

## **FUTURE VIEW ON TESTING & ASSESSMENT: AN EXPANDING FOCUS TO 2030**

Application of *Euro NCAP Vision 2030: A Safer Future for Mobility*  
for the Australian and New Zealand markets

**November 2022**



# FUTURE VIEW ON TESTING & ASSESSMENT: AN EXPANDING FOCUS TO 2030

Application of ***Euro NCAP Vision 2030: A Safer Future for Mobility***  
for the Australian and New Zealand markets

Established in 1992 as the second New Car Assessment Program (NCAP) in the world after the United States, over the past three decades ANCAP has demonstrated its strong commitment to enhance the safety of new vehicles sold across Australia and New Zealand.

What began as a two-year campaign to shine a light on the comparable levels of safety offered by Australia's most popular selling models has defied expectations. Then, there was no independent measure. No mechanism to inform consumers as to how well, or not, their vehicle performed in a crash - nor any incentive for manufacturers to fast-track safety improvements in their models.

Today however, ANCAP safety ratings are a valuable consumer tool and one of the most sought-after aspects considered when making a new vehicle purchase. Consumers and fleet purchasers expect the highest levels of safety, and vehicle manufacturers work hard to not only satisfy the market but lead the development of new safety features and technologies.

In ANCAP's 30 years, a range of new tests and assessments have been introduced and existing ones enhanced. Minimum safety requirements have increased across all star rating levels, and more sophisticated testing, assessment and rating methods developed.

---

## Our Vision

*Zero deaths and serious injuries on Australian and New Zealand roads*

## Our Mission

*To protect road users in Australia and New Zealand by improving new vehicle safety and promoting safer vehicles*



Consumer preferences, industry offerings, regulatory requirements, and technology-based solutions are all evolving at a rapid pace. This means today's new car buyers are facing an increasingly complex landscape of vehicle safety features and technologies – all of which are important in achieving ANCAP's vision of zero deaths and serious injuries on Australian and New Zealand roads.

Rapid advances in technology, such as artificial intelligence and over-the-air (OTA) software updates are challenging the established traditions in safety testing.

Driven by the desire to create a more sustainable and greener future, the automotive sector is transforming into electric, shared, and automated mobility. This transition not only alters the role of vehicle purchasers and users as well as vehicle manufacturers, but also re-defines the purpose and target audiences of the non-regulatory consumer safety information ANCAP provides. For example, the use of electric scooters on city streets (micro-mobility) is becoming an increasingly popular alternative to personal car ownership and use, yet the rapid increase in use of these mobility options has introduced new road safety challenges.

Despite these changes, the non-regulatory influence of ANCAP still holds the potential for further road safety gains in support of 'Vision Zero'. By developing timely voluntary standards encouraging advanced safety features and technologies, ANCAP will continue to act as a catalyst for accelerating the uptake and promoting best practice - not just for passenger vehicles, but for the commercial vehicle fleet.

In parallel, ANCAP will monitor the evolution of automated vehicle safety technologies and assist in building consumer confidence in vehicles with connected and automated capability.

Against the background of a disrupted automotive market following the COVID-19 pandemic, associated global supply-chain disruptions, and cost-of-living pressures, ***ANCAP's Future View on Testing & Assessment: An Expanding Focus to 2030*** outlines some of the key updates to our existing safety rating regime. Produced in collaboration with our European counterpart, Euro NCAP, and based on ***Euro NCAP Vision 2030: A Safer Future for Mobility***, this document outlines a range of new initiatives that go beyond safer cars – driving forward innovation and ensuring a safer future for a broader range of vehicle types across the Australian and New Zealand new vehicle markets.

## FUTURE VIEW TO 2030

To ensure continuous improvement in vehicle safety in future years, ANCAP and Euro NCAP have considered the current vehicle safety landscape in the context of current and future road and vehicle-safety challenges and opportunities and developed a forward-looking vision to 2030.

This document draws upon *Euro NCAP's Vision 2030: A Safer Future for Mobility* applied with context to the Australian and New Zealand markets. It reflects ANCAP and Euro NCAP's joint commitment to maintaining common test and rating protocols relevant to our respective markets.

## PASSENGER CAR, SUV AND LIGHT COMMERCIAL VEHICLE SAFETY

The star ratings published by ANCAP are a primary driver for improved safety among passenger cars, SUVs and light commercial vehicles supplied in Australia and New Zealand. This will continue to be the case for the foreseeable future.

