



National
Road Safety
Strategy

National Road Safety Strategy 2011-2020 Implementation status report

November 2017

Purpose of report

The National Road Safety Strategy 2011–2020 (NRSS) was approved and released by the former Australian Transport Council on 20 May 2011. The NRSS, now overseen by the Transport and Infrastructure Council, represents the commitment of federal, state and territory governments to an agreed set of national road safety goals, objectives and actions. It has the specific target of reducing Australia’s annual number of road deaths and serious injuries by at least 30 per cent by 2020.

Following a comprehensive review of progress in 2014, an Action Plan for the three years from 2015 to 2017 was developed cooperatively by Commonwealth, state and territory transport agencies, and was endorsed by the Transport and Infrastructure Council in November 2014.

The National Road Safety Action Plan 2015-2017 (the Action Plan) details a range of priority national actions to be taken by governments over the three years from 2015 to 2017.

This report provides:

1. an assessment of overall progress to mid-2017 towards the high-level Directions laid out in the NRSS, for each of the four cornerstone areas: Safe Roads, Safe Speeds, Safe Vehicles and Safe People;
2. an update of the key statistical measures of progress outlined in the NRSS, for 2016; and
3. a comprehensive report on the nineteen priority actions detailed in the Action Plan, including simple ‘traffic light’ indicators of progress to mid-2017.

Implementation responsibilities and coordination arrangements

Given Australia’s federal system of government, responsibilities for implementing the NRSS are distributed across nine jurisdictions and align with the established roles of each area of government:

- The Australian Government has responsibility for allocating agreed infrastructure resources to the national highway and local road networks, and for regulating safety standards for new vehicles.
- State and territory governments have primary responsibility for funding, planning, designing and operating the road network, managing vehicle registration and driver licensing systems, and enforcing road user behaviour.

Transport agencies in each jurisdiction take the lead role in implementing and facilitating the Directions and specific actions set out in the NRSS and Action Plan. There are a number of other key bodies that provide support in relevant areas, including Austroads, the National Transport Commission (NTC), the Australia New Zealand Policing Advisory Agency (ANZPAA) and the National Heavy Vehicle Regulator (NHVR).

National coordination arrangements for the NRSS are managed by the Transport and Infrastructure Senior Officials Committee through two cross-jurisdictional committees:

- The Austroads Road Safety Task Force (RSTF), comprised of senior road safety officials from Australian Government, state, territory and New Zealand transport agencies, the NTC, and ANZPAA.
- The Strategic Vehicle Safety and Environment Group (SVSEG), comprised of representatives from Australian Government, state, territory and New Zealand transport agencies, the NTC, the NHVR, and from automotive industry and road user bodies.

Overview

Progress towards the high level Directions

There is a considerable amount of activity underway relating to the majority of the high level Directions in the NRSS. In most cases it can be expected that considerable overall progress will have been made by the end of the decade. Some of the identified Directions have proven difficult to influence directly – such as a reduction in the average fleet age in Australia – and may require further investigation and targeted efforts in future.

Statistical progress

The primary statistical measures of progress under the NRSS are the annual numbers of road crash deaths and serious injuries. These and a range of other high-level outcome measures are used to track Australia's road safety performance over the 10-year life of the NRSS, relative to the baseline period of 2008–2010.

The NRSS also established a range of safety performance indicators to help assess progress in addressing specific road safety issues. These indicators are mainly, though not exclusively, based on national road crash data.

The Bureau of Infrastructure, Transport and Regional Economics (BITRE), in cooperation with state and territory agencies, has developed the National Crash Database to support these statistical measures of progress. The current status report draws on the fatal crash data in the database to report against most of the NRSS indicators. Measures of progress based on serious injury crash data will be included in future, once an adequate source of national serious injury data is established.

While these statistical indicators are an important tool for monitoring progress, it is also important to monitor changes in the broader operating environment. The NRSS notes that road trauma levels are influenced by a wide array of factors. Many of these – including changing economic conditions – are difficult to predict and are beyond the direct control of governments and road safety organisations. Road safety strategies therefore need to be alert to such challenges and be flexible in their responses.

Statistical progress – key points

A later section of this report (page 18) presents the full set of NRSS outcome measures and performance indicators with latest available results. Key points are noted below.

High level outcome measures

In 2016, there were:

- 1,296 road crash deaths: a reduction of 9.1% relative to the baseline (1,426)
- 1,203 fatal road crashes: a reduction of 7.3% relative to the baseline (1,297)

The number of fatalities increased in 2016 relative to 2015 (1,206). The latest monthly national data¹ shows that this trend may now be declining, with 1,237 people killed in road crashes in the 12 months to September 2017.

