

Ms Gabby O'Neill
Assistant Secretary, Head of the Office of Road Safety
Department of Infrastructure, Transport, Regional Development and Communications
PO Box 594
CANBERRA ACT 2600

Dear Ms O'Neill

The Australasian New Car Assessment Program (ANCAP) welcomes the opportunity to provide a submission to the consultation draft of the National Road Safety Strategy (NRSS) 2021 to 2030.

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 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 provided a submission to the 2020 consultation paper and it is pleasing to see that many of ANCAP's activities have been recognised in the consultation draft and in the accompanying Fact Sheets. In particular, the consultation draft recognises ANCAP's role in vehicle safety as Australasia's leading independent vehicle safety advocate, and our success in driving improvements in vehicle safety in Australia for more than 25 years through:

- Technical testing and vehicle safety assessment, and
- Consumer communications and advocacy activities.

ANCAP makes the following points in relation to the current NRSS consultation draft.

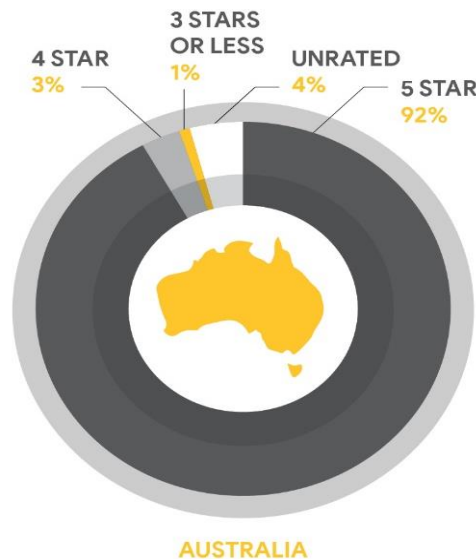
ANCAP Role and Success

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 A copy of ANCAP's publication *Beyond the Stars: The Facts Behind ANCAP 2019-2020* contains further information and is attached for your reference (Attachment A).

¹ ANCAP Safety, *Beyond the Stars: The Facts Behind ANCAP 2019-2020*



ANCAP Assessment Expansion

ANCAP is expanding its testing and assessment regime to address emerging active safety and automated driving technologies being introduced into Australia in new vehicles.

During 2020 ANCAP undertook a program to compare the performance of pedestrian-detecting autonomous emergency braking (AEB) on Australia's top ten selling vehicle models (Attachment B). This test program clearly demonstrated that while all vehicles tested were able to detect and react to pedestrian targets (and all were 5-star), typically those vehicle models that are more recent releases have more advanced and effective AEB systems.

In 2020, ANCAP also provided information on the safety of vehicles in the "lighter" end of commercial vehicles (over 3.5 tonnes and up to 8 tonnes GVM) with the release of a Commercial Van Safety Comparison. In this program, ANCAP joined with Euro NCAP to evaluate the availability and performance of ADAS systems fitted to light, medium and heavy commercial vans available across Australasia. A copy of the report is attached for your information (Attachment C). This program showed that while some commercial vans are well equipped with active safety systems, unfortunately, there are a number of models that offer no active collision avoidance capability.

ANCAP 2021/22 Activities

Advanced driver assistance systems that can assist the driver with the driving task are increasing in prevalence, and this is expected to continue throughout the period of the NRSS and beyond. ANCAP recognises that public and government interest in automated driving is high, however consumer understanding of these new technologies is low and features are often misunderstood.

In the second half of 2021 ANCAP plans to undertake a program of assessing Assisted Driving systems, technologies designed to make motorway/highway driving safer by reducing fatigue and encouraging safe driving, on several top selling vehicle models. The technologies to be assessed help the driver to maintain a steady speed, to keep a safe distance from the car in front and to keep the vehicle in the centre of the lane by combining (intelligent) Adaptive Cruise Control (ACC) with Lane Centering (LC). A key objective of this program is to provide information to consumers and policy makers on the performance, capabilities and limitations of the Assisted Driving systems currently available on new vehicles.

During 2021-22 ANCAP also plans to continue its expansion into the "lighter" end of commercial vehicles (over 3.5 tonnes and up to 8 tonnes GVM). ANCAP will be able to leverage our testing and communications expertise into programs such as testing and assessing the Advanced Driver Assistance Systems (ADAS) performance of a number of additional commercial vans, and also of some volume selling light trucks (e.g. two axle light trucks over 3.5 and up to 8 tonnes GVM). ANCAP will work with relevant industry representative organisations including the Australian Trucking Association and Truck Industry Council, as well as directly with commercial vehicle brands, to develop and deliver safety information to vehicle owners and drivers with the objective of encouraging market demand and uptake of light trucks with improved levels of safety.

ANCAP Comments on NRSS Priority Actions

ANCAP recognise that it will continue playing a critical role in improving vehicle safety throughout the duration of the NRSS 2021-2030.

Following are comments on aspects of the draft NRSS 2021-2030 priority actions.

Road Safety Data Hub: The draft NRSS identifies the need for better national dataset to be able to target road safety interventions and measure their effectiveness. ANCAP supports the establishment of a national road safety data hub.

Workplace road safety: Under the Vehicle Safety priority, the NRSS consultation draft includes an action to “encourage and promote the uptake of vehicle safety technologies ... through fleet purchasing policies.” The Fact Sheet: *Workplace Road Safety* supports the use of ANCAP’s light-vehicle fleet safety recommendations to only choose 5-star rated vehicles while the Fact Sheet: *Evidence Supporting the Priority Focus Areas* acknowledges that the ‘grey fleet’ is often neglected in workplace road safety. ANCAP’s *Vehicle Purchasing and Use Guide*, was updated in 2020 to include the use of privately owned vehicles for work purposes, also known as the ‘grey fleet’, (Attachment D). ANCAP recommends that the NRSS address the ‘grey fleet’ with the following:

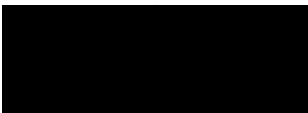
- All commercial users, governments and business develop and implement policies that cover both traditional employer-owned fleets as well as the grey fleet.
- Any vehicle, including privately owned vehicles, used for work purposes hold a 5-star ANCAP rating with a date stamp no more than six (6) years old.

Safety information for consumers who purchase used vehicles: The NRSS consultation draft and Fact Sheet: *Vehicle Safety* includes the results of ANCAP’s analysis that shows new vehicles are safer. ANCAP considers that any information on the safety performance of older cars that is provided to consumers must be accurate, relevant and provided at the correct point in the consumer’s research to influence the buying decision. ANCAP is undertaking a series of activities with the intention to develop information on the relative safety performance of used cars that meet these criteria.