### Overall Safety Rating

Changes to ANCAP's test and rating criteria over the past 30 years have focused on incentivising manufacturers to deliver safer vehicles. This approach has been successful, with new vehicles offered into the Australian and New Zealand markets becoming increasingly safer as a result.

Over the past three decades the content and requirements of ANCAP's test and rating criteria have been continuously updated, and thresholds adjusted to encourage better performance and keep five stars within reach. Since aligning with Euro NCAP in 2018, ANCAP has utilised an overall rating system focused around **four key assessment pillars** - *Adult Occupant Protection*, *Child Occupant Protection*, *Vulnerable Road User Protection* and *Safety Assist*. The scores achieved across these pillars each contributing to an overall star rating.

ANCAP will continue to publish star ratings for passenger cars, SUVs and light commercial vehicles, and prioritise the testing and rating of electric and alternative-powered models to encourage market, fleet and consumer uptake across Australia and New Zealand.

As we move forward, the **overall rating methodology** needs to reflect the increasingly important role that **assisted** and **automated** technologies will play, as the potential safety benefits of technologies that assist with the driving task are becoming clearer. This will require our approach to evolve into one that reflects the transition from **crash mitigation** to **crash avoidance**.

ANCAP and Euro NCAP will both move to a **three-year protocol update cycle**, with the next step-change in protocols after 2023 to be applicable **from 2026**. This will provide more time for development of protocols and test equipment.

From 2026 the current four pillar system will be replaced with a new scheme that categorises tests according to the four distinctive phases of a potential crash:

- *Safe Driving*
- *Crash Avoidance*
- *Crash Protection*
- *Post-Crash Safety*

In future protocols, ANCAP will seek to incorporate requirements that:

- Strengthen procedures for carry-over ratings
- Implement an over-the-air (OTA) software update policy
- Retain and update the existing dual rating policy in the context of the current Australian and New Zealand markets

Content changes to the star rating system will seek to:

- Use **real-world evidence** to improve overall robustness of safety systems and ensure tests reflect real-life situations more accurately
- Increase the focus on **gender equality** and **aging population** of car drivers and occupants, in passive safety testing
- Better simulate **real traffic environments** and take best practice in **human machine interface** design into account, in active safety testing
- Leverage **driver and occupant monitoring** technology to facilitate other safety functions, such as smarter restraint deployment
- Address new critical scenarios and emerging road safety priorities through advances in **sensing, software and connectivity**



Vehicle safety will benefit from increased levels of vehicle connectivity. **Vehicle-to-X (V2X)** technologies will be monitored and appropriate assessment adopted once infrastructure exists to support these functions. As a starting point, ANCAP will work with governments and vehicle manufacturers towards implementation of eCall assessment from 2026.

With the increasing range of technologies that are encouraged by ANCAP and Euro NCAP's shared protocols, there is an obvious trade-off with cost of testing, including testing that occurs outside official test programs. In conjunction with Euro NCAP, ANCAP will consider options to minimise required testing, while maintaining the integrity of the test program and ratings, and supporting robust vehicle systems.

## Safe Driving

### *In-Cabin Monitoring*

*Driver Monitoring:* In addition to the 2023 change to reward **direct** monitoring systems only, future protocols will be developed to evaluate more advanced systems that are more robust and efficient. This will include recognition of **driver impairment**, including **alcohol**, and the use of **occupant status** information to adjust vehicle performance characteristics (active and passive safety).

*Occupant Classification:* Future protocol revisions will consider opportunities to use occupant information including biometric data to optimise performance of passive safety features - such as seatbelt pre-tensioning, load-limiting and airbag operation.

*Child Presence Detection:* From 2023, both indirect (e.g. door opening) and direct sensing can be rewarded. From 2026, **direct sensing only** will be assessed.

### *Speed Assistance*

ANCAP will continue to encourage Speed Assistance systems. While the ANCAP protocol will maintain partial alignment with that of Euro NCAP, there are differences in the infrastructure (signage and communications) and regulatory environment. Divergence between ANCAP and Euro NCAP assessments and scoring may be necessary due to Europe's General Safety Regulation (GSR2).

As with Euro NCAP, ANCAP will encourage improved accuracy in the measured/controlled vehicle speed, with a reduction in the acceptable offset tolerance (3km/h from 2026).