Safety performance indicators

For the following categories, fatality reductions (relative to the baseline) were greater than the overall reduction of -9.1% in 2016:

- Single vehicle crashes (-12.1%)
- Young drivers and motorcycle riders (-19.6%)
- Drivers and motorcycle riders with a blood alcohol concentration (BAC) above the legal limit (-36.9%)
- Crashes involving a heavy vehicle (-17.2%)
- Crashes involving a young driver or motorcycle rider (-25.3%)
- Crashes involving a driver or motorcycle rider with a BAC above the legal limit (-40.2%)
- Vehicle occupants killed who were not wearing a restraint (-27.6%)
- Cyclists (-10.3%)

For the following categories, fatality reductions (relative to the baseline) were less than the overall reduction of -9.1% in 2016, or fatalities increased, for the following categories:

- Regional roads (-8.5%)
- Head-on crashes (-1.2%)
- Older drivers and motorcycle riders (+25.3%)
- Motorcyclists (+8.3%)
- Pedestrians (-2.3%)

¹ From the Australian Road Deaths Database

Action Plan implementation

The nineteen actions detailed in the Action Plan are grouped into four broad areas of activity under the following headings:

- Prioritising our investments in infrastructure
- Improving the safety of our vehicle fleet
- Encouraging safer road use
- Advancing the Safe System

The detailed status report commencing on page 21 of this document identifies the main jurisdictional responsibilities for each action item and provides a summary of progress to date. Colour-coded markers are used to indicate whether actions are progressing satisfactorily or whether they require more attention. This report is a summary of the situation across all jurisdictions; the mix of measures adopted in individual jurisdictions, and the details of specific measures, may vary to reflect local circumstances and priorities.

Implementation status – key points

General points

- In this status report, most Action Plan items have been coded green, indicating that action is either complete or well advanced, while the remainder have commenced and are being progressed.
- A number of the actions involve research and investigation work that is needed to underpin effective road safety interventions. This work is mainly being progressed through the Austroads Road Safety Program. The status report identifies relevant projects that are planned or underway, as well as a number of projects that have been completed.

Prioritising our investments in infrastructure

- All states and territories have infrastructure treatment programs in place that target the major crash types and vulnerable user groups. Ongoing efforts to implement Actions 1 and 2, which involve assessing risk in order to prioritise infrastructure treatments (see page 21), is aided by Austroads work to facilitate the implementation of the Australian National Risk Assessment Model (ANRAM).
- The development of an assessment framework and training package to assist with translating Safe System knowledge and research into practice has been completed and a series of workshops delivered across Australia and New Zealand.
- A planned review of road infrastructure safety programs (including black spot programs), with the aim of better aligning assessment methodologies with the Safe System approach, is underway and will be completed in 2018.

Improving the safety of our vehicle fleet

- The Commonwealth adopted a new Australian Design Rule (ADR), ADR 85/00, to mandate pole side impact occupant protection in December 2015, and it will shortly come into effect for light passenger vehicles, with light commercial vehicles to follow in July 2018. The regulatory package for motorcycle Anti-lock Brake Systems (ABS) is being finalised, and a Regulation Impact Statement to mandate Heavy Vehicle Electronic Stability Control (ESC) is under development.
- The Commonwealth has extended its fleet purchasing policy to include five-star rated light commercial vehicles and governments and other stakeholders are supporting the alignment of ANCAP ratings with EuroNCAP from 2018. Several industry codes and advisories have been developed.

Encouraging safer road use

- The NHVR has implemented amendments to the Heavy Vehicle National Law (HVNL) and has carriage of other activities to improve roadworthiness compliance, with the support of the NTC.
- Some jurisdictions have trialled interventions to promote safer speeds following the completion of an Austroads project about building better community support for effective speed management. All states and territories have implemented additional lower speed limits in areas with high levels of pedestrian and cyclist activity.
- All jurisdictions have alcohol interlock schemes in place for drink driving offenders, and Victoria is expanding its program to require interlocks for all drink driving offenders.
- A coordinated cross-jurisdictional effort targeted drug driving in the first ever National Day of Drug Testing (20 March 2017).

