



Truck Safety Technologies

Speed Limiters

- A speed limiter (SL) device prevents the vehicle engine from traveling faster than a pre-set speed.
- These systems are already included on all vehicles with electronic engine control systems, and used by 60 – 63 percent of fleets.
- Trucks equipped with SLs had a significantly lower crash rate (approximately 50 percent) compared to trucks without SLs.
- The cost of SL technology is negligible and many large trucks are already equipped with this device.
- Status: The proposed rule is currently under review at the Office of the Secretary of Transportation (OST).
- Next Steps: Review by the Office of Management and Budget (OMB).

TSC's Position: Immediately issue a rule for speed limiters set no higher than 65 mph.

Electronic Stability Control

- Electronic Stability Control (ESC) seeks to reduce crashes by applying selective braking to prevent rollovers and mitigate loss of control.
- The National Highway Traffic Safety Administration (NHTSA) has found that ESC on large trucks would prevent 40 – 56 percent of rollovers and 14 percent of loss of control crashes and, in recognition of the potential impact, proposed a new standard for heavy trucks.
- According to the Federal Motor Carrier Safety Administration (FMCSA), for every dollar spent on ESC devices, the carrier's return on investment is \$1.66 - \$5.34.
- Status: A NPRM was published May 23, 2012.
- Next Steps: NHTSA plans further research for mid-2013 to finalize performance tests. A final rule is expected to be published in early 2014.

TSC's Position: Support the issuance of a final rule requiring ESC installation on large trucks.

Forward Collision Warning Systems

- Forward collision warning systems (FCWS) provide audible and/or visual warnings to help reduce the incidence of rear-end crashes.
- FMCSA studies have estimated that between 8,597 and 18,013 rear-end crashes involving commercial motor vehicles (CMVs) could be prevented annually through the use of FCWS systems. For every dollar spent, the carrier's return is \$1.33 to \$7.22.
- FMCSA estimates carriers would recoup the cost of a FCWS from avoiding collision in as few as 8 months.
- Status: NHTSA is developing objective test procedures and performance metrics for these systems.
- Next Steps: Agency decision on rulemaking expected in 2015.

TSC's Position: Accelerate testing in order to begin rulemaking and implementation for collision avoidance systems.

Lane Departure Warning Systems

- Lane departure warning systems (LDWS) help to reduce crashes caused by lane change maneuvers above a speed threshold and when the vehicle's turn signal is not used.
- FMCSA studies show LDWS could prevent approximately 3,863 – 8,103 annual crashes involving CMVs. The return on LD systems was \$1.37 to \$6.55 for each \$1.00 spent. Recovery of costs could occur in as few as 9 months.
- Status: NHTSA is developing test procedures and performance metrics using the latest generation systems.
- Next Steps: Initiate testing and field operational tests in 2013.

TSC's Position: Accelerate testing in order to begin rulemaking and implementation for LD warning systems.

- ❖ National Highway Traffic Safety Administration Presentation, Motor Carrier Safety Advisory Committee – Regulatory Update, April 5, 2013.
- ❖ Pickett, Racquel L. *Onboard Safety System (OSS) Deployment Research: A Synthesis of Research on the Costs, Benefits and User Requirements Associated with Motor Carrier Safety Technologies*. Tech. Comp. Daniel Murray and Chris Flanigan. N.p.: n.p., n.d. American Transportation Research Institute. Web. 24 Apr. 2013. <<http://www.atri-online.org/research/results/ATRITRBOSS.pdf>>.