## *Assisted and Automated Driving Systems*

ANCAP will assess the performance of SAE **Level 2 and Level 3** driver assistance systems in accordance with Euro NCAP's *Assisted Driving* assessment – with metrics for Driver Engagement, Assistance Competence and Safety Backup. The assessment will be separate from, and complementary to, the star ratings, however from 2026 good or poor performance of Assisted Driving systems, including optionally-fitted systems, will be factored into the star rating calculation through a penalty or reward within the *Safe Driving* pillar score.

### *Other Safe Driving Technology*

There exists the potential for proactive driving systems - for example obstacle anticipation or deceleration assistance - to build on existing active safety functions, in order to avoid driving situations becoming critical. At this point these systems are new, and the potential benefits are unclear. As such these will be monitored, with a view to later inclusion in assessment of Assisted Driving systems.

## Crash Avoidance

### *Lane Support Systems, Autonomous Emergency Braking and Steering for cars and VRU*

A significant step in crash avoidance comes with the introduction of **motorcycle (Powered Two Wheeler)** test devices from 2023. This is expected to be consolidated in the medium term with refinement of test scenarios, potentially including higher approach speeds and, if beneficial, additional test opponents (for example Powered Standing Scooters – eScooters).

Robustness of vehicle systems in real-world scenarios remains an area of potential development, and future protocols may include variation of test conditions, such as obstructions, weather, oncoming lighting and target appearance. These potential additional scenarios must be balanced against an increasing testing burden, with the further use of grid-based test selection to reduce testing time and cost. In the longer term this may be combined with **virtual** or **vehicle-in-the loop tests** to achieve greater robustness while limiting overall cost.

It is important to ensure that the crash avoidance systems are able to interact safely with the driver, and that the driver does not become overly dependent on these systems.

The human machine interaction of these systems will therefore continue to be considered as part of the *Crash Avoidance* pillar assessment, with the assessment further developed to consider best practice in interaction between visual, audible and haptic systems.

### **Pedal Misapplication**

As with other markets, **pedal misapplication** appears to be a relatively small, but a potentially growing issue in Australia and New Zealand. It is likely that misapplication can be addressed with current vehicle sensors and systems, in particular autonomous emergency braking (AEB) forward and backover. It is expected that ANCAP will introduce assessment of pedal misapplication prevention systems, taking into account methodologies in place in other countries, such as Japan through Japan NCAP.

### **Crash Protection**

#### ***Protection of Adults and Children in Front and Side Crashes***

A range of **occupant sizes** are covered in ANCAP's assessment, either through the use of different test devices (dummies) or through additional assessments such as 'knee mapping'. As additional advanced dummies become available - for example the **THOR 5F advanced small female frontal crash dummy** - these will be applied in appropriate tests, either in place of or in conjunction with the current family of dummies.

The existing suite of crash tests assessing child occupant protection will be maintained in the short term, however revisions to test methods will be considered for 2026 and further protocol generations. This review will also include consideration of increasing testing costs, and the possibility that current tests may no longer be required or may be replaced or enhanced with virtual simulation or sub-systems (e.g. sled) tests.

ANCAP's protocols will continue to account for differences in the use and regulation of Child Restraint Systems (CRS) between Europe, and Australia and New Zealand. ANCAP will therefore continue to use Australian Standard CRS for all ANCAP assessments, including dynamic tests that are conducted by ANCAP. Minor differences in the application of **indirect** Child Presence Detection scoring, applicable from 2023, will no longer be relevant from 2026, with only **direct** detection systems being rewarded from that date.

### **Whiplash Protection**

Dynamic whiplash testing will continue, however the geometric requirements will be reviewed in the medium term to ensure applicability for different occupant size and gender.

### **Pedestrian and Cyclist Safety**

The introduction of a **new legform impactor** in 2023 will be consolidated, with no significant changes to the pedestrian protection testing process in the short term. In the longer term, the test locations and scoring method will be reviewed to take into account additional road users (e.g. micro-mobility or eScooters) and to encourage greater protection of the vehicle A-pillar area. Further refinement in the use of human body models for assessment of deployable systems like active bonnets or pedestrian airbags is also anticipated.