Advancing the Safe System

- Work by Austroads to establish an operational framework for Cooperative Intelligent Transport System (C-ITS) safety applications is progressing well and has been expanded to consider the support required for the deployment of automated vehicles.
- All jurisdictions have implemented projects trialling and demonstrating the potential of various Safe System interventions to improve safety for vulnerable road users.
- The National Road Safety Partnership Program (NRSPP) continues to attract a strong and growing level of participation from governments and the private sector.
- An Austroads pilot project to provide proof of concept for a national approach to linking police-reported crash data and hospital admissions data is progressing, although only 3-4 jurisdictions' data will be linked by the time of a draft report to Austroads late in 2017. This work may provide a means to resolving the long-recognised lack of national serious injury data.

Abbreviations and other terms

ABS	Anti-lock braking systems
ADR	Australian Design Rule
AEB	Autonomous Emergency Braking
ANCAP	Australasian New Car Assessment Program
ANPR	Automatic Number Plate Recognition
ANRAM	Australian National Risk Assessment Model
ANZPAA	Australia New Zealand Policing Advisory Agency
ATAP	Australian Transport Assessment and Planning
AusRAP	Australian Road Assessment Program
Austrroads	Association of Australian and New Zealand road transport and traffic authorities
BAC	Blood Alcohol Concentration
BITRE	Bureau of Infrastructure, Transport and Regional Economics
C-ITS	Cooperative Intelligent Transport System
ESC	Electronic Stability Control
EuroNCAP	European New Car Assessment Programme
GIS	Geographical Information System
GLS	Graduated Licensing Scheme
HVNL	Heavy Vehicle National Law
NGTSM	National Guidelines for Transport System Management
NHVAS	National Heavy Vehicle Accreditation Scheme
NHVR	National Heavy Vehicle Regulator
NRSP	National Road Safety Partnership Program
NRSS	National Road Safety Strategy 2011–2020
NTC	National Transport Commission
Operation AUSTRANS	Nationally coordinated police operation targeting road safety issues in the heavy vehicle transport sector
Operation CROSSROADS	Nationally coordinated policing operation targeting a range of road safety offences in major holiday periods
RIS	Regulation Impact Statement
RSTF	(Austrroads) Road Safety Task Force
SVSEG	Strategic Vehicle Safety and Environment Group
TISOC	Transport and Infrastructure Senior Officials Committee
WTP	Willingness-to-pay

Progress towards NRSS Directions

The following tables detail progress made towards the high-level Directions outlined in the NRSS in relation to Safe Roads, Safe Speeds, Safe Vehicles and Safe People.

Safe Roads

Direction	Progress
Adoption of improved standards for road design, construction and operation to reflect Safe System principles.	<ul style="list-style-type: none"> ■ All jurisdictions are making efforts to reflect and adopt Safe System principles in road design, construction and operation. ■ Austroads has completed a number of projects to support the implementation of Safe System principles. The following projects are in addition to the projects described later in this report against Action 4 (development of a package to translate Safe System knowledge and research into practice): <ul style="list-style-type: none"> ○ A three-year research project, <i>Improving the performance of Safe System infrastructure (ST1767)</i>, examined road infrastructure elements identified as Safe System solutions. ○ A project to identify and investigate low cost measures and new or innovative treatments to improve safety on locally controlled roads, <i>Safe system roads for local government (ST1769)</i>, was completed in April 2016. ○ <i>Safe System Practice Amendments to the Guide to the Road Design (SP1705)</i>. ○ <i>Providing for Road User Error in the Safe System (SS1650)</i>. ○ <i>Safe System in the Planning Process (ST1766)</i>. ○ <i>Achieving Safe System Speeds on Urban Arterial Roads: Compendium of Good Practice (ST1768)</i>.
All new roads and upgrades of existing roads will be designed, built and operated in accordance with Safe System principles.	<ul style="list-style-type: none"> ■ Most jurisdictions have adopted Safe System principles for new road construction and upgrades and some have revised or are revising their road design standards. ■ An Austroads project to establish a <i>Safe System Infrastructure Assessment Framework (SS1958)</i> and training package has been completed and a series of workshops has been delivered across Australia and New Zealand. ■ Austroads initiated the project <i>Road Cross Section Design for Road Stereotypes (including Network Safety Plans) and a Safe System (SSP2068)</i> to provide guidance on cross section dimensions, safe system treatments, and speed environment for road networks. This project will be completed in 2018. ■ The 10 year plan for the Midland Highway in Tasmania aims to deliver a minimum 3-star rating for the entire highway.

