Autonomous trucks, dedicated lanes discussed as possible solutions to congestion near Interstates 94 and 65

By Karen Caffarini, Post-Tribune

Many Northwest Indiana residents have probably found themselves sitting in their vehicle near or where Interstates 94 and 65 converge, surrounded by large trucks and other vehicles and inching their way to their destination.

According to a new report by TRIP, a national transportation research nonprofit, the intersection is one of the worst bottlenecks in the nation.

The traffic and congestion may be a bother to leisure drivers; but to the trucking industry and its drivers and the businesses they provide deliveries for, they can hinder their ability to safely and efficiently move freight unless measures are taken to improve the nation's highway system and federal funds are released to make it happen.

"Any time freight is delayed in making shipments, it is a lost opportunity," said Ty Warner, executive director of the Northwestern Indiana Regional Planning Commission.

A high price to pay

According to TRIP’s report, America’s Rolling Warehouses: Opportunities and Challenges with the Nation’s Freight Delivery System, Indiana ranked 11th in the nation in freight value, at more than $726 billion, and 19th in terms of the number of combination trucks on rural interstates.

The numbers are expected to only go higher, increasing by 67% by 2045, at least partly as a result of consumers’ shopping habits increasing switching from in-store visits to online purchases and at-home delivery, TRIP stated.

The report said the congestion could be costly for trucking companies and the businesses they move goods for, hampering their ability to move freight efficiently and safely.

But for others, the stakes could be even higher. It could cost them their lives.

In Indiana, an average of 18 people per 1 million population were killed annually in crashes involving a large truck from from 2013-2017. This was the 17th highest rate in the U.S., the report stated.

Nationwide, traffic fatalities as a result of crashes involving large trucks increased 20 percent in that time span, from 3,981 to 4,761.

Approximately 5 of 6 people killed in crashes involving a large truck were occupants of the other vehicle, pedestrians or bicyclists.

Warner said NIRPC did a study of the I-65 and U.S. 30 intersection several years ago and found that one quarter of the accidents there involved pedestrians or bicyclists. He said the study attempted to come up with some safety measures there, including building a tunnel under U.S. 30 and widening the space between lanes going in opposite directions.

"They all took big bucks," Warner said.

The TRIP report recommended increased capacity on the nation's freight transportation system, particularly in bottleneck areas, improved reliability and condition of intermodal connectors and federal funding to help pay for substantial, and costly, freight transport improvements.

Advocates for the state's trucking industry agreed.

"We are always in favor of additional capacity," said Gary Langston, president of Indiana Motor Trucking Association.

He said trucks move more than 70% of the nation's total freight tonnage so a safe and reliable highway and bridge infrastructure system is vital to the economy.

Langston said according to a 2018 update to an American Transportation Research Institute report, congestion caused 1.2 billion hours delay time on national highways at a cost of nearly $75 billion.

"That's the equivalent of 425,333 commercial truck drivers sitting idle for an entire working year," he said.

NIRPC's Warner said while there’s a need for more lanes on the roads, there is a phenomenon called latent demand that often takes place that could negate those lanes.

"More lanes may seem good in a short period, but it doesn't take long for people to realize there are more lanes and quickly fill them, too," Warner said.

Langston also believes more federal funding is needed to improve the nation's infrastructure.

"Many states, just like the Indiana Legislature in 2017, are being forced to find ways to fund their roads and bridges in the absence of federal dollars," he said.

Looking to the future

While not getting into specifics, TRIP also recommended improved roadway safety, additional truck parking spaces so drivers can rest and continuing to develop vehicle autonomy as ways of improving driver safety and helping to solve the truck driver shortage now facing the industry.

Bryce Carpenter, vice president of industry engagement for Conexus Indiana, which promotes Indiana's manufacturing and logistics economy, said autonomous trucks have the potential to reduce the impact of the driver shortage and ensure sustained growth for industries that rely on freight transportation for the long-term.

For the short-term, he said platooning — where two or more tractor-trailers are electronically tethered in a convoy on the highway — would potentially offer immediate benefits and relatively low barriers to adoption.

Warner said while there are some concerns in the trucking industry about autonomous vehicles, including the loss of jobs, he believes these vehicles would have advantages.

"You would have faster reaction times and better synchronization, which would help stop tandem crashes," Warner said.

He said autonomous vehicles could also greatly reduce the distance needed between vehicles, allowing more vehicles on the road and reducing the need for more lanes.

Other options to improve safety could include separate lanes for truck and passenger vehicle traffic, more rest stops and driver rest lanes.

Carpenter said Indiana has had long-standing discussions about separating cars and trucks on the highway.

"The Borman Expressway is a perfect example of congestion caused by the confluence of commercial and passenger traffic," Carpenter said.

He said Indiana understands that truck stop capacity is a challenge and it's important to increase the number of rest stops to ensure safe freight movement, and ultimately safe passenger movement on the same roads.

He said Indiana was part of a coalition of states that received a grant to add rest stop capacity and create a digital tool to provide real time data so drivers can know where the rest stops are on their routes.

Adding more interstates is another solution, but Warner pointed out that isn't always easy to do.

"The controversial proposed I-lliana Expressway was seen as one of the solutions and it met its demise," Warner said of the proposal that was opposed by many region residents who would have been impacted by the new road.

"There was a lot of debate about whether it would have addressed the issues anyway," Warner said.

Karen Caffarini is a freelance reporter for the Post-Tribune.