoping to rank 200 or 250 locations," Murray said. (To see the full list of rankings, see www.atri-online.org/index.php?option=com_content&view=article&id=248&Itemid=75.)

"THE LONG-TERM BENEFIT IS IN GETTING TRANSPORTATION INVESTMENT TO FOCUS ON THESE BOTTLENECKS."

In 2009, the worst bottleneck in the country was the I-290 interchange with I-90 and I-94 in Chicago, where the average speed at 5 p.m. drops to 15 mph. The average peak hour speed is 23 mph, and the average non-peak hour speed is only 33 mph.

"The long-term benefit is in getting transportation investment to focus on these bottlenecks," Murray said. "As an industry, we've complained for years that highways don't get their fair share" of funding. The FPM data can help change that, he said.

ATRI and the FHWA are looking for new ways to use the data, partnering with universities and states, Murray said. As carriers begin to use the system to benchmark their own routing, more innovative ideas will pop up, he said.

"We already have carriers asking us not just what's the fastest or cheapest route," he said, "but what's the greenest route." **joc**

Contact William B. Cassidy at wcassidy@joc.com.

COMMERCE DETAILS EXPORT EFFORTS

Plan to double exports comes as outbound goods expand in a growing American economy

PRESIDENT OBAMA'S GOAL of doubling U.S. exports within five years generated a set of nation-specific marketing plans, according to a senior U.S. trade official.

"We are developing commercial engagement strategies for Brazil, India, China, Vietnam, South Africa and other nations" as part of the National Export Initiative, said Francisco Sanchez, undersecretary for international trade at the Commerce Department.

"We have developed plans on where we want to be in these markets in five years' time, including dealing with trade barriers," he told the Washington International Trade Association in a June 2 speech.

Sanchez said although the five-year goal is to double U.S. exports and support 2 million jobs, that will start a longer strategy "to reposition America's strategic outlook" toward commercial opportunities to reach the 95 percent of consumers outside the United States.

Some U.S. companies have said they want to see greater attention from the administration to opening markets abroad, including completing free trade agreements they say help build markets for U.S. goods. Sanchez says he is working toward "resolving the outstanding issues in the free trade agreements with Panama, Colombia and South Korea."

Exports already have helped U.S. manufacturers and suppliers of agricultural products rebound this year from the severe 2008-09 recession. The Institute for Supply Management this week said export demand at U.S. factories increased in May, even as import activity slowed.

The Commerce Department reported last month that exports of goods in March grew \$4.2 billion from February, to \$102.7 billion. Still, imports grew even faster, rising by \$6 billion to \$155.6 billion. That left the trade

deficit in goods at \$52.9 billion, \$1.8 billion more than in February.

In the first quarter, U.S. exports of goods grew 20.2 percent over the same period a year earlier, to \$299.6 billion. Imports in the same period grew 21.4 percent.

Some key ports, however, are reporting significant gains in export volume.

Loaded outbound container traffic in April grew 12.4 percent over a year earlier at the Port of Los Angeles, sharply better than the loaded inbound volume expansion of 8.3 percent.

Commerce plans to build on that start, Sanchez said. "I have implemented a 12-month plan that refocuses the degree to which the International Trade Administration (at Commerce) works with companies that are new to exporting," he said.

ITA has commercial experts in 84 countries to help U.S. exporters, he said.

The effort also aims to expand the focus of U.S. companies that already sell abroad, as Sanchez said 58 percent of U.S. exporters sell only to a single country's market.

The administration also is trying to harvest near-term benefits from the strategy. "We are also moving to focus more on targeted industries and markets to accelerate exports now, to create jobs in order to add momentum to the recovery," he said.

The administration previously said it would leverage business contacts of the U.S. Postal Service plus private carriers FedEx and UPS, to make sure exporters they serve are also aware of U.S. export-promotion programs. Sanchez said that effort is well under way.

"By the end of this summer, we will train the entire international sales forces of these three companies on the services ITA can provide to their exporting clients," he said. **joc**

Contact John D. Boyd at jboyd@joc.com.