### **Post-Crash Safety**

#### ***Rescue, Extrication and Safety***

Development and deployment of public and third-party **eCall systems** in Australia and New Zealand remains well behind what is available in Europe. ANCAP has not and will not assess eCall (or Automatic Crash Notification) systems up to and including 2023-2025 protocols. From 2026 ANCAP will introduce assessment and scoring of both public and third-party eCall systems. The expected range of performance will need to be determined based on the available infrastructure, however it is expected that this will be at a lower level of functionality than that which is required for scoring under Euro NCAP's protocols where basic eCall functionality is already a regulatory requirement under the EU General Safety Regulation.

ANCAP will continue to encourage manufacturers to provide post-crash rescue information through provision of **Rescue Sheets** in accordance with ISO 17840 which will be made available through the *ANCAP RESCUE* app. Enhancements to the available information such as managing of **thermal runaway incidents** will be included if and when the ISO standard is amended accordingly.

## SAFETY ASSURANCE FOR SHARED AND AUTONOMOUS MOBILITY

There is significant interest in the development of **automated vehicles (AVs)** and other emerging transport and ownership models. However, there is a lack of consumer information on the safety of AVs and other alternative transport options.

ANCAP will continue to monitor the development of AVs and emerging transport and ownership models, and collaborate with Euro NCAP on any work to develop a safety assurance scheme for AVs.

## VEHICLE SECURITY AND ACCESS TO DATA

The role of **software** in modern vehicles is becoming more dominant, with software controlling braking, steering, driving and advanced safety functions, in addition to on-board infotainment systems. The connection of vehicles to cloud services has enabled vehicle manufacturers to offer real-time information to drivers and provide services such as functionality upgrades, remote diagnostics, and software updates over-the-air. The generation, access and use of data has become an important question for regulators.

The **security of connected vehicles** is also of concern, with the potential risk of vehicles being hacked in order to access the driver's personal information, or to take control of the vehicle. Software update procedures and organisational processes have begun to be addressed through UN Regulations<sup>1</sup> however the timeframe for adoption of these rules in Australia and New Zealand remains uncertain.

ANCAP's role as a consumer-focused organisation concerned with providing information about the safety performance of new vehicles and promoting the uptake of new advanced technologies, means it has an interest in whether new vehicles meet basic security requirements. Access to **consumer data and in-vehicle data** are also important considerations, along with the ability for vehicle data to be accessed during independent testing.

Vehicle security and data access are complex areas where technology continues to evolve and domestic regulatory framework is yet to be legislated. ANCAP will continue to monitor progress in this area with a view to ensuring transparent information is available to consumers.

## COMMERCIAL VEHICLE SAFETY

### Large Utilities (Pick-Up Trucks)

In recent years, heavier NA category and NB category utilities or '**pick-up trucks**' (some greater than 3.5 tonne GVM) have become more prevalent in the Australian and New Zealand markets. These vehicles have not been captured within ANCAP's traditional test program despite them closely competing with other rated (smaller) dual cab utilities.

There is also anecdotal evidence suggesting some mainstream manufacturers are confident to introduce new models into this segment as ANCAP's current traditional test program scope would see them 'untouched' from a star rating perspective, and hence not present as a negative to prospective fleet buyers and consumers. Manufacturers may see an opportunity for market growth through this segment as they are very close competitors to light commercial dual cab vehicles that are covered by ANCAP's star rating scope.

Given the rising popularity of this type of vehicle in Australia and New Zealand, their general use as 'everyday' and recreational vehicles driven by families and/or tradespeople in both metropolitan and regional areas, their greater physical size and mass, their untested 'risk' to other vehicles and road users, their high purchase price (and hence expectation of high specification and performance), and the arrival of additional peer vehicles (mainstream and new market entrants) within this category over the next 12-24 months, there is a compelling case for ANCAP to examine the comparable safety of these vehicles.

---

<sup>1</sup> UN Regulation 155 Cyber Security and Cyber Security Management Systems, UN Regulation 156 Software Updates and Software Update Management Systems.

## Goods Vehicles

Goods vehicles such as commercial vans, light trucks, medium and heavy trucks are over-represented in fatal and serious injury crashes in Australia. Goods vehicles make up less than three per cent of all registered vehicles yet are involved in approximately 15 percent of all fatal crashes. In 2021, 99 Australians died in collisions involving heavy trucks (over 4.5 tonne GVM). Seventy-five per cent of those fatalities were the driver of the other vehicle or vulnerable road users such as pedestrians or cyclists. More than 65 per cent of those fatal crashes occurred on highways, with the balance of fatalities occurring in urban areas.<sup>2</sup>

In New Zealand goods vehicles are also over-represented in road fatalities. Over the five-year period 2016-2020, heavy vehicles made up 3.5% of registered vehicles<sup>3</sup>, yet on average were involved in 20.5% of road fatalities where 85% of the fatalities were the driver of the other vehicle or pedestrians or cyclists<sup>4</sup>.

