

# Truck Safety Technologies: Automatic Emergency Braking and Speed Limiters

Presented By:

Truck Safety Coalition | Road Safe America | The Trucking Alliance |  
Advocates for Highway and Auto Safety | The Truckload Carriers Association

# Overview

## **Truck Safety Trends**

## **Speed Limiters**

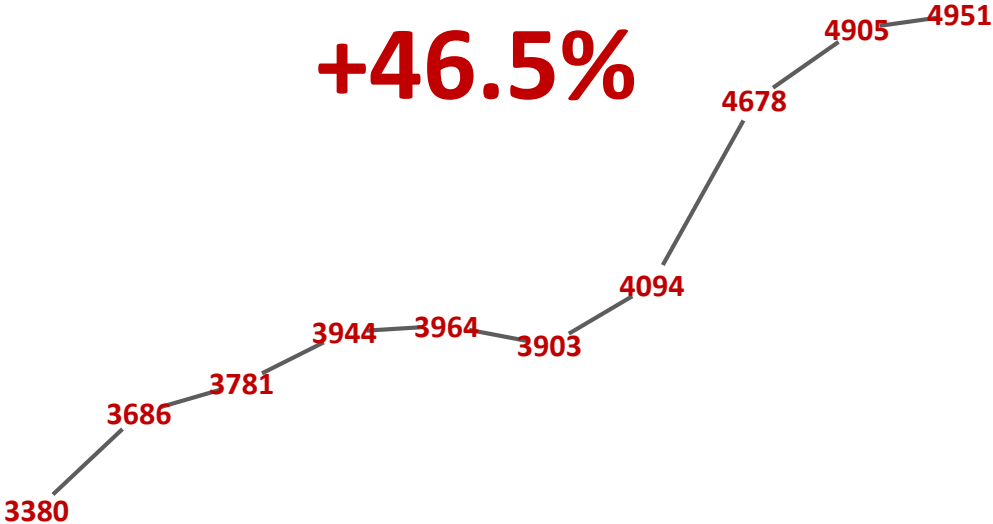
## **Automatic Emergency Braking**

## **Call to Action**

# Truck Crash Trends

## Truck Crash Deaths

**+46.5%**

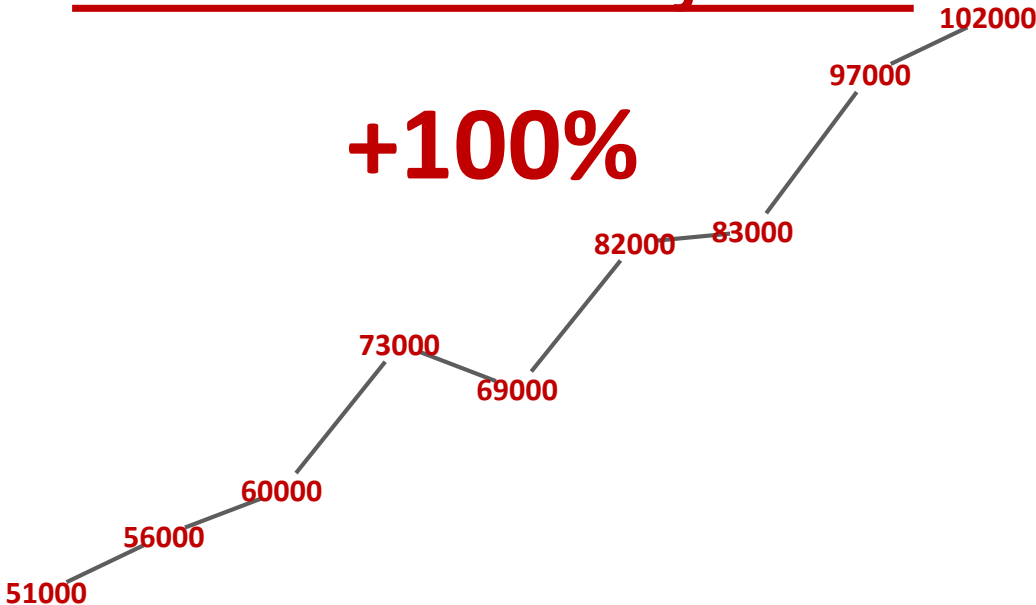


2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

-- Fatalities

## Truck Crash Injuries

**+100%**



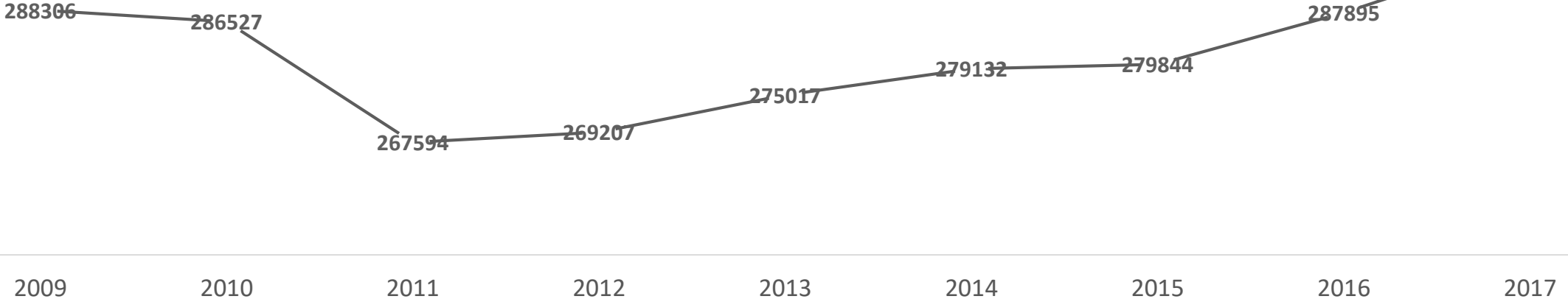
2009 2010 2011 2012 2013 2014 2015 2016 2017

-- Injuries

# Truck Vehicle Miles Traveled

## Truck Vehicle Miles Traveled

**+3.2%**



— Truck Vehicles Miles Traveled (in Millions)

# What are Speed Limiters?

All class 7 & 8 trucks with electronic control units (ECU) are speed limiter capable because the ECU monitors an engine's RPM and controls the supply of fuel to the engine.

Depending on the make, speed limiting capability has been standard in these large trucks for 15-30 years

**Speed limiters cap the maximum speed at which class 7 & 8 trucks (the heaviest vehicles on our roads) can travel.**

# What is S. 2033, the Cullum Owings Large Truck Safe Operating Speed Act of 2019?

1. Require original equipment manufacturers to continue making trucks with speed limiter capabilities as standard,
2. Require existing speed-limiting technologies already installed in these commercial motor vehicles to be used at 65mph or slower while in operation, and
3. Require that the maximum operating speed of all class 7 & 8 commercial motor vehicles shall not exceed 65 miles per hour in Interstate commerce.

# How do Speed Limiters Improve Truck Safety?

After Ontario required speed limiters, the Ontario Ministry of Transportation found:

**73% reduction in highway speed-related, at-fault truck crashes, and 24% reduction in fatalities in all crashes involving big rigs after mandatory speed limiter technology took effect in Ontario.**

A 2012 FMCSA study found that **using speed limiters had a significantly lower speed limiter-relevant crash rate (approximately 50%) compared to trucks not using speed limiters.**

# Are Speed Limiters Set at 65-mph a Cost-Effective Safety Solution?

Companies that use speed limiters report fuel savings as well as avoiding high-speed wrecks in which their truck is the striking vehicle.

Because a vast majority of trucks this size already are speed limiter capable, there is no capital cost to requiring their use.

NHTSA determined that a speed limiter rule, **requiring trucks to be speed limited at a speed of 65 mph would be cost-beneficial, with the net benefit estimated to be \$1.0 billion to \$2.8 billion annually.**



# Marvin Johnson & Associates Study

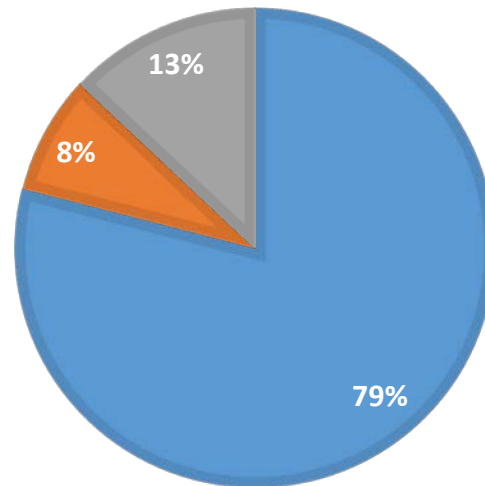
	Driver A Allowed to Drive over the Speed Limit	Driver B Required to Obey the Speed Limit
# Vehicles Passed by Driver	2,000	13
# Times Driver Applied Brakes	1,339	652
Time Elapsed	20 Hrs, 12 min	20 Hrs, 43 min
MPH Average	49.7 MPH	48.9 MPH
Fuel Used	169 Gallons	159 Gallons

# Does the Public Support Congressional Action to Require Speed Limiters Set at 65mph in Large Trucks?

RSA commissioned a September 2018 survey conducted by McLaughlin & Associates of likely general election voters nationwide, who were asked whether they favor or oppose Congress requiring large trucks to use speed limiters set at 65mph:

## SUPPORT FOR SPEED LIMITERS

■ Support ■ Don't Know ■ Oppose





# Will Speed Limiters Diminish Safety?

**Myth: Speed limiters will lead to speed differentials, which lead to more crashes.**

Implies that there are no speed differences now on our roads. This is clearly wrong.

