REAL-WORLD CRASH TRENDS & ANCAP RATINGS

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ANCAP Trends - Vehicle Models

Year published by ANCAP
- 5 Stars
- 4 stars
- 3 stars or less
5-star vehicles are available in all categories

FLEET PURCHASING POLICIES

From July 2011 all cars purchased by the Australian government must have a 5-star ANCAP rating and all light commercial vehicles must have at least a 4-star rating (no exemptions!)

BHP Billiton recently announced a global 5-star vehicle policy
Tracking model crashworthiness

- Used Car Safety Ratings include an estimate of the risk of serious injury to the driver in a Police-reported crash.
- Injury risk is expressed as "crashworthiness": the number of seriously injured drivers per 100 reported crashes. Takes into account influencing factors such as age of driver.
- UCSR are available for vehicle models built from the mid-1980s to 2010 (the limit of available crash data).
- ANCAP commenced crash testing in 1992. Ratings out of 5 stars are available for new models from 1999 (Euro NCAP method).
- Estimated star ratings can be calculated for models released between 1995 and 1999 based on the offset crash test results.
Tracking model crashworthiness

Over the past 15 years most models have improved their ANCAP star rating. USCR scores are available for these models and so the effect of a change in star rating can be evaluated.

Method:
- Identify model changes (sometimes names change)
- Determine ANCAP star rating and USCR crashworthiness rating
- For models rated prior to 1999, estimate star rating from offset test score (nearly all pre-1999 models are 3 stars or less because the offset test score was less than 8.5 out of 16)
- Calculate the change in crashworthiness for the improvements in star rating

35 models could be tracked in this way.

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<th>ANCAP 1</th>
<th>USCR 1</th>
<th>Year Range</th>
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3 stars or less to 4 stars

- 32 models
- Average UCSR improvement 22%
- Corolla only model that got worse
- Barina star rating dropped and so did UCSR

4 stars to 5 stars

- 11 models
- Average UCSR improvement 35%
3 stars or less to 5 stars

8 models
Average UCSR improvement 49%

Examples - Ford Falcon

UCSR 3.27
20%

UCSR 2.2
47%

UCSR 1.38
Examples - BMW 3 Series

Conclusions

- Clear reduction in the risk of serious injury to the driver each time that a model improves its ANCAP star rating.
- Average improvements are:
  - 22% when a model improves from 3 stars or less to 4 stars
  - 35% when a model improves from 4 stars to 5 stars
  - 49% when a model improves from 3 stars or less stars to 5 stars
- In the past few years many models have improved to a 5 star ANCAP rating. It will be several years before the UCSR program gathers sufficient real-world crash data to determine reliable crashworthiness ratings for these models.
- Based on the popularity of 5-star models a remarkable reduction in serious injury risk can be expected from these newer models.