MTA Press Releases

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NYC Transit IMMEDIATE

MTA NYCT Tests New Safety Technology on Buses

Department of Buses will Evaluate Pedestrian Turn Warning, Collision Avoidance Systems

MTA New York City Transit has begun to test new technologies aimed at improving safety for drivers, bus customers and pedestrians. The 60-day tests of pedestrian turn warning and collision avoidance systems will determine if a full pilot of one or both systems can proceed in 2016.

As part of the MTA's ongoing commitment to improving safety across all agencies and in coordination with New York City's Vision Zero plan, tests will look at integrating these systems on our buses to assess their functionality in our operations. If these preliminary tests are successful, a broader pilot program will be implemented to evaluate the effectiveness of these systems in assisting or alerting bus operators and pedestrians, and improving the safety of our customers, pedestrians, bicyclists, and drivers that operate near our buses.

NYC Transit's Department of Buses is testing two systems on six buses: a pedestrian turn warning system that issues an external audio warning when the bus is making a right or a left turn, and a smart sensor based technology designed to prevent forward and side collisions by alerting the bus operator with visual and auditory warnings.

"These initiatives are an integral part of our commitment to continually improve our safety performance," said Darryl Irick, Senior Vice President, NYC Transit Department of Buses and President of MTA Bus. "Our safety efforts so far have reduced the number of collisions per million miles by as much as 46 percent since 1988. But we are always aiming to do better, and we look forward to taking this commercially-available technology and seeing how we can put it to practical use on a larger scale under New York City operating conditions."

A pedestrian turn warning system by Clever Devices has been installed on four buses. This system is triggered when the bus makes a turn, activating an external warning to nearby pedestrians or bicyclists that the bus is turning. External speakers are installed in an area that does not block the bus operator's view, and the speaker volume takes into consideration the ambient sound level in the vicinity of the bus. The system has been installed on one bus operating out of the Fresh Pond Depot in Queens, one bus out of the Flatbush Depot in Brooklyn, and two from the Michael J. Quill Depot in Manhattan.

The second test involves a collision avoidance system that is installed within view of the bus operator at the front of the bus. Multiple smart vision sensors manufactured by Mobileye are integrated with a driver interface manufactured by Rosco Vision Systems, to create the Mobileye Shield+ System. This system is installed in and around the bus to help detect the presence of vehicles and pedestrians in the front of the bus and pedestrians on both sides of the bus. Moreover, the system alerts the bus operator prior to a potential collision. The collision avoidance technology initiates the alerts without the need for bus operator input and continually measures distance and relative speeds of the bus and surrounding objects to evaluate the risk of a collision. When danger is imminent, visual and audible alerts warn the bus operator to make necessary corrections in sufficient time to avoid a collision. The collision avoidance system has been installed on two buses operating out of the Flatbush Depot.

The Department of Buses will test these systems for 60 days to gather data and feedback from bus operators.

Based upon the results of these tests, the systems will be refined and, if successful, will lead to full pilots of one or both systems in 2016 to better determine their effectiveness, viability, and functionality in our operation, as well as the impact to customer service and safety performance. The Department of Buses is prepared to test each type of system on approximately 100 buses next year, for an expanded pilot using at least 200 buses total. The cost of rolling out these technologies throughout the fleet is estimated at $20 million for pedestrian turn warning systems and $57 million for collision avoidance systems.