



What if Every Car had Automatic Emergency Braking?

Trends show more automakers are equipping their vehicles with advanced driver assistance systems (ADAS), some companies even making these improvements standard. In 2023, 20 vehicle manufacturers, comprising 99 percent of the U.S. auto market, fulfilled their voluntarily commitment to equip every new vehicle with Automatic Emergency Braking (AEB) by 2022. Of all new 2022 model year vehicles sold in the U.S., 83 percent came standard equipped with AEB, an increase from less than half in 2018.



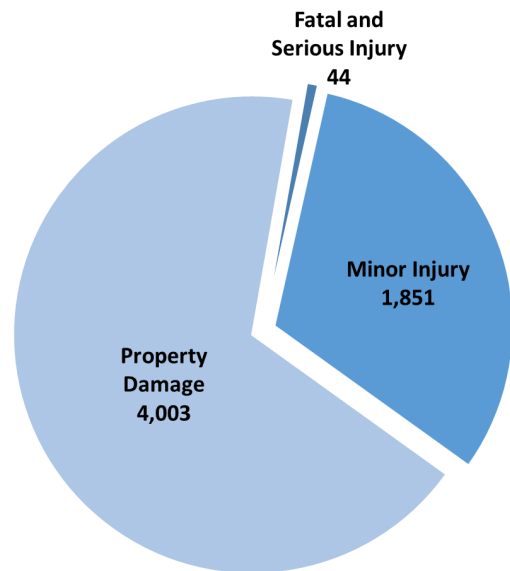
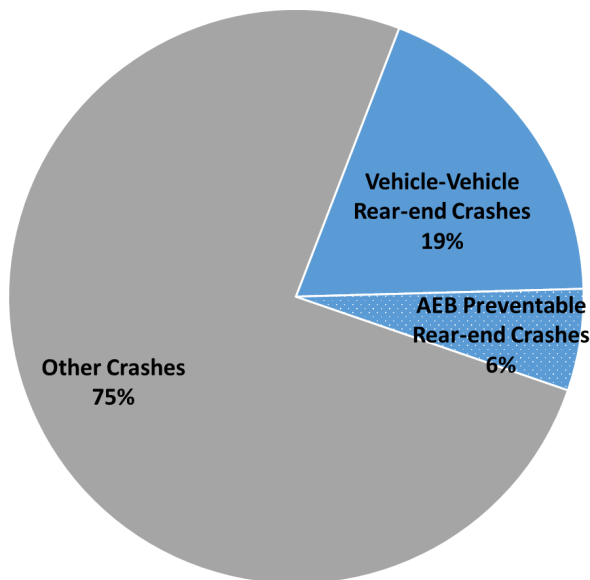
I care, because if every car on the road was equipped with AEB, thousands of crashes and injuries could be prevented on Washington roadways every year. A conservative analysis was performed on 2022 Washington crash data and all vehicle-vehicle rear-end crashes. A group of these rear-end crashes were identified for which AEB would have prevented the crash. AEB preventable rear-end crashes were defined as those occurring on dry roads, with posted speed limits of 35 MPH or less, with no speeding drivers involved, and no vehicles involved with any tire, brake, or power defects.

In 2022, AEB could have prevented nearly 6,000 crashes in Washington and saved \$83 million in crash-related costs.

If every car on Washington roads had AEB, then under conservative conditions about one-quarter of all rear-end crashes could have been prevented, or six percent of all crashes in 2022.

- 44 fatalities and serious injuries would have been pre-vented and \$8,443,000 saved.
- 1,851 evident and possible injuries would have been prevented and \$52,200,000 saved.
- 4,003 property damage crashes could have been pre-vented and \$22,463,700 saved.

Crashes in Washington State 2022:
What if every car had AEB?





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Four out of five 2022 model year vehicles were equipped with automatic emergency braking (AEB). AEB uses various sensors to detect and intervene in imminent crash situations. AEB includes a series of escalating stages, typically beginning with a driver warning and ending with automatic brake application. AEB is designed to avoid or mitigate crashes. The National Highway Traffic Safety Administration (NHTSA) develops AEB criteria, and the Insurance Institute for Highway Safety (IIHS) conducts track tests to measure certain minimum speed reductions with automatic braking. In May 2023 and June 2023, NHTSA announced a Notice of Proposed Rulemaking that would require AEB on all new passenger cars and light trucks, and that would require AEB on heavy vehicles, respectively. This brief focuses on low speed AEB, although some vehicles are also equipped with high speed AEB and pedestrian/bicyclist detection with AEB.

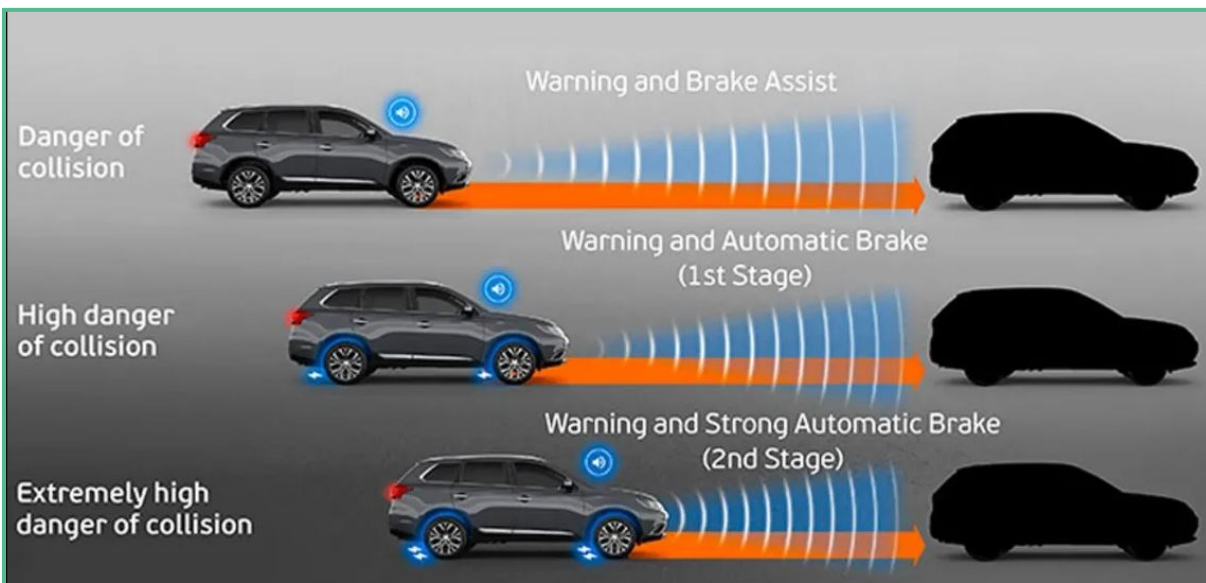


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For more information, please contact Washington Traffic Safety Commission, Research and Data Division at (360) 725-9860. <https://wtsc.wa.gov/traffic-safety-reports/>