EASE

DRIVING THE FUTURE OF AUTOMATED TRUCKING

ON THE ROAD WITH EASE & ONE OF THE FIRST U.S. DEPLOYMENTS OF AUTOMATED DRIVING SYSTEMS (ADS) FOR CUSTOMER FREIGHT SHIPMENTS



EXECUTIVE SUMMARY

In 2023, EASE became one of the first companies in the United States to deploy automated trucking technology on customer freight shipments, helping shape the future of the logistics industry. EASE semi-trucks connected by Al technology react to real-world scenarios, collecting valuable data that will be used to inform the safe scaling of future vehicle automation deployments in the U.S.

PROJECT STATUS

To date, EASE automated and connected semi-trucks have traveled over 48,000 miles on platooning routes and EASE professional drivers and ADS operators have spent 875 hours behind the wheel delivering goods for customers in the automotive, government and retail packaged goods industries. Notably, one special delivery took custom furniture from Columbus' A Carpenter's Son to the home of one of the Ohio's professional sports organizations. The project will come to an end in March 2024.

IN PARTNERSHIP WITH





















EASE HOW IT WORKS

TOM & JERRY

Two 53-foot EASE tractor-trailers, nicknamed Jerry (leader) and Tom (follower) are connected by Al technology. Bosch wireless vehicle-tovehicle (V2V) technology gives the vehicles the ability to communicate with each other.

PLATOONING MODE

Platooning mode occurs in very specific and ideal circumstances – weather, road conditions, and traffic are all taken into consideration when EASE drivers choose the perfect moment during a route to engage platooning mode. The driver of the lead truck controls the speed and the follower truck has precisely matched braking and acceleration technology to respond to the lead vehicle's movement.

DRIVERS ALWAYS ON BOARD

This technology is human-powered. Highly specialized EASE drivers completed 400 hours of training at the Transportation Research Center (TRC) before taking the driver's seat. Platooning automation requires a driver to be in each truck, with hands on the wheel, whenever the trucks are engaged in platooning mode.

SAFETY PROTOCOLS

The drivers have the authority to determine when during a route to engage in platooning mode and when to disengage the technology. The driver of the follower truck can override platooning mode to take manual control at any moment of the drive. Both trucks are equipped with radar to detect other vehicles on the road, monitoring and adjusting to their environment. Additionally, the automation disengages the moment another vehicle drives between the semi-trucks.

BART COOPER EASE ADS SYSTEM OPERATOR

DELIVER SUCCESS. WITH EASE.

Drive

SYSTEM

hic



EASE

DEPLOYING TECHNOLOGY FOR SAFER ROADS

PROJECT GOALS:

SAFETY FOR ALL: Safety is the first and foremost goal of this project. The technology will only be deployed under very specific and ideal circumstances to demonstrate how connected and automated semi-trucks could improve safety for drivers, passengers, freight, and communities in rural areas.

DATA COLLECTION & ANALYSIS: The data collected will be shared with the Federal Motor Carrier Safety Administration and U.S. Department of Transportation to assist in developing national ADS policies and remove barriers to the safe integration of automated technology into logistics operations across the U.S.

COMMUNITY & INDUSTRY IMPACT: The data collected during these projects will provide an important baseline for initiatives to reduce fuel consumption and emissions output, increase driver and transportation productivity, and remove barriers to increase the broad adoption of automation.

COLLABORATION TO ACHIEVE A COMMON GOAL: Many public and private partners have come together to make this project possible. Strategic partnerships like this are what help big goals to become achievable!

FURTHER ON DOWN THE ROAD

WHAT'S NEXT

This summer, a second fleet of EASE trucks outfitted with autonomous technology developed by Kratos Defense & Security Solutions will begin operating along I-70, moving freight on a 166-mile route between Ohio and Indiana.

I-70 CORRIDOR PROJECT SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) LEVELS OF AUTOMATION

LEVEL 1	LEVEL 2	LEVEL 4
PLATOONING AUTOMATION	PARTIAL AUTOMATION	HIGH AUTOMATION
One automated system for driver support. With truck platooning there is connectivity between a convoy of two or more trucks, as well as the automated support system.	Vehicle has combined automated functions, like acceleration and steering but the driver must remain engaged with the driving task and monitor the environment at all times.	The vehicle is capable of performing all driving functions under certain conditions. The driver can control the vehicle at any time.

"Partnering with innovative companies like EASE is key to unlocking the full safety and efficiency benefits that truck platooning technology can provide,"

- PREETI CHOUDHARY

DriveOhio Executive Director

INTERESTED IN JOINING THE JOURNEY?

EASE is currently looking for partners to join us in our next autonomous technology deployment with DriveOhio. Contact us: <u>innovation@easelogistics.com</u>

WWW.EASELOGISTICS.COM

