SUPPORT FOR RURAL AND REGIONAL LEARNER DRIVERS

Organisation:Australasian New Car Assessment Program (ANCAP) SafetyDate Received:14 May 2021



The Hon. Lou Amato MLC Committee Chair Joint Standing Committee on Road Safety (StaySafe) Parliament of New South Wales Parliament House 6 Macquarie Street SYDNEY NSW 2000

Dear Mr Amato

The Australasian New Car Assessment Program (ANCAP) welcomes the opportunity to provide a submission to the Parliament of New South Wales Joint Standing Committee on Road Safety's Inquiry into Support for Rural and Regional Learner Drivers.

ANCAP is Australasia's independent vehicle safety authority. ANCAP's role is to encourage vehicle brands to design and build, and consumers to purchase and use, the safest vehicles possible. Our objective is to create an environment where vehicle brands to strive for the highest level of safety. ANCAP acknowledges brands when they meet or exceed top performance, whilst bringing awareness to those that can improve, in an effort to reduce road trauma.

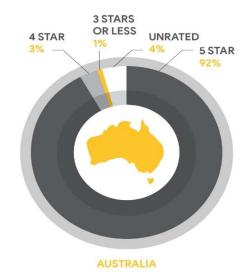
ANCAP's overarching public message is twofold: **For vehicle owners:** Purchase the safest vehicle you can afford, and one which suits your needs **For vehicle users**: Travel in the safest vehicle possible

ANCAP Role and Success

Since 1993, ANCAP has published independent safety ratings for thousands of new vehicle makes, models and variants. These independent safety ratings are used to compare the relative safety between vehicles of similar size, and have become a critical factor in vehicle selection for private and fleet buyers.

ANCAP is committed to encouraging improvements in vehicle safety by rating vehicles, providing consumer information and consequently influencing vehicle brands. ANCAP safety ratings use a rating system of 0 to 5 stars and are accompanied by a date stamp showing the year the vehicle was tested. ANCAP safety ratings show the level of safety a vehicle provides for occupants and pedestrians in the event of a crash, as well as its ability to avoid or minimise the effects of a crash. ANCAP safety ratings are published for a range of new light vehicles, including passenger cars, SUVs and light commercial vehicles up to 3.5 tonnes GVM.

Currently, ANCAP ratings are available for 95% of light vehicles sold in Australia with 92% of vehicles sold holding a 5-star rating.¹



¹ ANCAP Safety, Beyond the Stars: The Facts Behind ANCAP 2019-2020 (Attachment A)

Newer Cars are Safer

ANCAP's analysis of vehicle age (year of manufacture) and fatalities clearly demonstrates that shows newer vehicles are safer (Figure 2).

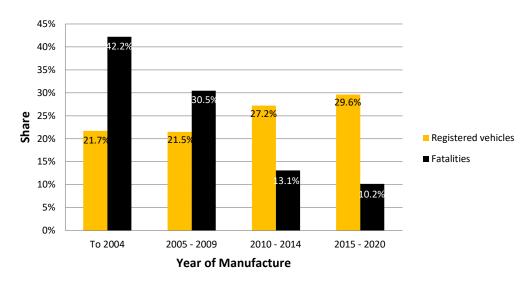


Figure 2 – Fatalities in 2020 vs. Registered Vehicles

The improvement in safety of newer cars shows the positive response by vehicle brands to programs such as ANCAP with continual improvements in vehicle safety technology.

Unfortunately, research has found that young drivers and young adult occupants were more likely to be injured in older cars. Research from Transport for NSW found that the young adult group aged 17-20 years had the highest proportion of fatalities from vehicles aged more than 15 years old².

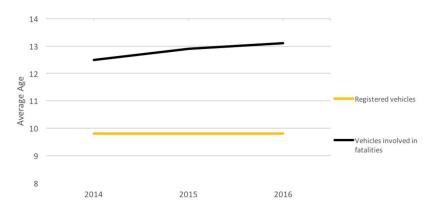


Figure 3 - Average age of registered passenger vehicles vs the average age of passenger vehicles involved in occupant fatalities

The road safety statistics published by the Commonwealth's Department of Infrastructure, Transport, Regional Development and Communications (DITRDC) shows that young drivers and road users are over-represented in road deaths (Figure 4).

