



Empty Cabs: Are driverless vehicles the answer to Michigan's trucker shortage?

By Ted Roelofs/Bridge Magazine contributor

With no obvious near-term answer to the shortage of truck drivers, could it be that science fiction delivers the final solution?

Caterpillar is already operating driverless trucks in mining operations in remote parts of Australia, a move company officials say saves both money and mistakes. In July, a driverless car navigated the streets of an Italian city in public traffic. Google has logged more than 500,000 miles with its demonstration fleet of automated vehicles, while Nevada, Florida and California have passed legislation that allows testers to operate autonomous cars.

State Sen. Mike Kowall, R-White Lake, wants Michigan to join the club.

Kowall introduced legislation earlier this year to legalize testing of driverless vehicles, a measure he believes will advance Michigan's stake in this rapidly developing field of technology.

He noted one estimate by Forbes Magazine that calculates as much as \$2 trillion a year could be up for grabs.

"If there is that much money going into research and development and manufacturing, wouldn't it be great to have that in Michigan?"

: Michigan personal injury attorney Steven Gursten predicts an eventual shift to driverless trucks. "There will be a seismic shift," he says.

Steven Gursten, a Farmington Hills personal injury lawyer who specializes in transportation litigation, predicts the shift to driverless vehicles will come first to commercial trucking.

"I wonder if it's 10 years from now or 20 years. But there will be a seismic shift. The economic incentive is too powerful," Gursten said.

Gursten bases that on 20 years of trial experience and some 400 cases in which he said one overriding factor was at stake in truck crashes: driver error.

“We call them truck accidents, but they really are not. An accident kind of suggests it was an act of God and it was unavoidable and the reality is the exact opposite.

“I have a client now who lost both legs and had over 20 surgeries because the truck driver was on his cell phone on I-94 and he dropped his cell phone and reached down to pick it up and looked up and my client’s car was in front of him.

“He literally cut the car in two.”

According to the United States Department of Transportation, large-truck crashes killed more than 3,600 people in 2010. A 2007 DOT study found driver error responsible for 87 percent of truck accidents, with 10 percent due to vehicle defect and 3 percent due to weather or environmental conditions. Driver fatigue was cited in 13 percent of the crashes and inattention in 9 percent.

In 2000, it pegged the cost of large-truck crashes in 1997 at \$24 billion.

If – and it remains a big if – driverless technology can be perfected, the pluses for commercial freight are obvious. Automated trucks do not require wages, health care benefits or vacation time. They do not take drugs, drop cell phones or fall asleep. They don’t go on strike.

The stakes are considerable in a state like Michigan, in which 25 percent of U.S.-Canada truck freight – some \$80 billion worth of goods a year – moves across a single crossing, Detroit’s Ambassador Bridge.

To be sure, the “driverless” vehicles thus far under public road testing are not without human oversight. Google’s vehicles, while guided by \$150,000 worth of laser radar, mapping technology and other sensors, are occupied by a driver ready to take control if needed.

Auburn Hills-based Continental Automotive Systems is among the high-tech firms invested in autonomous vehicles. It has logged thousands of test miles on a Volkswagen Passat equipped with technologies like forward-facing radar and adaptive cruise control. When fully activated, the car steers, brakes and accelerates or decelerates when needed and generally behaves like a car with a competent driver.

It hopes to have a fully autonomous car by 2025.

The mining trucks in use in Australia fill a niche industrial role, hardly a parallel for everyday over-the-road commercial use. With a payload of 250 tons, the massive trucks use sophisticated guidance systems to haul layers of rock and dirt up and down steep grades. They are monitored by specialists in a control room miles away, part of a system Caterpillar hopes to expand to 45 trucks. That would eliminate 180 drivers.

Truck driver Daniel Taylor is skeptical.

In his view, it's one thing to run an automated vehicle on a test track or in some remote mining operation. It's quite another to safely steer 40 tons of semi- tractor-trailer through freeway rush-hour traffic or over slick winter roads.

"Whoever thought of that idea needs to have their head examined," said Taylor, 37, a Genesee County resident with seven years behind the wheel of heavy trucks.

"There are too many split decisions you have to make. Is the computer going to be able adjust to freezing rain? If somebody cuts you off and you have to put on the brakes, what are you going to do?"

"You are putting a computer in charge of 80,000 pounds of weight on the highway. That's like putting a child in the driver's seat. I know I wouldn't want to be in a car in front of a truck with nobody in it."

Ted Roelofs worked for the Grand Rapids Press for 30 years, where he covered everything from politics to social services to military affairs. He has earned numerous awards, including for work in Albania during the 1999 Kosovo refugee crisis.