Infrastructure planning and investment: The NRSS consultation draft and Fact Sheet: *Vehicle Safety*, acknowledge that new connected and automated vehicle (CAV) technologies will rely on compatibility with the road infrastructure. ANCAP’s testing of current vehicle systems has demonstrated the importance of the physical road infrastructure including lines and signs, to deliver the expected performance of current automated vehicle technologies such as lane keep assist and traffic sign recognition. ANCAP expects that within the life of the NRSS the reliance on both physical and digital road infrastructure to deliver the road safety benefits of CAV will increase as new vehicles are introduced with more advanced connected and automated systems. The Fact Sheet: *Infrastructure Planning and Investment* does not currently include any reference to planning and investment of infrastructure for CAV, and ANCAP recommends this be addressed in the final strategy.

If you wish to discuss any of ANCAP’s views on the consultation draft NRSS 2021-2030, please do not hesitate to contact me directly.

Yours sincerely



Carla Hoorweg
Chief Executive Officer

23 March 2021

Attachments:

- ANCAP Publication – Beyond the Stars 2019-20
- ANCAP Publication – AEB Pedestrian Comparison
- ANCAP Publication – Commercial Van Safety Comparison: ADAS Availability and Performance
- ANCAP Vehicle Purchasing and Use Guide

BEYOND THE STARS

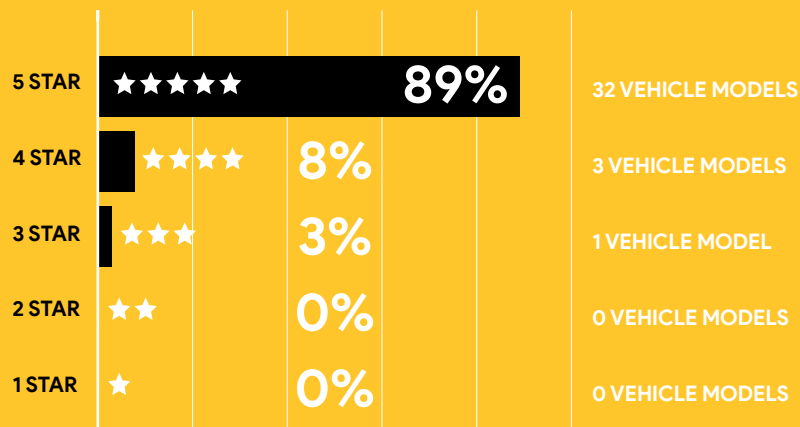
THE FACTS BEHIND ANCAP
2019-20



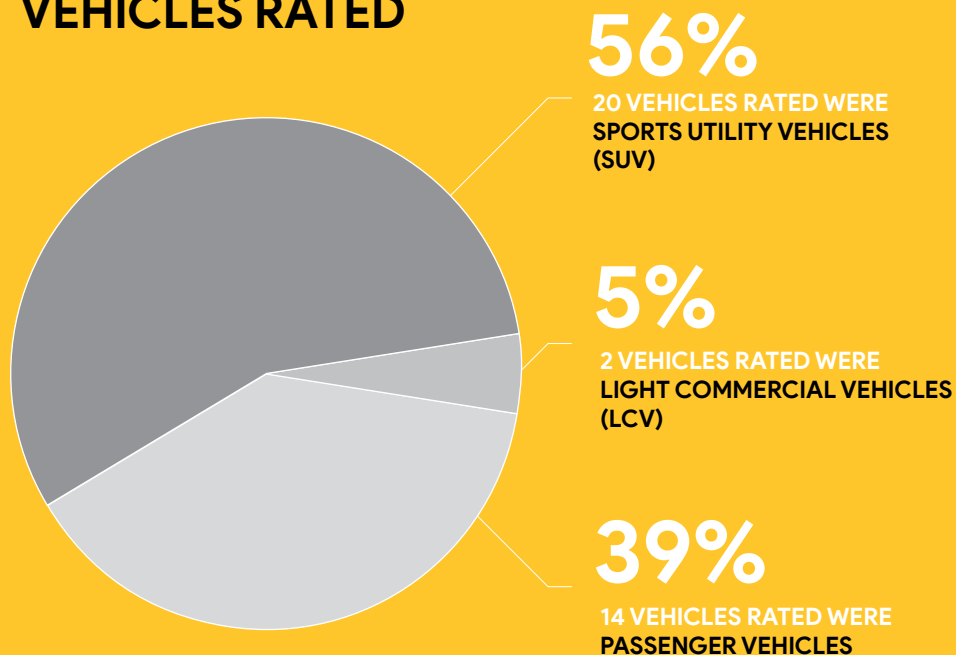
ANCAP
SAFETY

TESTS & RATINGS

ANCAP SAFETY RATINGS PUBLISHED FOR 36 VEHICLE MODELS COVERING 151 VARIANTS



VEHICLES RATED





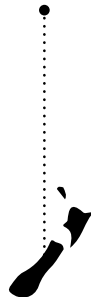
THE 36 NEW RATINGS
REPRESENT 9.9% OF NEW
LIGHT VEHICLE SALES IN
AUSTRALIA AND 9.0% IN
NEW ZEALAND

948,583

NEW 5 STAR
VEHICLES JOINED
OUR STREETS

836,658 IN
AUSTRALIA

111,925 IN
NEW ZEALAND



\$750,455

AVERAGE COST TO
PRODUCE A SINGLE
ANCAP SAFETY RATING

TOP PERFORMERS



ADULT OCCUPANT
PROTECTION

99%

MAZDA CX-30



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

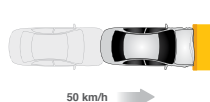


SAFETY ASSIST

94%

TESLA MODEL 3
TESLA MODEL X

11 LABORATORIES USED FOR TESTING



Full Width Frontal Test



Frontal Offset Test



Side Impact Test



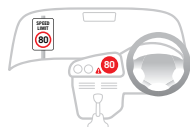
Oblique Pole Test



Pedestrian Test



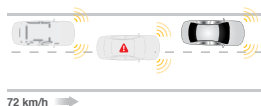
Whiplash Test



Speed Assistance Systems Tests



Autonomous Emergency Braking Tests



Lane Support System Tests

A TOTAL OF
291 TESTS WERE CONDUCTED
= \$14,175,913

10 TESTS FUNDED BY ANCAP
(\$0.48 MILLION)

262 TESTS FUNDED BY EURO NCAP
(\$12.64 MILLION)

19 TESTS FUNDED BY VEHICLE BRANDS
(\$1.04 MILLION)

TOTAL COST TO PRODUCE THE RATINGS =

\$23,264,115

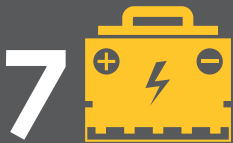
COST TO ANCAP = \$577,951
COST TO VEHICLE BRANDS = \$1,324,573
COST TO EURO NCAP = \$21,361,591