² Transport for NSW Centre for Road Safety, Vehicle and Technology – Trauma Trends, March 2017.

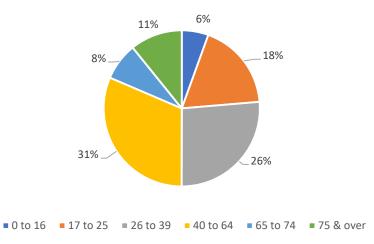


Figure 4 – Road deaths by age group (12 months to March 2021)³

ANCAP recognises that not everyone can afford a new car, and encourages consumers to purchase as new (and consequently as safe) a car as possible. This is of particular importance to young drivers (aged between 17 to 25 years) who are over-represented in road fatalities⁴ and tend to drive older, less safe vehicles. In 2020, 62% of vehicle occupants killed on NSW roads were travelling in vehicles aged 10 years or older.⁵

Safer First Cars

In 2019/20, ANCAP worked with the ACT Government to develop a list of safe, affordable cars to help young drivers, and their families to make safer vehicle choices. The vehicle choices recommended each held a 5 star ANCAP safety rating and could be purchased for under \$13,000. A copy of the brochure is included in Attachment B.

ANCAP would be keen to work with the NSW Government to develop similar information for NSW rural and regional young drivers who tend to drive older, less safe vehicles.

Vehicle Safety Technologies – AEB and LSS

More than half of Australia's road deaths occur in non-urban areas. High-speed, single vehicle, run-off road crashes remain the most common fatality crash type on regional and rural roads.⁶

New vehicle safety technologies that have been shown to reduce these types of crashes are AEB (Autonomous Emergency Braking) and LSS (Lane Support Systems).

Autonomous Emergency Braking (AEB)

Many international studies, as well as a study conducted for the Australian Government, show there is a substantial reduction in crashes in light vehicles fitted with AEB systems:

- 55% reduction in police-reported crashes⁷
- 38% reduction in real world rear end crashes⁸
- 54-57% risk reduction of real-world rear-end crashes in metro areas (35-41% risk reduction in all areas)⁹
- An estimated 46% reduction in rear-end striking crashes¹⁰
- Reduce vehicle occupant trauma by 28%¹¹

ANCAP has been testing and evaluating AEB systems for light vehicles in a broad range of daytime and night-time scenarios since 2018. The current and planned scenarios include:

- Car to car rear with target car braking
- Car to car (approaching head-on) with test car turning across target car path (i.e. a typical right hand turn across approaching traffic on a two-lane road

³ Australian Government, Department of Infrastructure, Transport, Regional Development and Communications, Road Safety Statistics, <u>www.bitre.gov.au/statistics/safety</u> [accessed 4 May 2021].

⁴ Australian Government, Department of Infrastructure, Transport, Regional Development and Communications, Statistical Report, Road Trauma Australia 2019 Statistical Summary.

⁵ NSW Centre for Road Safety, 2020 Road Death Statistics, January 2021

⁶ Australian Government, Department of Infrastructure, Transport, Regional Development and Communications, Statistical Report, Road Trauma Australia 2019 Statistical Summary.

⁷ Insurance Institute for Highway Safety (IIHS) & Highway Loss Data Institute (HLDI), USA, 2018

⁸ ANCAP, Euro NCAP, DoIRD research by B. Fildes, 2015

⁹ ICROBI study by M. Rizzi, A. Kullgren, C. Tingvall, 2014

¹⁰ UMTRI and GM, A. Leslie, R. Kiefer, M. Meitzner, C. Flannagan, 2019

¹¹ Monash University Accident Research Centre (MUARC) Report on the effectiveness of crash reductions associated with light vehicle AEB.

