

Future vehicle safety in Australia and the role of the Australasian New Car Assessment Program

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Abstract

For more than twenty years the Australasian New Car Assessment Programs (ANCAP) has encouraged improvements in vehicle safety beyond the regulatory system.

ANCAP has announced plans to align its safety ratings with those of Euro NCAP from 2018. This will result in greater emphasis on crash avoidance technologies such as autonomous emergency braking (AEB) as well as protection of small occupants, pedestrians and cyclists.

We review the influence of ANCAP on improved crashworthiness of the vehicle fleet and the uptake of key vehicle safety technologies. The trends show that ANCAP can have a substantial influence on the safety of the future Australian light vehicle fleet.

Research Question/Objective

To analyse the trends with improvements to vehicle safety, to identify the possible influence of NCAP safety ratings on the uptake of key safety features and to predict the potential influence on the safety of the future Australian light vehicle fleet.

Methods

Collect historical data on NCAP ratings and fitting rates of key safety features such as head-protecting side airbags, electronic stability control, intelligent speed assistance and autonomous emergency braking. Analyse the trends by year. Identify when various initiatives were introduced by NCAPs, and other sources such as regulations.

Results

NCAPs have contributed improved vehicle safety over the past 15 years and have accelerated the uptake of important safety features. There is potential for this to continue, particularly under the plans to align ratings with those of Euro NCAP. This should result in faster uptake of technologies such as AEB and better protection for small occupants, pedestrians and cyclists, compared with the current ANCAP Road Map.

Limitations

Fitting rates for certain safety features have to be estimated due to the lack of reliable information. There are numerous factors that influence improvements in vehicle safety and so the exact contribution of NCAPs cannot be accurately quantified