143 VEHICLES

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

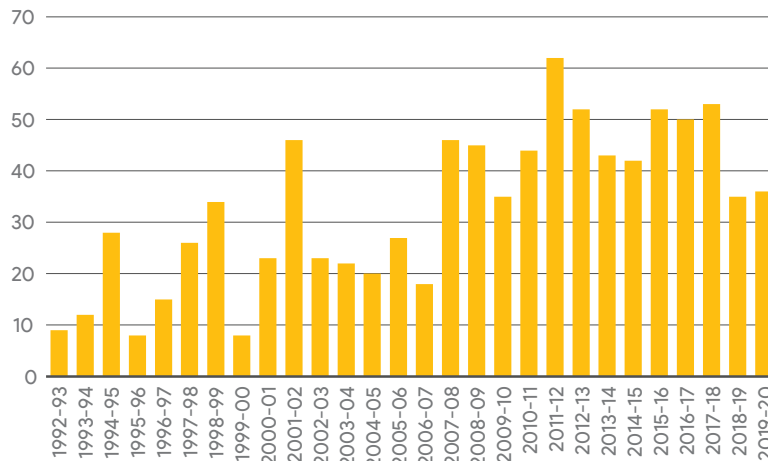
374

DUMMIES FACED UP
TO THEIR FATE

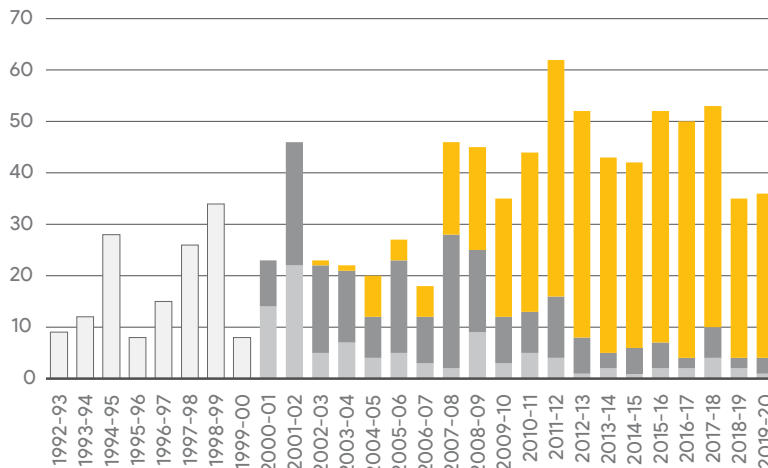


AUSTRALIA'S FIRST
SAFETY ASSIST
TEST FACILITY WAS
ESTABLISHED IN
CENTRAL WEST NSW

PUBLISHED RATINGS



Financial year



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

INVESTMENT & SUPPORT

OUR TEST, ASSESSMENT & VEHICLE SAFETY ADVOCACY PROGRAM IS:



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

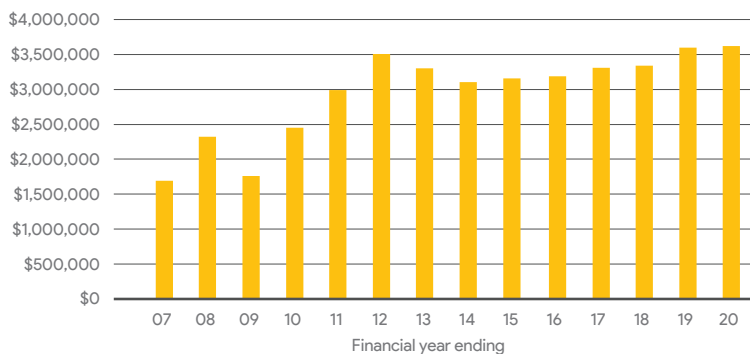
TOTAL EURO NCAP & VEHICLE BRAND SUPPORT

\$22,686,164



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

TOTAL MEMBER CONTRIBUTIONS



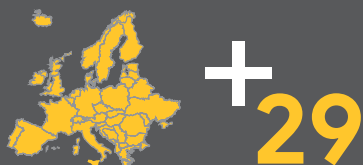
5 STAR ANCAP SAFETY RATINGS
PROVIDE VEHICLE BRANDS WITH A
COMPETITIVE ADVANTAGE

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

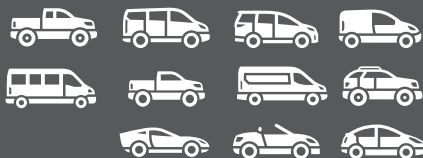
\$1,324,573

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

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



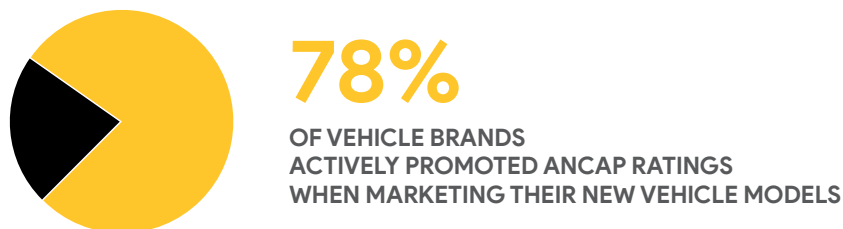
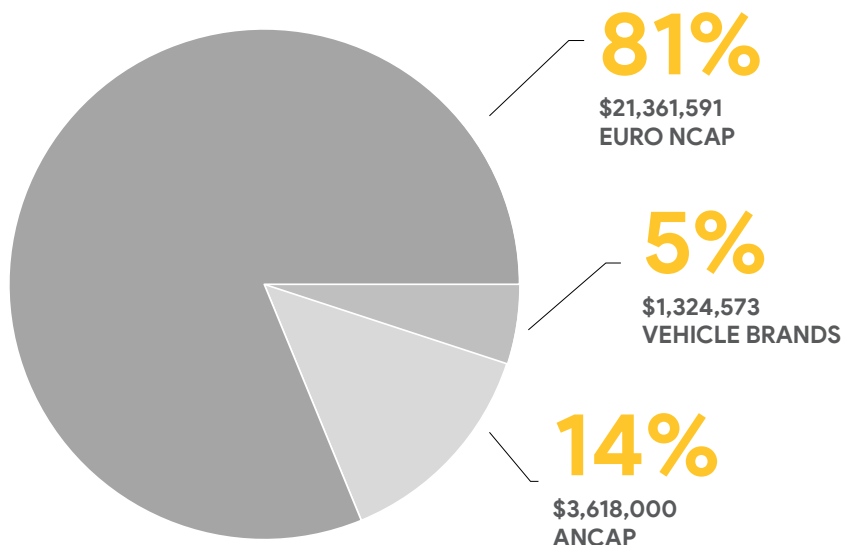
COLLABORATION WITH **EURO NCAP**
IS VITAL. IN 2019-20 IT ALLOWED
ANCAP TO PUBLISH RATINGS FOR AN
ADDITIONAL 29 VEHICLE MODELS