Direction	Progress
<p>A substantial reduction in serious casualties due to run-off-road, head-on and intersection crashes.</p>	<ul style="list-style-type: none"> ■ All jurisdictions have implemented road treatments to target these crash types; including audible edge and centre lines, wider sealed shoulders, roadside safety barriers, additional overtaking lanes, roadside hazard treatments, and junction treatments. ■ Much of this work has been done through specific programs with dedicated funding for certain crash types or interventions, including QLD's Targeted Road Safety Program, the NSW Safer Roads Program and Victoria's Safe System Road Infrastructure Program. ■ NSW re-prioritised existing Safer Roads Program funding to deliver infrastructure improvements to address increases in speed, fatigue and pedestrian fatalities. Resulting new sub-programs include a High Risk Curves Program, Fatigue Mass Action Program, and Safe Systems Pedestrian Program. ■ QLD introduced a new High Risk Roads approach to maximize investment on the highest risk state roads. ■ SA recorded a 37% reduction in single vehicle run-off-road serious casualty crashes (292) in 2016 compared to the 2008-2010 NRSS baseline average of 465; and a 34% reduction in serious casualty intersection crashes. ■ Approved projects from the Safe System Road Infrastructure Program in Victoria are expected to save 35 deaths and 237 serious injuries per year with a combined FSI (fatal and serious injury) reduction of 79%.
<p>All levels of government to:</p> <ul style="list-style-type: none"> - have assessed risk on their road network and re-focused road investment programs to treat higher-risk sections of the road network (road segments, traffic routes and defined areas) in addition to more targeted black spot programmes 	<ul style="list-style-type: none"> ■ Most jurisdictions are using tools such as ANRAM and the Australian Road Assessment Program (AusRAP) star ratings to assess risk on their road networks and to prioritise funds for road safety investment. See further reporting under Action 1 on page 21.
<p>All levels of government to:</p> <ul style="list-style-type: none"> - have adopted and applied the willingness-to-pay (WTP) methodology to value reductions in fatalities and injuries 	<ul style="list-style-type: none"> ■ Most jurisdictions have adopted willingness-to-pay values for road safety projects, which have been updated through Austroads' National Guidelines for Transport System Management (NGTSM) project, now known as the Australian Transport Assessment and Planning (ATAP) Guidelines. ■ A national Austroads WTP study is expected to establish values for travel time, reliability, and reduced crash risk. The initial design phase has been completed and Stage 2 of the study will undertake the pilot testing and design refinement for the survey.
<p>All levels of government to:</p> <ul style="list-style-type: none"> - be assessing the benefits and costs of safety treatments using a whole-of-life assessment 	<ul style="list-style-type: none"> ■ Most jurisdictions use a whole-of-life assessment when evaluating the costs and benefits of road safety treatments.

Direction	Progress
<p>All levels of government to:</p> <ul style="list-style-type: none"> - have accepted accountability and responsibility for the road safety performance of their networks in accordance with Safe System principles. 	<ul style="list-style-type: none"> ■ All jurisdictions have integrated Safe System principles into road safety project planning, and road authorities are continuing their efforts to increase understanding and acceptance of this accountability throughout their organisations and with local government. For example, transport for Victoria has responsibility for road safety policy and legislation functions; and VicRoads established dedicated teams to embed Safe System thinking into the management of the road network. Main Roads WA launched a Road Safety Management System framework aligned with ISO 39001, the international standard for road traffic safety management systems. ■ QLD and Victoria have both established committees to drive the implementation of Safe System principles. ■ An Austroads project to establish a <i>Safe System Infrastructure Assessment Framework</i> and training package has been completed and a resulting series of workshops were held across Australia and New Zealand. These workshops are intended to disseminate the findings of a number of research reports and support the implementation of Safe System practices into agencies.

