PRESS RELEASE

Collision-avoidance technology deployed on 38 buses in pilot program featuring eight of Washington's largest transit agencies, UW STAR Lab

May 6, 2016

Contact: Sanjay Bhatt, Kitsap Transit PIO
360-824-4926, sanjayb@kitsaptransit.com

Note: B-roll video of the technology in action on a moving bus is available upon request.

BREMERTON, Wash. -- Avoiding collisions and preventing injury is in everyone's interest. That's why Kitsap Transit is testing on select buses an award-winning collision avoidance technology known as Mobileye Shield+™. The technology alerts drivers to avoid and mitigate imminent collisions, protecting the most vulnerable and difficult to observe users of roads – cyclists, pedestrians and motorcyclists.

Over three months, the University of Washington's STAR Lab (Smart Transportation Applications and Research) will collect data from 38 buses in the state equipped with Mobileye Shield+ technology. Eight of the state's largest transit agencies are involved: King County Metro, Kitsap Transit, Community Transit, Pierce Transit, Intercity Transit, C-Tran, Ben Franklin Transit and Spokane Transit.

All except for Metro are members of the Washington State Transit Insurance Pool (WSTIP), which funded the 18-month, $225,000 pilot project with insurers and a federal research grant. Rosco Vision Systems is the official North American provider of the collision-avoidance system.

The buses are outfitted with four vision sensors, which feed visual displays and trigger audio warning alerts to drivers of pedestrians and bicyclists in blind spots. The system also monitors following distance, warns drivers of an imminent rear-end collision, alerts drivers if their bus strays from its lane without an active turn signal, and notifies drivers if the bus exceeds the posted speed limit.

Data is being collected from Kitsap Transit buses through June 15.

Autonomous collision avoidance and emergency braking technology is already installed in automobiles and trucks, but it has not yet penetrated the transit bus industry.

“This is the first time a collision-warning system has been deployed on public buses,” said Jerry Spears, deputy director of WSTIP. “There’s nothing else like this in the country.”

While bus passengers are more than three times safer than automobile passengers, based on the rate of fatalities per 100 million passenger miles, buses can be made even safer, says Dr. Jerome Lutin, former senior director of statewide and regional planning at New Jersey Transit.

“Current policies at the federal level have focused discretionary spending on programs that emphasize job creation rather than research,” Lutin says. “However, the data show that research and development of autonomous collision avoidance and autonomous emergency braking for buses have the potential to reduce annual casualty and liability expenses and allow scarce transit funds to be reallocated in ways that would not only create jobs, but would save lives and reduce injuries, as well.”

According to data from the National Transit Database, from 2002 to 2014, buses and vanpools were involved in 85,391 collisions that injured 201,382 people and resulted in 1,340 fatalities; these incidents triggered $5.7 billion in casualty and liability expenses. While the National Transit Database reports a decline in the number of injuries, severity continues to be an issue.

An analysis of bus collision claims from 2004 to 2014 from three major transit insurance pools and King County Metro found that of the total $191 million in gross incurred losses, about 60 percent of that was for claims over $100,000. WSTIP’s Spears says about half of these large claims are forward-motion collisions with pedestrians, bicyclists or motorcyclists.

Based on the analysis, forward collision-avoidance systems with autonomous emergency braking could prevent 61 percent of claims over $100,000. Four of the five largest claims could have been prevented by such technology, for a savings of $18 million, according to WSTIP’s Spears.

Supported by a grant from the Transportation Research Board at the National Academies of Science, the University of Washington’s STAR Lab will analyze both quantitative and qualitative pilot data collected from multiple sources including video, telematics, and transit operator surveys. A final report on the pilot project is due in mid-2017.

About Kitsap Transit

Kitsap Transit has been operating friendly, convenient public transit since 1983. The Bremerton-based transit agency for Kitsap County carried more than 3.8 million riders last year across a multi-modal system of routed buses, paratransit shuttles, vanpools, worker/driver buses for the Puget Sound Naval Shipyard and a passenger-only ferry service.