11 MODELS

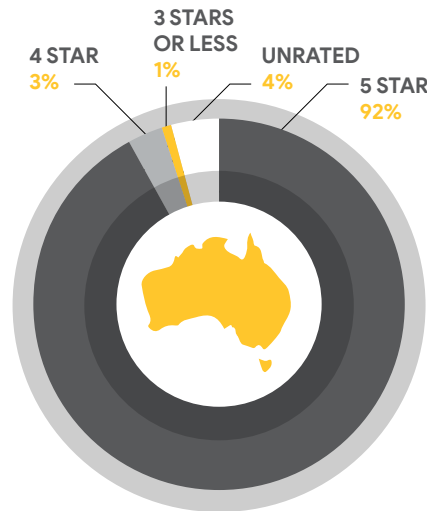
WERE PUT FORWARD FOR
ASSESSMENT BY VEHICLE BRANDS

REVENUE AND IN-KIND SUPPORT

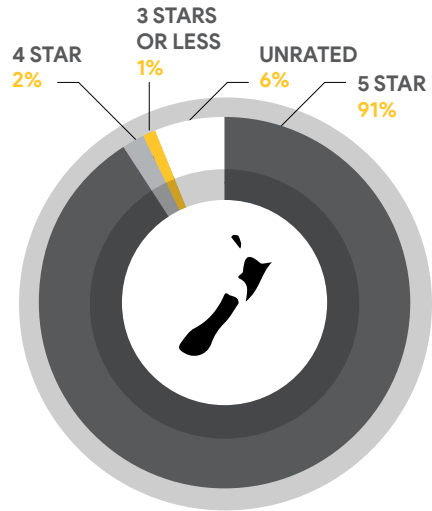


MARKET COVERAGE & VEHICLE SALES

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

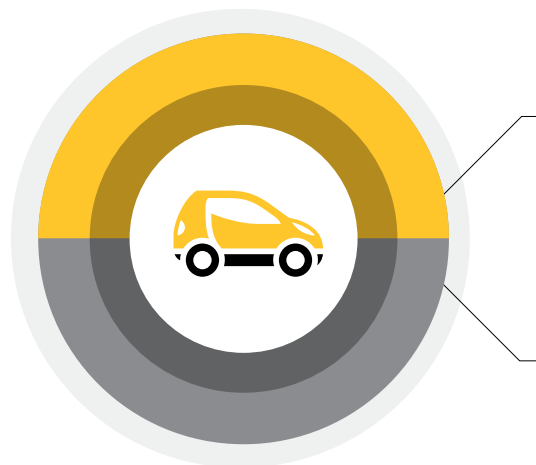


AUSTRALIA



NEW ZEALAND

**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

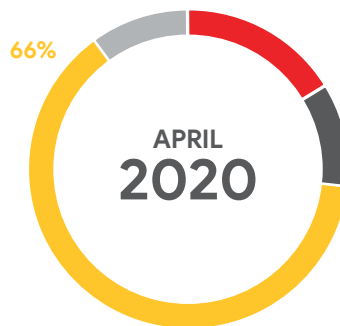
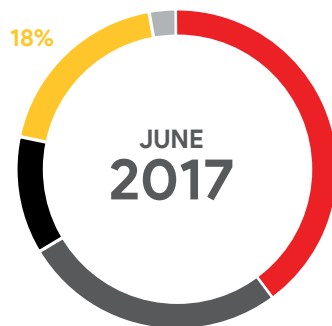
66%

AUTONOMOUS
EMERGENCY BRAKING (AEB)

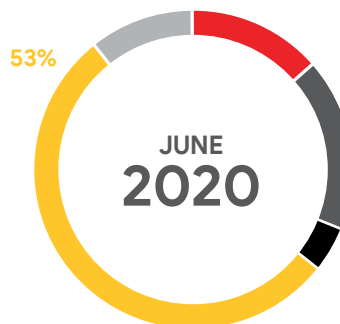
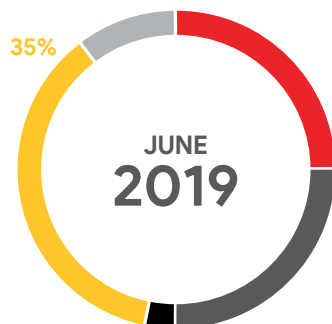
53%

LANE SUPPORT
SYSTEMS (LSS)