Unlike light passenger vehicles, goods vehicles comprise a range of different sizes and vehicle types depending on the operational environment - for example urban, rural, highway etc. This also means that different types of goods vehicles are involved in fatal crashes in differing environments.

To encourage safety improvements among goods vehicles, the Australian Government recently announced the regulatory requirement for light, medium and heavy trucks to be fitted with AEB from 2025 under ADR 97/00. The mandating of reversing aids on goods vehicles (light, medium and heavy trucks) is also under regulatory consideration. There is however **no consumer advocacy platform** to communicate or promote safety among this industry segment or consumer market to encourage voluntary, non-regulatory change.

## Commercial Vans

As an extension to ANCAP and Euro NCAP's traditional star rating program, the collision avoidance (ADAS) capability of 17 commercial vans was evaluated as part of a *Commercial Van Safety Comparison* program conducted in 2020 and updated in 2022. This program used a category-based grading system to highlight the differences in safety specification and active safety performance of commercial vans up to 8 tonne GVM.

The comparison program was triggered by the COVID-19 pandemic which generated an increase in the use of commercial vans on Australian and New Zealand roads following a rise in home delivery services and online purchases.

The publication of safety grading information for this market segment has proven to be a valuable tool to assist fleets, business and private consumers make informed purchasing decisions. Manufacturer cooperation and support has also been strong, with many manufacturers seeking to improve the specification, and hence grading of their vans as a result of the program.

ANCAP intends to continue publishing regular updates to the safety performance of vehicles in this segment utilising the shared commercial van testing protocols. It is anticipated that in future years, only **standard** safety equipment will be considered in the assessment of the commercial van safety gradings.

The success of this supplementary program presents a strong opportunity and supporting rationale for ANCAP to undertake further comparison-style programs for market segments not historically tested and assessed by ANCAP.

---

<sup>2</sup> Australian Government BITRE Road Deaths in Crashes Involving Heavy Vehicles (Quarterly Bulletin, Oct-Dec 2021).

<sup>3</sup> New Zealand Te Mātū Waka the Ministry of Transport, Annual Fleet Statistics 2020.

<sup>4</sup> Data supplied by New Zealand Transport Agency, May 2022.

## Light Trucks

Light trucks (over 3.5 tonne and up to 8 tonne GVM) are market competitors to commercial vans and are not covered by ANCAP's current star rating program. This segment of the market however is growing in popularity among tradespeople and fleets as they offer increased payload and carrying capacity at an affordable price. They are also covertly attractive to those operating fleets or worksites that require five-star ANCAP rated vehicles as they offer a means for bypassing that requirement, thus making them eligible for purchase despite not being star rated.

Light trucks operate predominantly in urban areas and travel on average twice as far as passenger cars (21,100kms vs. 11,100kms)<sup>5</sup>. Light trucks make up approximately 50 per cent of all goods vehicles sold in Australia each year and sales have been increasing by an average of 6.6 per cent per year since 2012<sup>6</sup>. Light trucks make up around 30 per cent of all goods vehicles sold in Zealand each year<sup>7</sup>.

In 2021, 64 Australians died in collisions involving rigid trucks<sup>8</sup>. Eighty per cent of these fatalities were the driver of the struck (opponent) vehicle and pedestrians or cyclists (vulnerable road users), and more than 60 per cent of these fatal crashes occurred on roads in major cities and other urban areas. This demonstrates a clear opportunity for focus, and safety improvements, within this segment.

An initial market survey examining the availability of safety features and technologies fitted to this segment found that truck manufacturers are offering a range of passive and active safety features on new trucks, however fitment levels lag significantly behind that of light vehicles<sup>9</sup>. There is currently **no consumer advocacy platform** to communicate or promote safety among this industry segment or consumer market to encourage voluntary (non-regulatory) change.

As an initial step, ANCAP will investigate applying a similar test and grading program to light trucks as it has for commercial vans.

