



Automatic Emergency Braking (AEB) Fact Sheet

Automatic Emergency Braking (AEB) technology is a proven highway safety system that saves lives and prevents injuries by applying the brakes if the driver does not respond sufficiently to audio and/or visual warnings.¹ It has been successfully used by leading U.S. trucking companies and there is ample data and research to support its required use.

AEB IS A HIGHLY EFFECTIVE SYSTEM

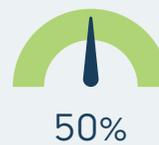
An AEB requirement on all trucks would result in significant crash and fatality reductions.

Truck Crash Trends are Getting Worse

Truck crash fatalities have increased 47 percent the last 11 years.²



Truck crashes in which a truck rear-ends a passenger vehicle are up 50 percent.³



Trucks are involved in 30 percent of fatal work zone crashes.⁴



Class 3-6 Trucks Need AEB Requirements

Despite years of successful use by leading motor carriers and numerous studies concluding AEB improves safety, this technology is not required for all commercial motor vehicles. Currently, AEB will only be required on all newly manufactured Class 7/8 In November of 2023. Based on new truck sales data, limiting the installation of AEB to Class 7 and 8 trucks will potentially exclude **over half a million Class 3-6 trucks every year.**⁵

Single-unit trucks (a majority of which are likely Class 3-6) injure upwards of 72,000 people a year, and 27 percent of all fatalities in large truck crashes involved a Class 3-6 truck in 2019.⁶ **An AEB requirement in these trucks would result in significant crash and fatality reductions.**

Class 3-6 trucks travel on local streets and through neighborhoods everyday making millions of deliveries, picking up garbage, and delivering supplies to retail stores and other businesses. Data shows that each day on average, the U.S.P.S. delivers 430 million pieces of mail and UPS and FedEx deliver 43 million packages. **Equipping these trucks with AEB will make neighborhood streets safer for pedestrians, bicyclists, children, older adults, people in wheelchairs and other vulnerable road users.**

Trucks with Automatic Emergency Braking are Getting Better

One major trucking company 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.⁷



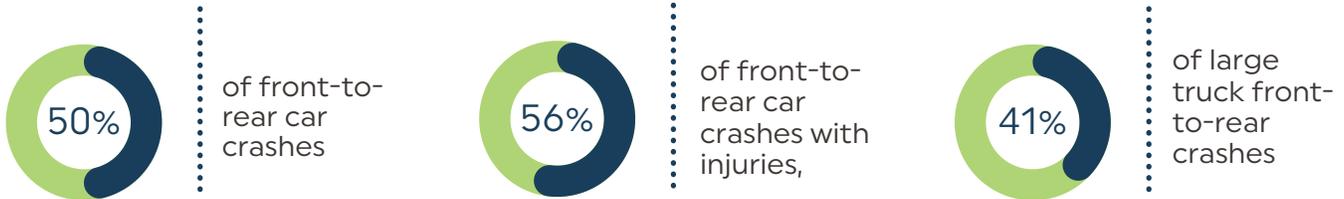
Another major trucking company saw a 95 percent reduction in the severity of rear-end collisions in their trucks equipped with AEB compared to their trucks without these safety systems.⁸





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Research by the Insurance Institute for Highway Safety (IIHS) has concluded that forward collision warning with automatic braking could prevent:⁹



Based on these estimates alone, AEB could potentially prevent approximately:

1 MILLION
PASSENGER VEHICLE CRASHES
450,000
INJURIES IN THOSE CRASHES

The National Transportation Safety Board (NTSB) has recommended repeatedly, including most recently in its 2021-2022 "Most Wanted List of Transportation Safety Improvements", that AEB and other crash avoidance technologies should be standard equipment on all cars and all trucks.¹⁰



SUPPORT AEB ON ALL TRUCKS



In 2019 there were 5,005 people killed in crashes involving large trucks, 569 of those were non-occupants (pedestrians, bicyclists, etc.). There were 158,000 people injured in crashes involving large trucks, 3,000 of those were non-occupants.¹¹ **Research shows AEB will be a game-changer to reduce fatalities and injuries and should be required on all trucks.**

Given that in 2018 large trucks were in over 200,000 crashes where the front of the truck was the location of impact,¹² **AEB on large trucks could potentially address as many as 87,000 large truck front-to-rear crashes.**

The costs of AEBs are minor compared to the costs of buying a new truck. The U.S. Department of Transportation (DOT) determined that the cost per vehicle of adding AEB to a new truck would add a non-retail cost of \$270 - \$290.¹³ The cost is further reduced if required by federal mandate because of economies of scale as demonstrated by past federal safety standards. For perspective, the cost of a new Class 6 truck can reach \$90,000 or more. Adding AEB would cost an additional 0.3%.

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2. National Highway Traffic Safety Administration (NHTSA). Trends Table 4. Large Truck Fatal Crash Statistics, 1975-2017. Large Truck and Bus Crash Facts 2017. <https://cms.fmcsa.dot.gov/safety/data-and-statistics/large-truck-and-bus-crash-facts-2017>
3. Ibid. Vehicles Tables 19. Large Trucks in Crashes with Passenger Vehicles by Crash Type and Severity, 2017.
4. Ibid. Crashes Table 25. Fatal Crashes by Work Zone, 2015-2017.
5. Transportation Energy Data Book Edition 39, U.S. Department of Energy, Feb. 2021, ORNL/TM-2020/1770.
6. Large Truck and Bus Crash Facts 2019, FMCSA, Sep. 2020, FMCSA-RRA-19-018.
7. From a report by the National Transportation Safety Board (NTSB), The Use of Forward Collision Avoidance Systems to Prevent and Mitigate Rear-End Crashes
8. <https://schneiderjobs.com/blog/schneider-2018-safety-excellence-award-winner>
9. Real-world benefits of crash avoidance technologies; IIHS HLDI, Dec. 2020, <https://www.iihs.org/media/259e5bbd-f859-42a7-bd54-3888f7a2d3ef/shuYZQ/Topics/ADVANCED%20DRIVER%20ASSISTANCE/IIHS-real-world-CA-benefits.pdf>
10. <https://www.nts.gov/advocacy/mwl/Pages/default.aspx>
11. Traffic Safety Facts 2018 Data: large Trucks, NHTSA, Mar. 2020, DOT HS 812 891 <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812891>
12. Large Truck and Bus Crash Facts 2018, FMCSA, Sep. 2020, FMCSA-RRA-19-018.
13. https://aaafoundation.org/wp-content/uploads/2017/11/Truck-Safety_-Braking-Report.pdf