FITMENT OF AEB



FITMENT OF LSS

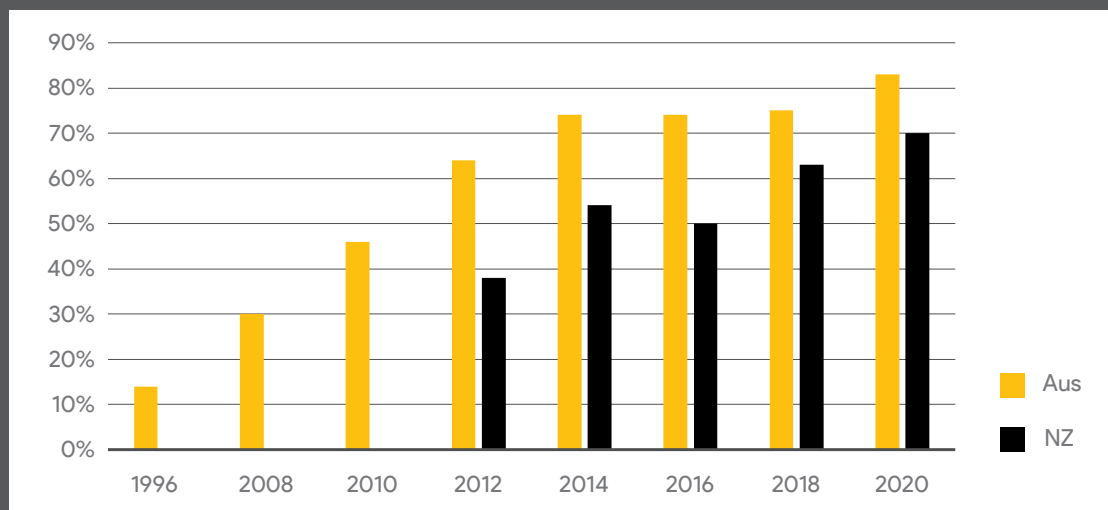


- STANDARD
- NOT AVAILABLE
- OPTIONAL
- AVAILABLE ON HIGHER VARIANT
- UNKNOWN



CONSUMER ENGAGEMENT

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

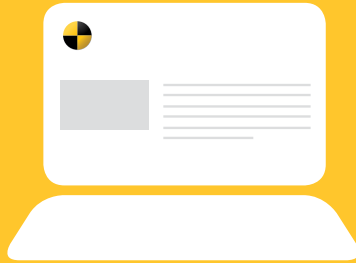
SAFETY
IS THE MOST
IMPORTANT
ATTRIBUTE



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

32.79%

AVERAGE OPEN RATE
FOR NEW VEHICLE RATING
ALERTS & MEDIA RELEASES

SOCIAL MEDIA FOLLOWERS



6%



22%



58%



11%

495,220 VIDEO VIEWS
9,700 HOURS WATCH TIME

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

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



ANCAP
SAFETY

PERFORMANCE TEST RESULTS AUTONOMOUS EMERGENCY BRAKING (PEDESTRIAN)

AUSTRALIA'S TOP 10 SELLING MODELS¹

Through ANCAP's influence, vehicle manufacturers are fitting more and more advanced vehicle safety features and technologies to their new model releases and existing models through mid-life facelifts to enhance the safety of vehicle occupants and other road users.

While it's not possible for ANCAP to re-test each make and model against updated rating criteria each year, we've sharpened our focus on Australia's most popular selling models - including some models introduced prior to performance testing of AEB - to compare their performance in avoiding or minimising impacts with pedestrians.





The following results are provided to provide consumers with information on the performance of **Autonomous Emergency Braking** systems with pedestrian detection capability (**AEB Pedestrian**).

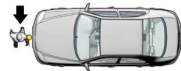

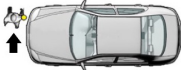
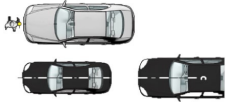


The vehicles evaluated as part of this comparison analysis were assessed against:

- *ANCAP TEST PROTOCOL - AEB Vulnerable Road User Systems v2.0.3 (Jan 2019)*
- *ANCAP ASSESSMENT PROTOCOL - Pedestrian Protection v9.0.3 (Jan 2019)*

The results from this analysis do not replace or alter existing ANCAP safety ratings or contributing scores.

SYSTEM CAPABILITY

	ADVANCED
	INTERMEDIATE
	BASIC
	NO FUNCTIONALITY / NOT TESTED

TEST SCENARIO	DESCRIPTION
	CPFA-50 Car-to-Pedestrian: Farside Adult (adult running from farside) The adult pedestrian dummy is running towards the kerb at 8km/h, with timing such that the centreline for the test vehicle would strike the dummy if there was no braking (50% overlap). This scenario is conducted in day-time only. Vehicle travel speeds are 20km/h to 60km/h.
	CPNA-25 Car-to-Pedestrian: Nearside Adult (adult walking from nearside) The adult pedestrian dummy is walking from the kerb at 5km/h, with timing such that the dummy will strike 1/4 across the front of the vehicle (25% overlap). For night-time testing this scenario is conducted with street lighting, and test vehicle headlights on low beam. Vehicle travel speeds are 20km/h to 60km/h.
	CPNA-75 Car-to-Pedestrian: Nearside Adult (adult walking from nearside) The adult pedestrian dummy is walking along the road at 5km/h, with timing such that the dummy will strike 3/4 across the front of the vehicle (75% overlap). For night-time testing this scenario is conducted with street lighting, and test vehicle headlights on low beam. Vehicle travel speeds are 20km/h to 60km/h.
	CPNC-50 Car-to-Pedestrian: Nearside Child (child running from obstruction) The child pedestrian dummy runs out from behind the front of two parked cars at a speed of 5km/h, with timing such that the centreline for the test vehicle would strike the child dummy if there was no braking (50% overlap). This scenario is conducted in day-time only. Vehicle travel speeds are 20km/h to 60km/h.
	CPLA-50 Car-to-Pedestrian: Longitudinal Adult (adult walking along road, longitudinally) The adult pedestrian dummy is walking along the road at 5km/h, aligned at the centreline of the test vehicle (50% overlap). For night-time testing this scenario is conducted with no street lighting and test vehicle headlights on high beam. Vehicle travel speeds are 20km/h to 60km/h.
	CPLA-25 Car-to-Pedestrian: Longitudinal Adult (adult walking along road, longitudinally) The adult pedestrian dummy is walking along the road at 5km/h, aligned to the left of the centreline, 1/4 across the front of the test vehicle (25% overlap). For night-time testing this scenario is conducted with no street lighting and test vehicle headlights on high beam. This is a Forward Collision Warning (FCW) test with performance assessed on the basis of the time the audible or visual warning is issued prior to impact with the pedestrian dummy. A warning time of 1.7 seconds or more before impact is required for points to be scored. Vehicle travel speeds are 50km/h to 80km/h.

PERFORMANCE TEST RESULTS AUTONOMOUS EMERGENCY BRAKING (PEDESTRIAN)