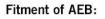
- Car to adult pedestrian crossing vehicle path
- Car to child pedestrian crossing vehicle path
- Car to adult pedestrian walking along the road (i.e. to replicate pedestrian walking along the side of the road where there is no separated footpath)
- Car to adult pedestrian where the car is turning at an intersection and a pedestrian is crossing the road
- Reversing car to pedestrian
- Car to bicyclists (both child and adult cyclists)

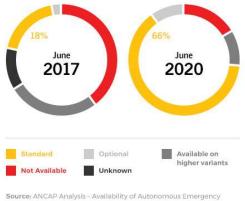
It is not possible for a passenger car, SUV or LCV to achieve a 5 star ANCAP safety rating without an effective AEB or lane support system.



Figure 5 - AEB Scenarios: Car to car rear, Car to adult cyclist and Car to pedestrian

ANCAP's encouragement of AEB has resulted in the availability of AEB increasing very quickly with now (approx.) 66% of sales of new light vehicles, and 186 models now having AEB fitted as standard. **Figure 3** shows that as at June 2020, AEB was available on almost 80% of light vehicles (passenger cars, SUVs and light commercial vehicles) sold.





Braking (AEB) in Australia, June 2020.

Figure 6 - Availability of AEB in Australia (June 2020)

Lane Support Systems (LSS)

Lane Support Systems such as lane departure warning (LDW) and active lane keep assist (LKA) systems can assist a driver in safely maintaining their intended path. LDW and LKA systems can reduce head-on and single-vehicle crashes by up to 30%.¹²

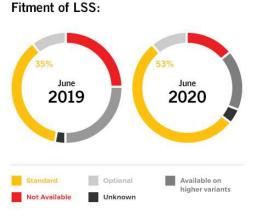
Lane departure warning systems use cameras and sensors to recognise lane markings and alert the driver through either an audible or visual warning or vibration of the steering wheel if the vehicle is leaving the lane without indicating. Active lane keep assist systems can automatically bring the vehicle back within the lane where the driver fails to respond through autonomous steering input or the braking of specific wheels.

Some current lane support systems not only have the ability to recognise painted lane markings and reflective strips, but they can also detect and maintain the vehicle's path within a non-marked road edge such as a gravel or grassed road shoulder.

¹² Sternlund, Strandroth, et.al., 2017, *The effectiveness of lane departure systems – A reduction in real-world passenger car injury crashes*, Traffic Injury Prevention Volume 18, 2017, Issue 2, pp 225-229

ANCAP has been testing and evaluating LSS systems for light vehicles in a broad range of scenarios since 2018. The testing is conducted on an outdoor test track with the vehicle intentionally and unintentionally leaving the vehicle's lane in order to determine how the vehicle's system react and active to prevent a collision with an adjacent vehicle or obstacle, or a resulting run-off-road crash. The vehicle's ability to 'read' solid and broken lane marketing as well as non-marked road edges is assessed.

Figure 7 shows that as at June 2020, LSS was available on almost 80% of light vehicles (passenger cars, SUVs and light commercial vehicles) sold.



Source: Australian light vehicle sales, ANCAP & VFACTS, June 2020

Figure 7 - Availability of LSS in Australia (June 2020)

Summary and Conclusions

As Australasia's leading independent vehicle safety advocate, ANCAP has been successful in driving improvements in vehicle safety in Australia for more almost 30 years. Currently, ANCAP ratings are available for 95% of light vehicles sold in Australian with 92% of light vehicles sold holding a 5-star ANCAP safety rating. This high level of market penetration, combined with high levels of consumer awareness, positions ANCAP to hold a unique ability to accelerate the provision and market uptake of new vehicle safety features and technologies.

ANCAP's influence and encouragement has resulted in the availability of both AEB and LSS (technologies that will assist in reducing head-on and single vehicle run off road crashes in rural and regional areas) on new light vehicles to almost 80%. This has been achieved in advance of any regulatory actions.

ANCAP recognises that not everyone, and particularly young drivers, can afford a new car. ANCAP has worked with the ACT Government to develop a list of safe, affordable cars to help young drivers and their families to make safer vehicle choices. ANCAP would welcome the opportunity to work with the NSW Government to develop similar information for rural and regional young drivers.