Safe Speeds

Direction	Progress
Speed limits that reflect a better balance between safety and mobility objectives.	<ul style="list-style-type: none"> ■ All jurisdictions continue work to implement safer speeds in rural and urban environments, particularly on roads with a high crash risk. ■ NSW and QLD are both reviewing speed zoning guidelines to better align with Safe Systems principles and SA has recently completed a similar process. NSW is adopting a 'movement and place' (please refer to definition on page 11) framework as part of the new Future Transport strategy. ■ NT re-introduced the 130 km/h speed limit on a former open speed section of the Stuart Highway from 21 November 2016. Speed limits in a number of urban locations have been reduced to create a safer environment for vulnerable road users. ■ Victoria has introduced lower speed limits as part of several Safer System Roads Infrastructure Program (SSRIP) programs including on high speed rural roads and local streets. Post-implementation assessments showed these did not adversely impact mobility, and the initiatives were well received by the community. ■ Austroads is developing a compendium of effective speed management countermeasures and strategies for government and the community (SAG6043), scheduled for completion in August 2018.
A substantial improvement in overall compliance with speed limits, particularly on highly trafficked and/or higher-risk sections of the road network.	<ul style="list-style-type: none"> ■ All jurisdictions maintain a strong focus on speed limit enforcement. Some have increased the number of fixed and mobile speed cameras in highly trafficked and high risk locations. QLD has introduced speed cameras on trailers that can be used in locations that may be difficult and dangerous for an operator to work such as roadworks and motorways. ■ Some jurisdictions, including QLD and WA, are trialling and implementing point-to-point (average speed) camera enforcement. WA's trial has been evaluated and the site will continue as an enforcement zone. ■ Victoria is developing a smartphone app with speed alerts when drivers exceed the limit. ■ NSW speed survey data showed an overall reduction in speeding over the last seven years, but increased light vehicles speeding in 2015 compared with 2014, corresponding with increased fatalities on NSW roads in 2015. A 2016 NSW review found ongoing reduced fatalities and serious injuries at program level and at most individual speed camera locations. ■ Tasmania has commenced an enforcement project to increase the number of urban fixed speed cameras; introduce rear-facing speed cameras and point-to-point average speed cameras in rural locations. ■ SA Police conducted additional speed enforcement campaigns in 2016-17 including one targeting motorcycle speeding. The number of speed cameras will increase by 10 in 2017-18. ■ The report from an Austroads project 'Public demand for safer speeds: identification of interventions for trial' (SS1962), was published in February 2016, with this work expected to contribute to improvements in the longer term.

Direction	Progress
Network-wide alignment of speed limits with the inherent risk and function of the road and roadside environment.	<ul style="list-style-type: none"> <li data-bbox="683 338 1430 533">■ Most jurisdictions continue to conduct speed limit reviews, in consultation with local governments, the community and police, working towards better alignment of speed limits with both risk and function of the road and roadside environment. Some (NSW, Victoria) are adopting the ‘movement and place’ framework as part of transport and land use planning. <li data-bbox="683 551 1430 707">■ As part of the QLD review of its speed limit setting manual, an assessment of road and roadside infrastructure risk will be introduced into the process, and the current assessment of crash rates will be improved to increase the influence of road safety outcomes on speed limit setting decisions. <li data-bbox="683 725 1430 808">■ Tasmania has conducted a workshop to investigate the development of a risk rating tool to prioritise funding for infrastructure and speed management on Tasmanian roads.

Movement and Place

The Movement and Place framework explicitly recognises the dual functions of a road to move people and goods and to support places where people live, work and play. Defining the level of movement and level of place associated with roads can provide greater clarity around the expected standards and performance. From a Safe System perspective, this approach drives a top-down, network-wide consideration of road safety which can complement the four pillars of roads, speed, vehicles and users.

Movement and Place provides a framework to set the desired vision for each road to support broader transport and land use objectives. One of the foundations of Movement and Place is that the function of a road can be directly related to the modes of transport and uses that should have the highest priority. The aim is to make decisions that support this priority and align a road’s actual performance with an agreed vision. The result is the more efficient and effective use of the road network as well as a strong alignment with safe system principles.

Movement and Place can be used to set the desired features of a road that best matches its function. The type and frequency of access to a road is one of these features, and is a significant factor in the safety performance of a road. The framework recognises the incompatibility between vulnerable road users and vehicular traffic, a key safe system principle. It provides a way to rationally align speed limits to road function and also set road standards that match the function and result in more appropriate speeds. In fact, Movement and Place gives road designers and road managers the licence to adopt new and innovative safe system designs that consider the local context of a road.