AUSTRALIA'S TOP 10 SELLING MODELS¹



SALES RANK	MAKE / MODEL*	SALES (2019)	MARKET SHARE	ANCAP SAFETY RATING	ANCAP RATING YEAR (DATESTAMP)	CPFA-50 ADULT CROSSING TOWARDS KERB (50%)	CPNA-25 ADULT CROSSING FROM KERB (25%)		CPNA-75 ADULT CROSSING FROM KERB (75%)	CPNC-50 CHILD RUNNING OBSTRUCTED	CPLA-50 ADULT WALKING ALONG ROAD (50%)		CPLA-25 ADULT WALKING ALONG ROAD (25%)		MANUFACTURER SYSTEM NAME	AEB PEDESTRIAN STATUS^	
						DAY	DAY	NIGHT	DAY	NIGHT	DAY	DAY	NIGHT	DAY			NIGHT
1	TOYOTA HILUX (July 2019 - onwards) All variants	47,649	4.7%	★★★★★	2019	ADVANCED										Toyota Safety Sense	●
2	FORD RANGER (April 2019 - onwards) All variants	40,960	4.0%	★★★★★	2015	INTERMEDIATE										Pre-Collision Assist - AEB with Pedestrian Detection	●
3	TOYOTA COROLLA (August 2018 - onwards) All variants	30,468	3.0%	★★★★★	2018	ADVANCED										Toyota Safety Sense	●
4	HYUNDAI i30 (March 2017 - August 2020) Hatch variants	28,378	2.8%	★★★★★	2017	BASIC										Hyundai Smart Sense	●
5	MITSUBISHI TRITON (November 2018 - onwards) GLX ADAS, GLX+, GLX-R, GLS & GSR variants	25,819	2.5%	★★★★★	2015	BASIC										Forward Collision Mitigation with Pedestrian Detection	●
6	MAZDA CX-5 (February 2020 - onwards) All variants	25,539	2.5%	★★★★★	2017	ADVANCED										Smart City Brake Support with Pedestrian Recognition	●
7	MAZDA 3 (April 2019 - onwards) All variants	24,939	2.4%	★★★★★	2019	ADVANCED										Smart Brake Support with Pedestrian Recognition	●
8	TOYOTA RAV4 (May 2019 - onwards) All variants	24,260	2.4%	★★★★★	2019	ADVANCED										Toyota Safety Sense	●
9	KIA CERATO (March 2018 - onwards) All variants w/ Safety Pack	21,757	2.1%	★★★★★	2019	INTERMEDIATE										AEB with Forward Collision Warning System (pedestrian & cyclist)	●
10	MITSUBISHI ASX (August 2017 - onwards) All variants	20,806	2.0%	★★★★★	2014	BASIC										Forward Collision Mitigation with Pedestrian Detection	●

● STANDARD ● NOT AVAILABLE ON BASE VARIANT BUT STANDARD OR OPTIONAL ON HIGHER VARIANTS ○ OPTIONAL ✗ NOT AVAILABLE

¹ 2019 Australian Top 10 selling models (VFACTS).
^ As at February 2020.
* Date range refers to build dates.

ADAS AVAILABILITY & PERFORMANCE COMMERCIAL VAN SAFETY COMPARISON

As part of ANCAP's adoption of common test and rating protocols with Euro NCAP in 2018, performance testing of *Safety Assist*, or **Advanced Driver Assistance Systems (ADAS)**, was introduced. These active safety systems work automatically to assist a driver in avoiding or mitigating the effects of a crash.

69 vehicles have been tested and rated by ANCAP since ADAS performance testing was introduced in 2018, yet due to generally longer product cycles for commercial vehicles, and the current scope of the ANCAP safety rating system covering passenger vehicles, SUVs and light commercial vehicles up to a GVM of 3.5 tonne (MA, MB, MC and NA category vehicles), many of the commercial vans currently on the market are unrated or have ANCAP ratings that pre-date the introduction of ADAS testing.

Commercial vans are an important market segment, operating with generally higher levels of exposure (vehicle kilometres travelled) due to their primary goods carrying and commercial use compared with passenger vehicles and people movers. As a result of the COVID-19 pandemic the use of commercial vans has also increased due to a rise in the home delivery of groceries and other online purchases.

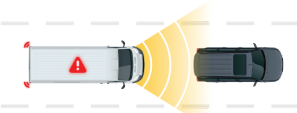
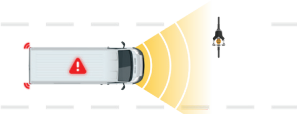
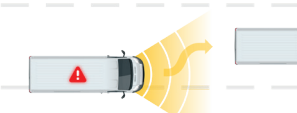
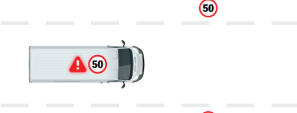


To allow Australian and New Zealand fleet, business and private consumers to make informed purchasing decisions, and to highlight any differences in safety performance across the commercial van market, ANCAP has joined with Euro NCAP to evaluate the availability and performance of ADAS systems of light and medium/heavy commercial vans available across Australasia.

The vans evaluated as part of this comparison analysis were assessed against slightly modified versions of the following test and assessment protocols, laden to half their gross load carrying capacity:

- *Assessment Protocol – Safety Assist v8.0.4*
- *Assessment Protocol – Pedestrian Protection v9.0.3*
- *Testing Protocol – AEB Car-to-car v2.0.1*
- *Testing Protocol – Lane Support Systems v2.0.1*
- *Testing Protocol – Speed Assist Systems v8.0.4*
- *Testing Protocol – AEB Vulnerable Road User v2.0.4*

NOTE: The results from this analysis do not replace or alter existing ANCAP safety ratings or contributing scores.

TESTED SYSTEMS

ADAS SYSTEM	DESCRIPTION
	AUTONOMOUS EMERGENCY BRAKING (Car-to-Car) A driver assistance system that can detect stationary or slowing vehicles in front of the subject vehicle, and autonomously apply braking to avoid a collision, or reduce the speed of impact.
	AUTONOMOUS EMERGENCY BRAKING (Vulnerable Road User) A driver assistance system that can detect pedestrians and (in some cases) cyclists that are in the path of the subject vehicle, and autonomously apply braking to avoid a collision, or reduce the speed of impact.
	LANE SUPPORT SYSTEMS Lane Departure Warning (LDW) A driver assistance system that can detect lane marking on the road ahead and warn the driver if they are drifting out of the lane. Warnings may be audible or haptic (e.g. vibrations through the steering wheel or seat). Lane Keep Assist (LKA) A driver assistance system that can detect lane markings on the road ahead and provide active steering input to avoid the subject vehicle unintentionally leaving the lane.
	SPEED ASSISTANCE SYSTEMS A system that assists the driver to avoid excessive speed. This may be through a manual speed limiter set by the driver, or a Speed Limit Information Function (SLIF) which uses GPS map and/or camera information to determine the applicable speed limit, inform the driver and alert them if the speed is exceeded.
	INTELLIGENT SEATBELT REMINDERS A warning device that informs and reminds the driver - through visual and audible warnings - if they, or a passenger, are not wearing a seatbelt.
	DRIVER MONITORING SYSTEMS A warning device that informs the driver of driver fatigue or loss of attention. These systems can detect driver performance by measuring steering and other driver inputs, lane position and other driving events. Some more sophisticated systems monitor driver attention directly, using cameras to follow eye movements and signs of inattention.

VEHICLE PURCHASING & USE GUIDE

OCTOBER 2020

WHY IS A VEHICLE PURCHASING & USE GUIDE RECOMMENDED?