ANCAP would be willing to discuss this submission, or any other part of our activities, with your Committee.

Yours sincerely

Carla Hoorweg Chief Executive Officer

14 May 2021

Attachments:

- A. ANCAP Publication Beyond the Stars 2019-20
- B. ANCAP/ACT Government Safer First Cars

BEYOND THE FACTS BEHIND ANCAP 2019-20 STARS



2 NOVEMR

ANCAP SAFETY RATINGS PUBLISHED FOR 36 VEHICLE MODELS COVERING 151 VARIANTS



32 VEHICLE MODELS 3 VEHICLE MODELS 1 VEHICLE MODEL 0 VEHICLE MODELS 0 VEHICLE MODELS

VEHICLES RATED

56% 20 VEHICLES RATED WERE SPORTS UTILITY VEHICLES (SUV)

5%

2 VEHICLES RATED WERE LIGHT COMMERCIAL VEHICLES (LCV)

39%

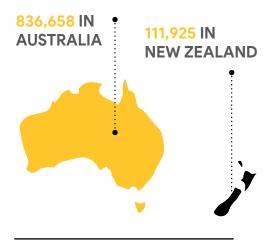
14 VEHICLES RATED WERE PASSENGER VEHICLES



THE 36 NEW RATINGS REPRESENT 9.9% OF NEW LIGHT VEHICLE SALES IN AUSTRALIA AND 9.0% IN NEW ZEALAND

948,583

NEW 5 STAR VEHICLES JOINED OUR STREETS



\$750,455

AVERAGE COST TO PRODUCE A SINGLE ANCAP SAFETY RATING

TOP PERFORMERS



ADULT OCCUPANT PROTECTION 99%



CHILD OCCUPANT PROTECTION

92%

MERCEDES-BENZ EQC MERCEDES-BENZ B-CLASS MERCEDES-BENZ CLA MERCEDES-BENZ GLE

VULNERABLE ROAD USER PROTECTION **91%**

MERCEDES-BENZ CLA



LABORATORIES USED FOR TESTING



UTAC CERAM









Full Width Frontal Test

Frontal Offset Test

Side Impact Test



Oblique Pole Test



Pedestrian Test

Whiplash Test



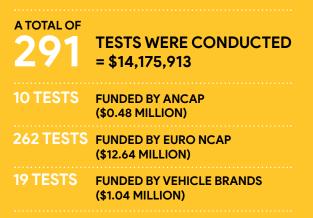
Speed Assistance Systems Tests





Lane Support System Tests

72 km/h 📖



TOTAL COST TO PRODUCE THE RATINGS =

23.264.115

COST TO ANCAP = \$577.951 COST TO VEHICLE BRANDS = \$1,324,573 COST TO EURO NCAP = \$21.361.591



WORTH \$9,088,202 WERE **DESTROYED IN THE NAME OF SAFETY**

CONSUMERS NOW HAVE ACCESS TO RATINGS FOR 239 CURRENT NEW VEHICLE MODELS AND A COMBINED **754 NEW AND USED VEHICLE MODELS**



ALTERNATIVE POWERED VEHICLES (ELECTRIC, HYBRID, PHEV) WERE RATED

- 🛨 TESLA MODEL 3
- 🔶 🛛 BMW 3 SERIES
- 🛧 TOYOTA COROLLA
- ★ MERCEDES-BENZ EQC
- 🔶 TESLA MODEL X
- + HYUNDAI NEXO
- AUDI E-TRON

MOST EXPENSIVE MODELS TO RATE:

MERCEDES-BENZ G-CLASS \$1.28 MILLION

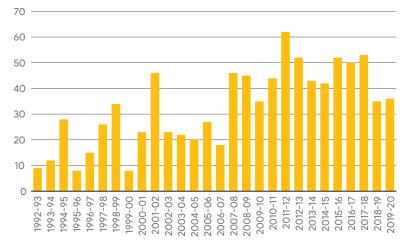
TESLA MODEL X \$1.19 MILLION

374 DUMMIES FACED UP TO THEIR FATE

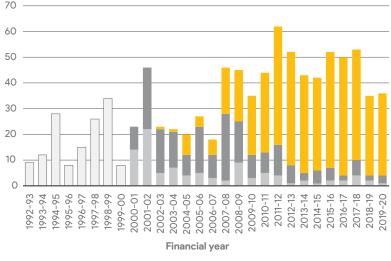


AUSTRALIA'S FIRST SAFETY ASSIST TEST FACILITY WAS ESTABLISHED IN CENTRAL WEST NSW

PUBLISHED RATINGS



Financial year



N/A (PRE 2000) 0-3 star 4 star 5 star



RESCUE SHEETS WERE PUBLISHED FOR THE FIRST TIME

1,188 RESCUE SHEETS

ARE AVAILABLE TO ASSIST FIRST RESPONDERS & PROVIDE EXPEDITED POST-CRASH CARE

OUR TEST, ASSESSMENT & VEHICLE SAFETY ADVOCACY PROGRAM IS:

SUPPORTED BY ITS **MEMBERS** [23]

GOVERNED BY ITS BOARD [11]

MANAGED & OPERATED BY ITS SECRETARIAT [8]

ASSISTED THROUGH ITS PARTNERS [VARIOUS] SINCE FOUNDATION, ANCAP HAS LEVERAGED ITS SUCCESS FROM ITS STRONG AND DEDICATED **MEMBERSHIP. ANCAP'S ABILITY** TO EFFECT MARKET CHANGE AND COMMUNICATE ITS MESSAGES TO A WIDE BASE OF STAKEHOLDERS IS A DIRECT RESULT OF ITS SOLID MEMBER. **BACKING AND THEIR CONTINUED** SUPPORT.

\$41,341,165

MEMBERS HAVE PROVIDED **IN EXCESS OF \$41.34 MILLION OVER THE PAST 14 YEARS**

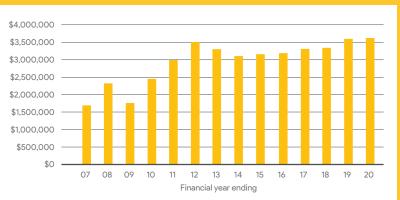
TOTAL EURO NCAP & VEHICLE BRAND SUPPORT



SUPPORT FOR ANCAP **CONTINUES TO GROW** THROUGH THE SUPPORT **RECEIVED VIA COUNTERPART VEHICLE** SAFETY ORGANISATION **EURO NCAP** AND VEHICLE BRANDS

\$22,686,164

TOTAL MEMBER CONTRIBUTIONS



5 STAR ANCAP SAFETY RATINGS PROVIDE VEHICLE BRANDS WITH A COMPETITIVE ADVANTAGE

THE VALUE VEHICLE BRANDS PLACE ON ANCAP SAFETY RATINGS IS HIGHLIGHTED BY THEIR CONTINUED APPETITE FOR AND SUPPORT OF ANCAP THROUGH THE FUNDING OF TESTS AND THE PROVISION OF TEST VEHICLES

\$1,324,573

WORTH OF TESTS AND TEST VEHICLES WERE CONTRIBUTED BY VEHICLE BRANDS:

19 TESTS 8 VEHICLES = \$1.05 MILLION = \$0.28 MILLION



COLLABORATION WITH EURO NCAP IS VITAL. IN 2019-20 IT ALLOWED ANCAP TO PUBLISH RATINGS FOR AN ADDITIONAL 29 VEHICLE MODELS