## Medium and Heavy Trucks

### Medium Trucks

Medium trucks (over 8 tonnes GVM and up to 39 tonnes GCM) are typically rigid medium body trucks with a single drive axle - for example local delivery trucks, furniture removal trucks, medium size tippers, and tilt-tray tow-trucks. They often tow a dedicated trailer such as a plant or machinery trailer, box body trailer for general goods, or furniture/car trailer. In Australia, medium trucks operate predominantly in urban areas and travel on average twice as far as passenger cars (21,100kms vs. 11,100kms)<sup>10</sup> each year. New Zealand truck usage is similar, with trucks travelling on average 2.5 times as far as passenger cars (21,600km vs 8,800km) each year<sup>11</sup>.

Medium trucks make up approximately 20 per cent of all commercial goods vehicles sold in Australia each year and 35 per cent of all commercial goods vehicles sold in New Zealand each year.

An initial market survey examining the availability of safety features and technologies fitted to this segment found that truck manufacturers are offering a range of passive and active safety features on new medium trucks, while fitment levels lag significantly behind that of light passenger vehicles and light trucks for some safety features<sup>12</sup>. However, as with light trucks, there is also currently no consumer advocacy platform to communicate the availability and benefits or promote the uptake of safety features among buyers of vehicles in this segment.

### Heavy Trucks

Heavy trucks (over 8 tonnes GVM and over 39 tonnes GCM) are typically long-distance prime movers towing one or more trailers operating on highways or rigid three axle trucks towing a three- or four-axle trailer operating in urban areas and used in construction.

Heavy articulated trucks like prime movers towing one or more semi-trailers generally operate on highways in regional, rural and remote areas and travel on average seven times as far as passenger cars (78,300 kilometres vs. 11,100kms). Heavy rigid trucks generally operating in the construction industry operate predominantly in urban areas and travel on average twice as far as passenger cars (21,100kms vs. 11,100kms)<sup>13</sup> each year. Heavy trucks make up approximately 30 per cent of all commercial goods vehicles sold in both Australia and New Zealand each year.

5 ABS Survey of Motor Vehicle Use, June 2020.

6 VFACTS National Sales Reports, 2013, 2015, 2017, 2019 & 2021.

7 New Zealand New Vehicle Sales, December 2021.

8 Heavy Vehicle Crash Statistics, Department of Infrastructure, Transport, Regional Development & Communications, April 2022.

9 ANCAP Survey on Availability of Safety Features & Technologies in Medium Commercial Vehicles, 2019.

10 ABS Survey of Motor Vehicle Use, June 2020.

11 New Zealand Te Mātū Waka the Ministry of Transport, Annual Fleet Statistics 2020.

12 ANCAP Survey on Availability of Safety Features & Technologies in Medium Commercial Vehicles, 2019.

13 ABS Survey of Motor Vehicle Use, June 2020.



### **Euro NCAP Truck Safety Label**

Euro NCAP is considering the development of a European-wide truck label, which will initially be constructed around crash avoidance technology and will eventually assess other aspects of safety. The label is intended to be a standalone instrument to assist road authorities, cities and operators, and will complement regulatory requirements. Specific ‘City’ and ‘Highway’ labels will allow operators to prioritise the safety aspects that are most important to their operations.

Euro NCAP have flagged the potential to expand the truck safety label to a “safe and clean” label by including the environmental performance, both air quality and greenhouse gas emissions, of the truck.

ANCAP intends to assess the applicability of Euro NCAP’s **truck safety label** for the Australasian context and will consult with relevant stakeholders as further detail becomes available.

### **MOTORCYCLES AND MOTORSCOOTER SAFETY (POWERED TWO-WHEELERS)**

General motorcycle awareness campaigns and programs released by state governments and advocacy bodies over the years have served to increase awareness of the risks faced by motorcycle riders, and the need for car drivers to be more aware of their surroundings and the vulnerability of this road user group. Motorcycle riders however have not benefited to the same magnitude as car drivers and occupants in relation to the safety features and technologies provided in light passenger vehicles.

Motorcycle fatalities are over-represented in both Australia and New Zealand. In Australia, over the past 10 years (2012-2022) motorcyclist fatalities were 18% of all road fatalities<sup>14</sup>, while motorcycles comprised only 4.5% of all registered vehicles<sup>15</sup>. In New Zealand, motorcycle fatalities are 14% of all road fatalities<sup>16</sup>, while comprising only 4.2% of all registered vehicles. However, with the increasing use of motorcycles for local deliveries in the ‘gig-economy’, motorcycle travel in urban areas is likely to increase.