Employers have an obligation under work health and safety legislation to provide their employees with a safe working environment. The vehicle is an extension of the workplace and just as employers need to provide employees with a safe workspace in the office, factory or worksite, a vehicle used for work purposes must be a safe vehicle.

Around 30% of work-related injuries involve a vehicle. This is the number one contributor to work-related injury fatalities.ⁱ

Vehicles used for work purposes may be owned or leased by the business, salary packaged vehicles or an employee's personal vehicle. In all instances, ANCAP recommends the purchase and use of the safest vehicles possible.

WHAT IS THE PURPOSE OF THIS GUIDE?

The purpose of the ANCAP Vehicle Purchasing and Use Guide are:

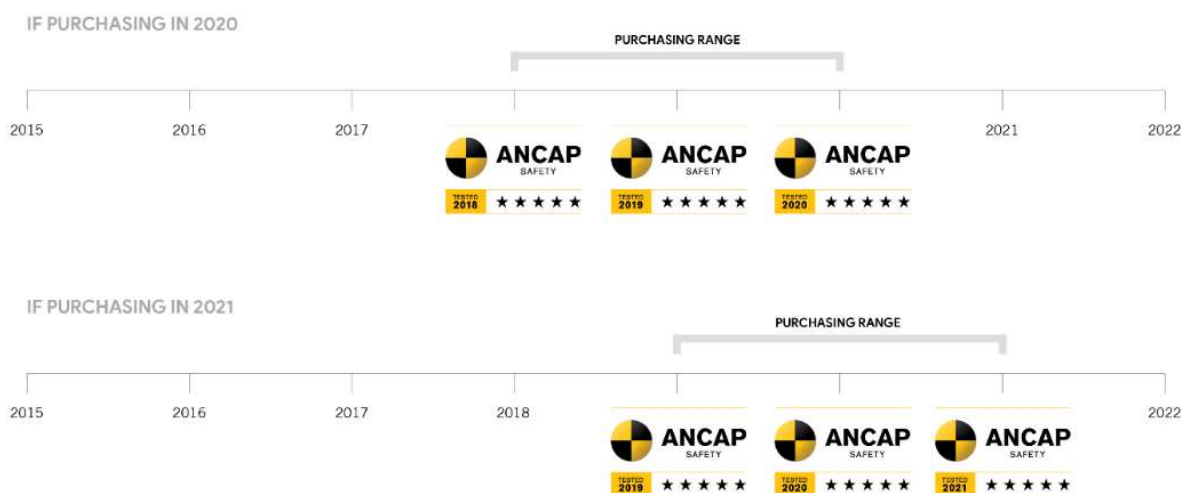
- To provide guidance for organisations that do not have an existing vehicle purchasing and use policy.
- To provide recommendations for organisations with existing vehicle purchasing and use policies to assist with updating/reviewing their own policies.

WHAT SHOULD A VEHICLE PURCHASING & USE GUIDE INCLUDE?

ANCAP recommends fleets and commercial usersⁱⁱ purchase vehicles which hold the maximum 5 star ANCAP safety rating with a "TESTED" datestamp of no more than three (3) years old. The datestamp is a key element of each vehicle rated by ANCAP as it identifies the year requirements against which a model has been assessed.

Purchasing 5 star vehicles with the most current datestamp possible will ensure vehicles purchased dynamically include the most up-to-date safety features as assessed under ANCAP's independent rating program.

For example, when buying a vehicle in 2020, look for a model which has either a 2020, 2019 or 2018 datestamp (see below).



ANCAP recommends that any personal vehicle (either as part of a salary packaging arrangement or personal vehicle) that is used for work purposes also has the maximum 5 star ANCAP safety rating.

WHAT DOES A 5 STAR VEHICLE OFFER?

Vehicles which have been awarded a 5 star ANCAP safety rating provide high levels of physical protection (crashworthiness) to occupants and pedestrians in the event of a crash, as well as the ability to avoid or minimise the outcomes of a crash through collision avoidance technologies.

The rapid development of new vehicle safety features and technologies can be a challenge for fleet managers and organisations in identifying those with the greatest safety potential. Fortunately, ANCAP test and assessment protocols are updated every two (2) years to ensure the latest safety technologies and crashworthiness features are incorporated into 5 star vehicles.

For more information on how ANCAP safety ratings are determined see [ANCAP Safety Testing Explained](#).

DOES THE AGE OF A VEHICLE AFFECT ITS SAFETY?

The criteria used by ANCAP to rate the safety of vehicles evolves with increases in stringency (see [ANCAP Evolution](#)).

ANCAP recognises that many businesses keep vehicles for three (3) years while a private buyer may keep a vehicle for up to five (5) years. To provide a balance between providing the latest possible vehicle safety with ensuring a return on the investment, ANCAP recommends vehicles used for work purposes should hold a 5 star ANCAP rating datestamp of no more than six (6) years old.

ANCAP RECOMMENDATIONS

ANCAP recommends fleets and commercial buyers purchase vehicles which hold the maximum 5 star ANCAP safety rating with a “TESTED” datestamp of no more than three (3) years old.

ANCAP recommends that any personal vehicle (either as part of a salary packaging arrangement or personal vehicle) that is used for work purposes also has the maximum 5 star ANCAP safety rating.

ANCAP recommends that vehicles used for work purposes hold the maximum 5 star ANCAP safety rating with a “TESTED” datestamp no more than six (6) years old.

For other aspects of safety for work related road-based travel, ANCAP recommends reviewing the Austroads National Guide, *Vehicles as a Workplace: Work Health & Safety Guide*.

PUBLISHED: [October 2020]

REVIEWED: Annually





ⁱ Safe Work Australia Key WHS statistics Australia, 2019.