11 MODELS

WERE PUT FORWARD FOR ASSESSMENT BY VEHICLE BRANDS

REVENUE AND IN-KIND SUPPORT

- 81% \$21,361,591 EURO NCAP



14% \$3,618,000

ANCAP



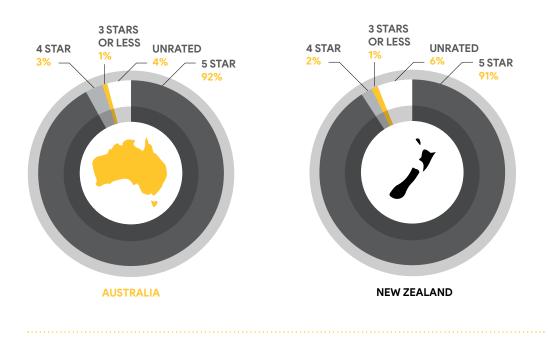
ANCAP TRANSLATED

INTO

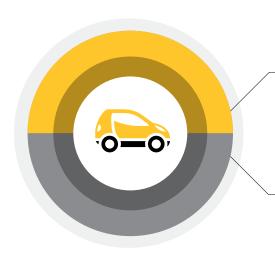


OF VEHICLE BRANDS ACTIVELY PROMOTED ANCAP RATINGS WHEN MARKETING THEIR NEW VEHICLE MODELS

95% OF NEW VEHICLES SOLD IN AUSTRALIA (912,214 VEHICLES) & 94% OF NEW VEHICLES SOLD IN NEW ZEALAND (123,100 VEHICLES) HELD AN ANCAP SAFETY RATING



FLEET VS PRIVATE VEHICLE SALES JANUARY - JUNE 2020



50.58%

OF NEW LIGHT VEHICLES (215,478 VEHICLES) SOLD IN AUSTRALIA WERE PURCHASED BY CORPORATE BUYERS

49.42% 210,536 VEHICLES WERE PURCHASED BY

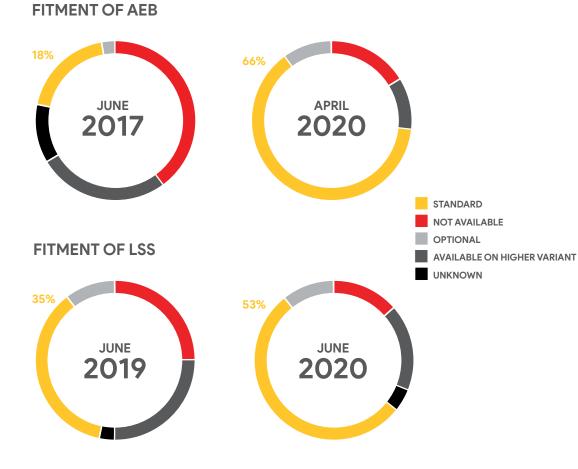
PRIVATE BUYERS

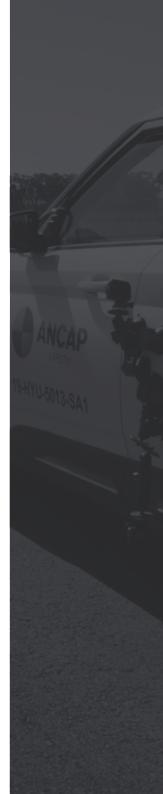
COLLISION AVOIDANCE TECHNOLOGY

STANDARD FITMENT INCREASED TO

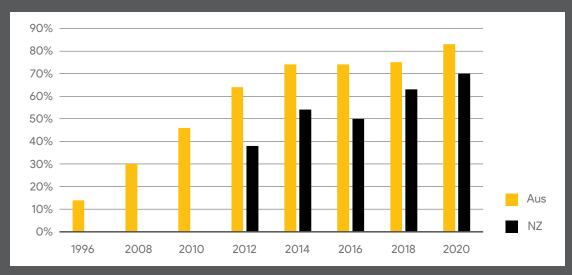
66% AUTONOMOUS EMERGENCY BRAKING (AEB)

53% LANE SUPPORT SYSTEMS (LSS)





CONSUMER AWARENESS



+41 NET PROMOTER SCORE 83% OF AUSTRALIAN NEW CAR BUYERS ARE AWARE OF ANCAP 70% OF NEW ZEALAND NEW CAR BUYERS

ARE AWARE OF ANCAP

AWARENESS OF ANCAP IS:

HIGHEST AMONG YOUNGER MALE DRIVERS WITH A FAMILY



LOWEST AMONG OLDER WOMEN DRIVERS SAFETY IS THE MOST IMPORTANT ATTRIBUTE



WHEN CONSIDERING THE PURCHASE OF A NEW OR USED CAR – FOLLOWED BY PRICE AND RELIABILITY

ANCAP WEBSITE

1.96 MILLION PAGE VIEWS 513,394 VISITORS 694.314 SESSIONS

•	

TOP 3 VEHICLE MODELS VIEWED ON ANCAP.COM.AU

1. JEEP WRANGLER

- 2. TESLA MODEL 3
- 3. TOYOTA COROLLA

61% OF USERS WHO VIEWED THE ANCAP WEBSITE DID SO VIA HANDHELD DEVICE (MOBILE OR TABLET)

7,899

DOWNLOADS

NEW ANCAP RESCUE APP LAUNCHED TO ASSIST FIRST RESPONDERS

ANCAP SAFETY RATINGS PROVIDE PEACE OF MIND 84% OF NEW CAR BUYERS IN AUSTRALIA & 71% IN NEW ZEALAND STATE THAT ANY FUTURE VEHICLE MUST HAVE AN ANCAP SAFETY RATING

32.79% AVERAGE OPEN RATE FOR NEW VEHICLE RATING ALERTS & MEDIA RELEASES

SOCIAL MEDIA FOLLOWERS









495,220 VIDEO VIEWS 9,700 HOURS WATCH TIME



VISION SAFE VEHICLES FOR ALL

MISSION

WORK WITH MEMBERS AND PARTNERS TO ELIMINATE ROAD TRAUMA THROUGH INDEPENDENT ASSESSMENT, MARKET INFLUENCE AND CONSUMER ADVOCACY

ANCAP.COM.AU



SAFER FIRST CARS



MAKE A SAFER VEHICLE CHOICE.

When looking to purchase your first car, it's not always obvious as to what makes a **safe** car. Your safety on the road is a priority, and unfortunately our newest drivers are too often those involved in crashes which are **fatal** or leave those involved with **serious injuries**.

YOUNG DRIVERS (17-24 YEARS) ARE INVOLVED IN 28% OF ALL CASUALTY CRASHES, DESPITE MAKING UP ONLY 12% OF ALL ACT LICENCE HOLDERS. (2018)

To make purchasing your first car a little easier, here is a list of safe, affordable vehicles to help you, your family and friends make **safer vehicle choices**.

The below vehicle choices each hold the maximum 5 star ANCAP safety rating and can be purchased for under \$13,000.

FORD FOCUS (From June 2015)



 $\star \star \star \star \star$ **2014**

HYUNDAI i30 (From January 2015)



 $\star \star \star \star \star$ **2014**

HOLDEN ASTRA (From November 2016)



 $\frac{1}{2015} \star \star \star \star \star \star$

nber 2019

TOYOTA COROLLA (From October 2014)





KIA CERATO (From June 2016)



 $\frac{1}{2014} \star \star \star \star \star \star \star$

HONDA CITY (From June 2014)



2014 $\star \star \star \star \star$

SKODA FABIA (From July 2015)





MITSUBISHI OUTLANDER (From April 2015)





MAZDA 3 (From July 2014)







While newer cars offer high levels of crash protection and crash avoidance, you don't need to buy a brand new car to make a safer choice.

ANCAP, with the support of the ACT Government, independently tests and rates vehicles using a rating system of 0 to 5 stars. ANCAP star ratings indicate the level of safety a vehicle provides to occupants, pedestrians and cyclists in the event of a crash, as well as its ability through technology - to avoid or minimise the effects of a crash.

For further information on vehicle safety and to check the ANCAP safety rating of your current or prospective new car, visit

ANCAP.COM.AU

ACT Graduated Licensing Scheme

From 1 January 2020, a range of changes were implemented for learner and provisional drivers in the ACT. The changes are designed to reduce the risk for our new and young drivers who are over-represented in road crashes, and help them gain experience and confidence on the road in a staged way.

For further information about the 'Safe Plates' initiative please visit

ACT.GOV.AU/SAFEPLATES