Safe Vehicles

Direction	Progress
A regulatory system ensuring that proven safety design features and technologies are mandated in new Australian vehicles as quickly as possible.	<ul style="list-style-type: none"> ■ The Commonwealth has continued work with the states and territories to pursue a strong and progressive program of vehicle safety regulation. ■ The Commonwealth continued to harmonise standards and remove redundant requirements, to streamline the regulatory system. In May 2017, a major revision of an international agreement on standards development was adopted, paving the way for vehicle certification on an international basis.
A greater penetration of five-star Australasian New Car Assessment Program (ANCAP) rated vehicles in the general fleet, with ANCAP star ratings available for all new vehicles.	<ul style="list-style-type: none"> ■ All jurisdictions continue to promote increased uptake of five-star rated vehicles in a range of ways, through fleet vehicle policies, education campaigns and through direct support for ANCAP. ■ ANCAP reports that safety ratings are now available for 92% of new light vehicles sold (first half of 2017).
A reduction in the average fleet age in Australia.	<ul style="list-style-type: none"> ■ The national average fleet age for 2016 is unchanged from the previous year at 10.1 years and is slightly greater than the average in the baseline period of 10.0 years (2008 to 2010). ■ No specific action has been undertaken aimed at reducing fleet age, beyond the promotion of safer vehicles. Several jurisdictions support and promote the Used Car Safety Ratings which assist people to choose safer (and possibly newer) second-hand cars.
Enhanced safety commitment from the commercial sector, including a demand for fleets to be equipped with key safety features such as five-star ANCAP rated vehicles, ESC, side curtain airbags, alcohol and seatbelt interlocks, and Intelligent Speed Adaptation.	<ul style="list-style-type: none"> ■ Jurisdictions continue to work directly with major fleet providers and vehicle manufacturers to promote the uptake of safer vehicles and improve minimum safety standards on base models. The heavy vehicle industry has released a number of codes or advisories promoting the fitting and use of safety features.
A substantial increase in the proportion of heavy vehicles with advanced braking systems and other safety technologies.	<ul style="list-style-type: none"> ■ The fitment of ESC has increased to around 25% and 40% of new trucks and trailers respectively in the general fleet, particularly in vehicles transporting dangerous goods in NSW and logging vehicles in Victoria.
Significant improvement in the safety of the light commercial vehicle fleet.	<ul style="list-style-type: none"> ■ The new pole side impact occupant protection standard (ADR 85/00) applicable to light commercial vehicles will come into effect in November 2017. ■ The new ADR mandating ESC for light commercial vehicles is now increasing fitment in the fleet.

Safe People – Responsible road use

Direction	Progress
<p>Australia will have a best practice graduated licensing scheme for novice drivers and riders.</p>	<ul style="list-style-type: none"> ■ Following an Austroads project examining the effectiveness of different components of graduated driver licensing, NSW led the development of an Australian Graduated Licensing Scheme (GLS) policy framework, which provides guiding principles for GLS across all jurisdictions. ■ All jurisdictions have or will review their GLS for drivers and some have implemented changes to better align with the exemplar model in the national policy framework. QLD completed its second evaluation and Victoria recently published an extensive 10-year evaluation of its GLS. ■ Following a discussion paper on GLS for motorcycle riders published by Austroads in November 2014 (AP-R469-14), several jurisdictions have initiated reviews of their motorcycle licensing arrangements. QLD implemented mandatory pre-learner training, WA will introduce a Graduated Rider Licensing scheme and NT will also look at developing a motorcycle GLS. Tasmania has introduced a new pre-learner motorcycle training and assessment program with an on-road component and check ride. Victoria implemented the final stage of its new Motorcycle GLS in 2016, including improved training requirements, new tests and for the first time, on-road components to the training and testing. In 2015 SA developed a voluntary motorcycle skills refresher course (Returning Rider) which was enhanced in 2016 for moped riders.
<p>Increased use of effective protective equipment by motorcyclists.</p>	<ul style="list-style-type: none"> ■ Most jurisdictions have either developed new campaigns or are reviewing their approaches to motorcycle safety, including the promotion of protective clothing. NSW is leading the development of a national consumer information program that will test and rate motorcycle protective clothing. ■ NSW administers the Consumer Rating Assessment of Safety Helmets Program (CRASH), with results for 30 helmets to be released during Motorcycle Safety Awareness Week.
<p>Substantially improved access to graduated licensing, and to vehicles with higher safety ratings, for Indigenous people.</p>	<ul style="list-style-type: none"> ■ Some jurisdictions have developed specific licensing programs for remote areas (such as DriveSafe Remote in the NT, and On the Right Track Remote in SA), which include targeted assistance for Indigenous people and communities, to improve access to graduated driver licensing. Others provide assistance to disadvantaged young drivers more generally: NSW operates the Driver Licensing Access Program (DLAP) to assist Aboriginal and other disadvantaged drivers and its Safer Drivers Course which includes an initiative that targets disadvantaged young drivers. ■ The NT will further develop education resources and provide in language for Aboriginal road users. ■ WA has distributed information on safer vehicles which meet the needs of people in remote areas, online and in brochure form; and is working with Aboriginal Corporations on safer fleet vehicle purchases.