ⁱⁱ Commercial users include ride-share and car-share operators

COMMERCIAL VAN SAFETY COMPARISON

ADAS SPECIFICATION / FITMENT STATUS

MAKE / MODEL	MARKET SEGMENT	SALES YTD*	AEB (C2C)	AEB (PED)	AEB (CYC)	LKA	LDW	BSM	DMS	SPEED LIMITER	ANCAP SAFETY RATING
 FORD TRANSIT CUSTOM (September 2019 - onwards) All variants	Vans / CC 2.5-3.5 tonne (NA)	2,143	●	●	●	●	●	●	●	●	★★★★★ 2012
 HYUNDAI ILOAD (March 2009 - onwards) All variants	Vans / CC 2.5-3.5 tonne (NA)	3,486	×	×	×	×	×	×	×	×	★★★★★ 2011
 MERCEDES-BENZ VITO (June 2015 - onwards) All variants	Vans / CC 2.5-3.5 tonne (NA)	1,136	×	×	×	×	○	○	●	●	★★★★★ 2014
 MITSUBISHI EXPRESS (June 2020 - onwards) All variants	Vans / CC 2.5-3.5 tonne (NA)	552	×	×	×	×	×	×	×	●	UNRATED
 PEUGEOT EXPERT (March 2019 - onwards) All variants	Vans / CC 2.5-3.5 tonne (NA)	289	●	●	×	×	●	●	●	●	UNRATED
 RENAULT TRAFIC (May 2015 - onwards) All variants	Vans / CC 2.5-3.5 tonne (NA)	1,429	×	×	×	×	×	×	×	●	UNRATED
 TOYOTA HIACE (February 2019 - onwards) All van variants	Vans / CC 2.5-3.5 tonne (NA)	7,009	●	●	●	●	●	●	●	●	★★★★★ 2019
 VOLKSWAGEN TRANSPORTER (December 2020 - onwards) T6.1 van variants	Vans / CC 2.5-3.5 tonne (NA)	501^	●	×	×	○	●	●	●	●	UNRATED
 FIAT DUCATO (August 2020 - onwards) All variants	LD 3501-8000kg GVM (NB)	690	●	×	×	×	●	○	×	●	UNRATED
 FORD TRANSIT (December 2019 - onwards) MY19.75 variants	LD 3501-8000kg GVM (NB)	1,007	●	●	●	●	●	●	●	●	UNRATED
 IVECO DAILY (2015 - onwards) Van variants	LD 3501-8000kg GVM (NB)	185	×	×	×	×	○	×	×	×	UNRATED

MAKE / MODEL		MARKET SEGMENT	SALES YTD*	AEB (C2C)	AEB (PED)	AEB (CYC)	LKA	LDW	BSM	DMS	SPEED LIMITER	ANCAP SAFETY RATING
	MERCEDES-BENZ SPRINTER (October 2018 - onwards) All variants	LD 3501-8000kg GVM (NB)	2,219	●	●	●	○	●	●	●	●	UNRATED
	PEUGEOT BOXER (March 2020 - onwards) All variants	LD 3501-8000kg GVM (NB)	23	●	×	×	×	●	×	●	●	UNRATED
	RENAULT MASTER (March 2020 - onwards) All variants	LD 3501-8000kg GVM (NB)	1,267	×	×	×	×	○	○	×	●	UNRATED
	VOLKSWAGEN CRAFTYER (July 2018 - onwards) All van variants	LD 3501-8000kg GVM (NB)	1,144	●	×	×	○	○	○	●	●	UNRATED

● STANDARD ○ NOT AVAILABLE ON BASE VARIANT BUT STANDARD OR OPTIONAL ON HIGHER VARIANTS ○ OPTIONAL × NOT AVAILABLE

AEB (C2C) = Autonomous emergency braking (car-to-car)
AEB (PED) = Autonomous emergency braking (pedestrian-detecting)
AEB (CYC) = Autonomous emergency braking (cyclist-detecting)
LKA = Lane keep assistance system (active)
LDW = Lane departure warning system
BSM = Blind spot monitoring system
DMS = Driver monitoring system

* VFACTS National Vehicle Sales, January to November 2020.
 ^ YTD sales for previous model VW Transporter (T6).

COMMERCIAL VAN SAFETY COMPARISON







ADAS PERFORMANCE TEST RESULTS










The *Safety Assist*, or **Advanced Driver Assistance Systems (ADAS)**, functions of fifteen (15) commercial vans have been tested, with each van carrying half of its permissible carrying capacity - a typical load for a commercial van in daily use.

Test scores for each ADAS system have been weighted and combined to produce an overall performance ranking of either GOLD, SILVER or BRONZE for each van. The performance of ADAS systems were tested regardless of whether the system is available as Standard or Optional. A number of vans have been classified as NOT RECOMMENDED.

COLLISION AVOIDANCE: OVERALL PERFORMANCE

GOLD	Equal or better than 60%
SILVER	Equal or better than 40%
BRONZE	Equal or better than 20%
NOT RECOMMENDED	Below 20%

MAKE / MODEL	AEB (C2C)	AEB (PED)	AEB (CYC)	LANE SUPPORT	SPEED* ASSISTANCE	OCCUPANT STATUS MONITORING	OVERALL PERFORMANCE
 TOYOTA HIACE[^] (February 2019 - onwards) All van variants							GOLD 77%
 FORD TRANSIT CUSTOM (September 2019 - onwards) All variants							SILVER 58%
 VOLKSWAGEN TRANSPORTER (December 2020 - onwards) T6.1 van variants		N/A	N/A				SILVER 50%
 PEUGEOT EXPERT (March 2019 - onwards) All variants			N/A				SILVER 44%
 MERCEDES-BENZ VITO (June 2015 - onwards) Variants with optional LDW	N/A	N/A	N/A				BRONZE 23%
 MITSUBISHI EXPRESS (June 2020 - onwards) All variants	N/A	N/A	N/A	N/A			NOT RECOMMENDED 11%

MAKE / MODEL		AEB (C2C)	AEB (PED)	AEB (CYC)	LANE SUPPORT	SPEED* ASSISTANCE	OCCUPANT STATUS MONITORING	OVERALL PERFORMANCE
	RENAULT TRAFIC (May 2015 - onwards) All variants	N/A	N/A	N/A	N/A			NOT RECOMMENDED 11%
	HYUNDAI ILOAD (March 2009 - onwards) All variants	N/A	N/A	N/A	N/A	N/A		NOT RECOMMENDED 5%
	FORD TRANSIT (December 2019 - onwards) MY19.75 variants							GOLD 63%
	MERCEDES-BENZ SPRINTER (October 2018 - onwards) All variants							SILVER 52%
	VOLKSWAGEN CRAFTER (July 2018 - onwards) All van variants		N/A	N/A				SILVER 44%
	PEUGEOT BOXER (March 2020 - onwards) All variants		N/A	N/A				BRONZE 33%
	FIAT DUCATO (August 2020 - onwards) All variants		N/A	N/A				BRONZE 28%
	RENAULT MASTER (March 2020 - onwards) All variants	N/A	N/A	N/A				NOT RECOMMENDED 6%
	IVECO DAILY (2015 - onwards) Van variants	N/A	N/A	N/A		N/A		NOT RECOMMENDED 6%

* Speed Limit Information Function (SLIF) performance based on European test results / European specified vehicles.

^ Unladen performance tests of Toyota HiAce conducted in 2019. All other vehicles tested laden to 50% of their cross load carrying capacity.

■ GOOD
 ■ ACCEPTABLE
 ■ MARGINAL
 ■ WEAK
 ■ POOR