From 2023 ANCAP’s protocols will expand to include crash avoidance testing of **vehicle interactions with motorcycles**, in a range of scenarios. In future years, these protocols will evolve through increased test speeds and with additional test scenarios.

In 2017 the Australian Government legislated that all new motorcycles sold from November 2019 must have anti-lock braking systems (ABS), with those models already on sale required to comply from 2021. Other **Advanced Rider Assistance Systems (ARAS)** such as traction control, blind-spot information systems, and autonomous emergency braking have been available for many years, yet the adoption and acceptance of these technologies by riders and industry has not been as expeditious as that seen with passenger vehicles. In most cases, these assistance systems are sold as optional equipment and uptake remains low.

The lag in adoption of ARAS and the continuing increase in motorcycle fatalities around Australia<sup>17</sup> presents a clear opportunity for ANCAP to provide guidance for motorcycle riders by assessing key ARAS and recommending those with the highest safety benefit.

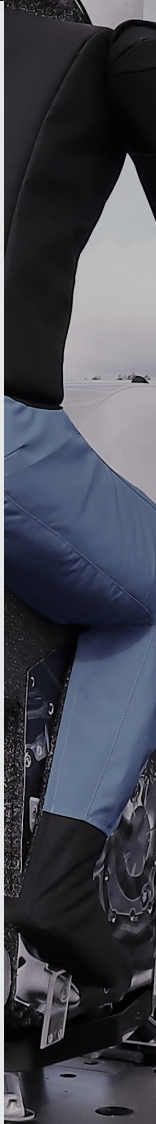
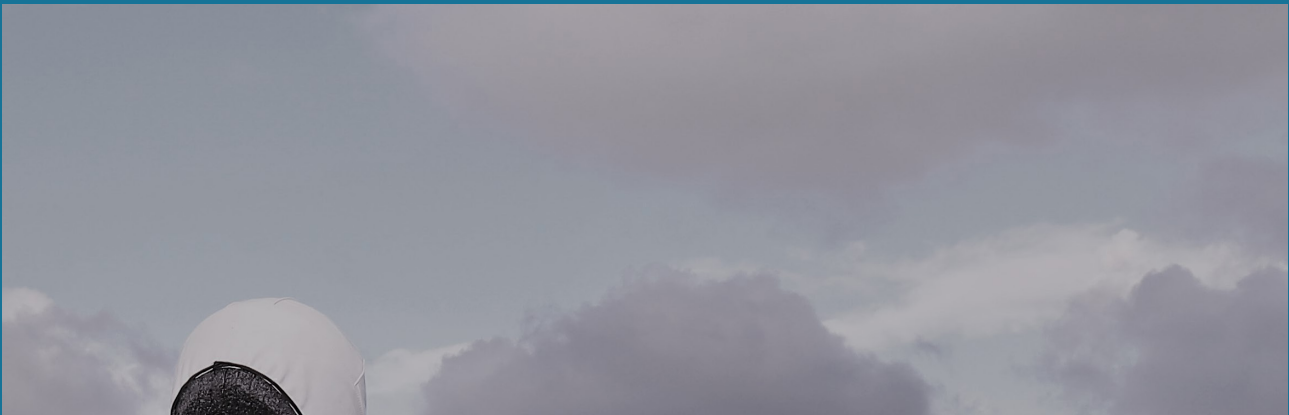
ANCAP will work with Euro NCAP and other NCAPs to explore the viability of assessing ARAS for motorcycles and motorscooters. Through this exploration, ANCAP will engage with the Australasian motorcycle industry and rider groups to better understand the challenges involved.

<sup>14</sup> Australian Government BITRE, Road Trauma Australia 2021 Statistical Summary.

<sup>15</sup> Australian Bureau of Statistics Motor Vehicle Census 2021.

<sup>16</sup> New Zealand Te Mātū Waka the Ministry of Transport, Safety - Road Deaths, 2018-2022 (accessed 26 October 2022).

<sup>17</sup> +2.0% increase trend 2018-2022, BITRE Road Fatalities Australia Monthly Bulletin, March 2022.



**ANCAP**  
SAFETY