Direction	Progress
A best practice framework for the assessment of older drivers' fitness to drive will be available and all jurisdictions will have effective processes for managing older driver licensing.	<ul style="list-style-type: none"> ■ All jurisdictions have implemented the <i>Assessing Fitness to Drive</i> guidelines which were released in 2012. ■ Jurisdictions continue to monitor older driver safety and licensing issues and some have developed education resources to assist older drivers, including the 'On the Road 65Plus' booklet in NSW and the 'Older Driver Handbook' in Victoria. Some jurisdictions conduct free workshops for older drivers (NSW, SA). ■ An Austroads project, <i>Older Road Users: Emerging Trends</i> (SS1955) investigated trends to support the development of targeted countermeasures and was completed in July 2016.
Development of suitable technology to combat driver fatigue.	<ul style="list-style-type: none"> ■ NSW tested a number of driver fatigue detection technologies including a trial of vehicle-based collision avoidance warning technology to reduce unintended lane departures associated with driver fatigue. NSW is currently piloting the use of a wearable fitness band to monitor the quality and quantity of sleep. This method uses an algorithm based on the US Army SAFTE Fatigue Model (Sleep, Activity, Fatigue and Task Effectiveness). ■ Victoria is planning to trial devices to detect impairment from fatigue and other factors.
Road safety education resources will be developed and available to the pre-primary sector and all primary and high schools.	<ul style="list-style-type: none"> ■ All jurisdictions have road safety education resources and programs in place targeting children ranging from early childhood, primary and high school. ■ In 2016 a new School Transport Coordinator role was created in the ACT to work closely with schools to promote active travel and promote safety.

Safe People – Irresponsible road use

Direction	Progress
Elimination of driving while impaired by alcohol or drugs as significant contributors to road trauma.	<ul style="list-style-type: none"> ■ In all jurisdictions, enforcement of drink and drug-driving laws is a strong priority for police. Some have continued to expand their roadside drug testing operations. ■ All jurisdictions have alcohol interlock programs in place for drink driving offenders. ■ Victoria has expanded its interlock program to apply to all convicted drink-drivers whose licence is cancelled, and legislation is expected to enter the Victorian Parliament to mandate interlocks for all drink driving offences. ■ A Bill is currently before the SA Parliament that will strengthen drug driving penalties; require dependency assessments if children are in the vehicle at the time of the offence; and streamline the drug testing process. ■ Some jurisdictions have or will conduct drug and alcohol education campaigns (WA, ACT, NT, QLD). ■ The Australian Government and Austroads have conducted initial research into better addressing drug-impaired driving. This will inform further action through the Action Plan for 2018-2020.
Elimination of illegal mobile phone use while driving.	<ul style="list-style-type: none"> ■ Most jurisdictions are engaged in a range of activities to deter illegal mobile phone use including mass media campaigns, police enforcement activity and in some cases increased penalties. ■ QLD is investigating mobile device crash risk and the potential for technological solutions to provide deterrence. ■ WA introduced unmarked traffic patrol motorcycles to target in mobile phone offences in metropolitan locations. ■ The Australian Government and Austroads have conducted initial research into better addressing driver distraction and from mobile phones and other in-vehicle technologies. This will inform further action through the Action Plan for 2018-2020.
A substantial reduction in the rate of driving by those without a licence.	<ul style="list-style-type: none"> ■ Some jurisdictions are primarily pursuing this reduction through efforts to improve access to licensing in remote and Indigenous communities, as detailed above (for example the Driver Licensing Access Program in NSW). ■ NSW has engaged a number of providers to assist disadvantaged communities with licensing, including through literacy and computer skills; learner driver mentoring and access to roadworthy vehicles; and road safety education and coaching. ■ The ACT provides payment options for eligible drivers to repay infringements, reducing the number of suspended licences. ■ QLD continues to fund learner driver mentor programs through its expanded Community Road Safety Grants program, and to prioritise initiatives that target high risk and disadvantaged groups. ■ In addition to the DriveSafe NT Remote program, the Charles Darwin University offers “English Second Language” programs aimed to reduce unlicensed driving. ■ Automatic Number Plate Recognition (ANPR) is used across Australia to assist with identification of unlicensed drivers.

Direction	Progress
All vehicle occupants are effectively restrained.	<ul style="list-style-type: none"><li data-bbox="683 349 1442 383">■ Restraint use is part of enforcement operations in all jurisdictions.<li data-bbox="683 394 1442 483">■ Jurisdictions continue to conduct education campaigns targeting seatbelt compliance, particularly awareness of correct use of child restraints.<li data-bbox="683 495 1442 562">■ Victoria and NSW both support the Child Restraint Evaluation Program which rates child restraints to inform consumers.<li data-bbox="683 573 1442 607">■ SA police operations targeted restraint use in rural locations.<li data-bbox="683 618 1442 698">■ The Car Seats for Kids child restraint program in the NT targets delivery of child car seats and fitment training opportunities in remote Aboriginal communities.

