

Transport Topics

The Weekly Newspaper of Trucking and Freight Transportation

Week of April 14, 2014

Truck Seat Hits High Note With Drivers, Study Shows

By Michele Fuetsch
Staff Reporter

A cab seat that blocks the shocks and vibrations that bedevil truck drivers moving down highways and local streets may be a strong determining factor in keeping them on the job longer.

About 89% of drivers who participated in a nine-month study of the seat, developed by audio products maker Bose Corp., said it may extend their careers by a year or more, and a third of them anticipated driving at least five more years.

The Bose Ride System was tested by 100 drivers from three carriers between March and December 2013.

Bison Transport of Winnipeg, Manitoba, outfitted 60 trucks with the seat and assigned them to specific drivers who were surveyed continually over the nine months.

"The thing that really came out loud and clear was the drivers were not as fatigued at the end of the day or the end of their workweek," said Garth Pitzel, Bison's director of safety and driver development.

For heavy-duty truck drivers who sit for lengthy periods, that kind of relief is critical.

The shaking and jarring of a driver's body, including legs, neck, spine and internal organs, is called whole-body vibration. As a result, many drivers suffer joint and other pain that requires medication or physical therapy, the study said.

About 64% of the drivers in the study reported "more rapid physical recovery after road trips, and 71% reported having more energy to do the things they like to do at home," the Bose study showed.

With the 60 drivers at Bison, the study also included 20 drivers at Pottle's Transportation Inc. in Bangor, Maine, and 20 drivers

at Freymiller Inc. of Oklahoma City.

All 100 drivers had a minimum of five years in over-the-road driving. They were surveyed at the start of the nine-month trial and every six to eight weeks afterward. However, 73 of the 100 drivers completed the test.

Michael Rosen, the program's general manager, said the seat differs from a normal seat suspension in that Bose's product doesn't just react to a pothole or other bumps in the road, for example, as a spring system would.

"Coming to a pothole, when the floor of the truck goes down into the pothole, our system actually extends, has a linear motor in it to hold the driver up so they don't feel that shock at the edge of the pothole," Rosen said.

"And on the other end of the pothole, the system senses the floor coming up, it retracts and again protects the driver from that shock," he added.

Behind the technology in the seat are precision sensors that pick up even tiny motions, a high-speed computer with Bose control algorithms and a high-power electromagnetic motor that counteracts the road bumps.

The Bose Ride System is an extension of applications the company also has used to develop products for the military and the aviation industry.

Truck manufacturer Volvo is installing the seats to order at the factory level, the company said.

The seats, first marketed in 2010, sell for \$5,995 for one unit, Bose said. But for fleets ordering 10 to 99 seats, the cost is \$3,695 per unit plus installation, shipping and taxes.

Bison said that, as a result of the survey, it is putting the seats in 60 more trucks

The Bose Ride System seat has sensors that help counteract bumps and vibrations that cause driver fatigue and injury.



Bose Corp.

and will conduct a second study on those new drivers.

A longhaul carrier with more than 1,200 power units, Bison ranks No. 63 on the TRANSPORT TOPICS Top 100 list of for-hire carriers in the United States and Canada.

Pottle's is a regional carrier with 120 units and Freymiller is a reefer fleet with 350 units.

A surprising finding in the study, Bison's Pitzel added, was that drivers using the seats reported increased safety benefits.

About 67% said their "visual acuity" had improved so they were better able to spot a safety problem, and 71% said their ability to handle such a situation had improved, the study said.

Eprinted and posted with permission to Bose Corporation from *Transport Topics*
April 14 © 2014 American Trucking Associations, Inc.

BOSE RIDE

www.BoseRide.com

Within the U.S. 1-800-721-2673

Outside the U.S. 001-508-766-5808