This myth is based on a flawed study from 1964 (Solomon), and a 1991 NHTSA study that both FMCSA and NHTSA noted in the heavy vehicle speed limiter NPRM that "the agencies have determined that it was appropriate to reexamine the [1991] report to Congress and have come to the conclusion that the concerns and conclusions in that report are no longer valid." (Page 37 of NPRM)

Research and use by successful companies indicates that benefits of reducing high-speed crashes outweighs any potential increase in crashes (if the latter even occurs – some recent studies (all post 2000) found no evidence of increased crash rates due to speed limiters or differential speed limits).

# What is Automatic Emergency Braking (AEB)?

**Automatic Emergency Braking (AEB)** is a technology that can detect when the truck is in danger of striking the vehicle in front of it and brake automatically if needed.

This technology has been around for more than a decade, and has since been greatly refined to reduce false activations.

# What is H.R. 3773, the Safe Roads Act?

1. Direct DOT to establish performance standards for automatic emergency braking in large trucks
2. Require new trucks to be manufactured with automatic emergency braking
3. Require motor carriers to use automatic emergency braking in trucks that have it

# How Can AEB Improve Truck Safety?

Prevents and mitigates truck crashes in which the truck rear-ends a passenger vehicle; **these types of truck crashes have increased 50 percent since 2009.**

Addresses other crashes in which a truck is the striking vehicle, such as fatal work zone collisions; **larges trucks are largely overrepresented in these types of crashes, with at least one large truck involved in 30 percent of fatal work zone crashes in 2017.**

# Is AEB Effective?

One major trucking company experienced a **69 percent decrease in rear-end crashes since it began equipping all new tractors with AEB in 2012**

Another major motor carrier saw a **71 percent reduction in rear-end collisions in their trucks equipped with AEB as well as electronic stability control and lane departure warning compared to their trucks without these safety systems**



# How Much Does AEB Cost for Truck Drivers?

A September 2018 study by the National Highway Traffic Safety Administration found that automatic emergency braking systems **incremental cost to the end-user \$70.80-\$316.18.**

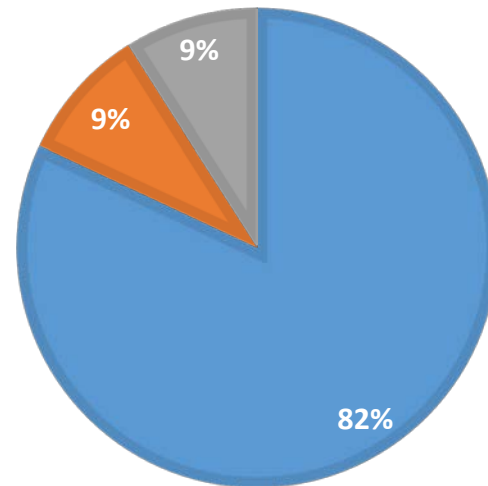


# Does the Public Support Congressional Action to Require AEB in Large Trucks?

RSA commissioned a September 2018 survey conducted by McLaughlin & Associates of likely general election voters nationwide, who were asked whether they favor or oppose Congress requiring large trucks to use AEB:

## SUPPORT FOR AEB

■ Support ■ Oppose ■ Don't Know





# Sponsor Life-Saving Legislation Today

## **Co-sponsor H.R. 3773 – The Safe Roads Act**

Lead sponsor: Rep. Hank Johnson (D-GA)

Contact in Rep. Johnson's Office: Chelsea Grey

## **Introduce a House companion bill for S. 2033 – The Cullum Owings Large Truck Safe Operating Speed Act**

Lead Sponsor: Sen. Johnny Isakson (R-GA)

Contact in Sen. Isakson's Office: Jack Overstreet

# Contact Information



**Harry Adler**  
Executive Director  
Truck Safety Coalition  
[hadler@trucksafety.org](mailto:hadler@trucksafety.org)



**Lane Kidd**  
Managing Director  
The Trucking Alliance  
[lanekidd@truckingalliance.org](mailto:lanekidd@truckingalliance.org)



**Allison Kennedy**  
Director of Government Relations  
Advocates for Highway and Auto Safety  
[akennedy@saferoads.org](mailto:akennedy@saferoads.org)



**Dave Heller**  
Vice President of Government Affairs  
Truckload Carriers Association  
[dheller@truckload.org](mailto:dheller@truckload.org)



**Steve Owings**  
Co-Founder  
Road Safe America  
[Steve.owings@nm.com](mailto:Steve.owings@nm.com)