

Wednesday, September 18th 2024

Truck of the Future can give NYC safer fleets

Truck of the Future Pilot Program Key Findings 67,732 VRU alerts collectively recorded over the course of the pilot program amongst the three participating fleets 1. NYC Fleet 1 Six out of the nine vehicles showed a decrease in speeding alerts in the most severe "red" category. Proportion of VRU alerts triggered while the driver was speeding decreased from 23.13% to 17.02%.

The Truck of the Future is a pilot program designed to help cities reduce truck-related traffic fatalities on city streets.



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PUBLISHED: September 18, 2024 at 5:00 a.m.



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Imagine a truck designed to keep people safe on the busy, bustling streets of New York City. A truck that offers the driver a sweeping, direct view of the street ahead and all the people on it. A truck outfitted with cutting-edge AI-powered cameras and "near-miss" technology that can see pedestrians and people on bikes hidden in blind spots. A truck that can relay that information back to the driver, alerting the driver before a crash occurs and helping the operator avoid hitting something or someone.

Imagine this and you might be imagining something very close to the <u>Truck of the Future</u> (ToF).

Co-developed as a public-private partnership between Together for Safer Roads (TSR), a global road safety NGO comprised of some of the largest fleets in the world, as well as leading road safety technology companies, the NYC Department of Citywide Administrative Services, and various public and private sector TSR partners, the Truck of the Future is a pilot program designed to help cities reduce truck-related traffic fatalities on city streets.

Connected by TSR, the program leverages the best of what the municipal and private sector fleets can offer, combining new and emerging technologies developed by safety-minded technology companies with real-world operating fleets including 20 New York City fleet vehicles from two separate city departments, and 10 vehicles from AB InBev's subsidiary in Mexico City. In addition, the program aligns with New York City's overall Vision Zero goals and dovetails with the important recent NYC Executive Order 39, which addresses visual obstructions for truck operators.

In each case, the VRU alert was triggered because there was a person detected within 3 feet (0.8 meters) of the truck. This heavy volume of close proximity VRU alerts illustrated the importance of providing drivers with a 360-degree view of vision around the vehicle and alerts on imminent risks.

In addition, the ToF pilot also showed that major changes to driving behavior are possible. In addition to the expected greater awareness of vulnerable road users, installation of the VRU Detection System was also associated with a significant behavior change: a decrease in speeding over time, particularly in the most severe "red" category and among outlier speeders. This finding was a welcome surprise, considering that the system did not directly alert drivers when they were speeding.

Since speeding is a leading contributing factor to the frequency and severity of crashes, it represents a significant and unexpected benefit. In addition, both drivers and managers surveyed after the pilot provided positive qualitative feedback on the effectiveness of the VRU Detection System.

The <u>Truck of the Future pilot program</u> could not come at a better time. In 2023, 99 people lost their lives walking in New York City and additional 29 people were killed while biking. While pedestrian fatalities have generally declined in New York City, from 132 in 2014 when the City's Vision Zero initiative began, cyclist fatalities have increased. Developing, testing, and refining technology to create safer vehicles is an essential effort for the public and private sectors alike.

The Truck of the Future underscores the transformative potential of innovative technologies and cross sector collaborations to make roads safer for Vulnerable Road Users and fleet vehicle drivers. The enhanced capabilities of AI in telematics can provide drivers with greater awareness of surrounding VRUs, change driving behaviors, and create safer roads for all. Municipalities throughout the U.S. should take note of this opportunity to deploy technology for actionable, scalable change.

Every alert that a VRU Detection System can make represents the potential for a near miss and a life saved on our urban roads.

Goldwasser is executive director of <u>Together for Safer Roads</u> (TSR), a leading NGO focused on building cross-sector partnerships to improve fleet trucking safety.