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EVENT DATA RECORDERS: BLACK BOXES FOR CARS ENABLE NEW RESEARCH

The Centre for Automotive Safety Research (CASR) are leading innovative new research using Event Data Recorders (EDR).

The advent of (EDRs) in recent years has opened unprecedented opportunities to understand driver behaviour just prior to a crash. An EDR records various vehicle sensor data up to 5 seconds prior to a crash, and during the impact, similar to a black box in a plane.

CASR's expert team are specialised in the use of EDR and are leading the way in realising the opportunities EDR presents through the development of a large EDR data collection and data matching program. EDR data can provide new insights into:

- Travel speed and speeding
- Impact speed and injury severity
- Seatbelt wearing
- Operation of passive safety systems
- Driver behaviour in critical situations
- Driver inputs prior to fatigue related crashes

The capability to properly determine the prevalence of speeding in crashes is key to driving speed enforcement policy and to greater public acceptance of policy.

New understanding of relationships between speed and crash outcomes can also drive speed limit and general speed management policy.

EDR data will also be critical to understanding how the autonomous functions of a vehicle operated in a critical situation and the implications of this for regulation and approval

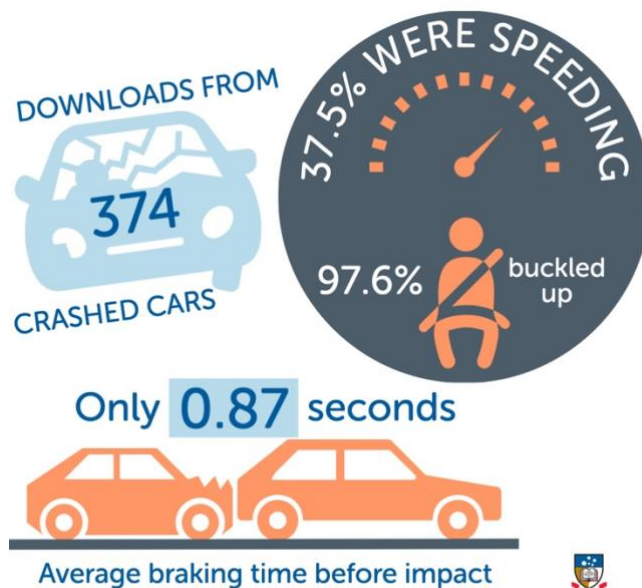


EDR device

Available CASR publications

CASR publications on EDR research are available to download via the QR code below.

By October 2022 CASR has collected EDR data from 766 crashed vehicles and matched the EDR data to a police report and hospital injury data.



Result summary CASR170 and CASR171



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