Case study – Flexible Safety Barriers at Goulburn Valley Highway Molesworth to Yea



2015 – Before



2017 – Centreline flexible safety barrier installed

In April 2016, VicRoads received the green light to improve road safety on the Goulburn Valley Highway by installing flexible wire rope safety barrier down the centre of a 10 kilometre section.

In the five years to March 2015, 6 fatal crashes were recorded involving a vehicle crossing the centerline which resulted in 8 people killed and 12 people seriously injured. Four of these fatal crashes occurred across a 5-month period in 2015 and all involved a vehicle crossing the centerline.

Across this same five year period, a centreline flexible wire rope safety barrier could have prevented these crashes and result in one serious injury and one other injury crash.

In 2015, prior to installation of the centreline flexible safety barrier, work to address the identified road safety risk on the Goulburn Valley Highway included: reducing the speed limit between Molesworth and Yea from 100km/h to 80km/h, installing centreline audio tactile line marking, and installing crash zone warning signs. In that same year, a robust program of community engagement commenced, to seek input to improve road safety on this section of the Highway.

Work to deliver the \$18.5 million package of flexible safety barrier commenced in 2016 and was completed by the end of July 2017.



Between March and June 2017, 8 hits have been recorded to completed sections of the safety barrier, potentially saving another 8 lives.

The speed limit will return to 100 km/h pending finalisation of the current road safety audit.



Statistical Progress

High level outcome measures

Measure	Baseline (2008-2010) ²	2016	% Change
Number of deaths resulting from road crashes	1,426	1,296	-9.1%
Number of road crashes resulting in deaths	1,297	1,203	-7.3%
Number of deaths per 100,000 population	6.6	5.4	-18.7%
Number of deaths per 100 million vehicle-kilometres travelled	0.63	0.52	-18.0%
Number of deaths per 10,000 registered vehicles	0.91	0.70	-22.5%

² Average annual number during the three-year period 2008 to 2010. Note the baseline figures shown here are rounded to whole numbers, but were not rounded to calculate percentage change calculations.

Safety performance indicators

Measure	Baseline ³ (2008-2010)	2016 ⁴	% Change
<i>Safe roads</i>			
Number of deaths from head-on crashes	271	268	-1.2%
Number of deaths from single-vehicle crashes	651	572	-12.1%
Number of deaths from intersection crashes	301	268	-11.0%
Number of deaths from crashes on metropolitan roads ⁵	490	452	-7.8%
Number of deaths from crashes on regional roads	787	720	-8.5%
Number of deaths from crashes on remote roads ⁶	137	123	-10.4%
<i>Safe speeds</i>			
Number of deaths from crashes where speed was a contributory factor	N/A	N/A	
Mean free speeds at designated sites across the network	N/A	N/A	
Percentage of vehicles speeding by vehicle type and offence category	N/A	N/A	
<i>Safe vehicles</i>			
	Baseline (2008-2010)	2016	% Change
Average age of the Australian vehicle fleet (years) ⁷	10.0	10.1	+1.0%
Average age of passenger vehicles	9.7	9.8	+1.0%
Percentage of new light vehicles sold with a 5-star ANCAP rating ⁸	56% (2010)	88%	57.1%
Percentage of new vehicles sold with key safety features	N/A	N/A	

³ The baseline figures were updated this year and will vary from previous reports.

⁴ Uses data from the National Crash Database

⁵ This count excludes Hobart and Darwin. Uses [Australian Statistical Geography Standard Remoteness Structure](#) from the Australian Bureau of Statistics.

⁶ Totals for metropolitan, regional and remote categories do not add to the annual totals because some fatalities could not be coded to a regional category.

⁷ Based on estimates from the annual Motor Vehicle Census, Australian Bureau of Statistics.

⁸ This data sourced from ANCAP.

Measure	Baseline (2008-2010)	2016 ⁹	% Change
<i>Safe people – responsible road use</i>			
Number of young driver and motorcycle rider deaths (aged 17-25 yrs)	223	179	-19.6%
Number of deaths from crashes involving a young driver or motorcycle rider (aged 17-25 yrs)	470	351	-25.3%
Number of older driver and motorcycle rider deaths (aged 65+ yrs)	114	143	+25.8%
Number of deaths from crashes involving an older driver or motorcycle rider (aged 65+ yrs)	208	235	+12.8%
Number of motorcyclist deaths	232	251	+8.3%
Number of cyclist deaths	32	29	-10.3%
Number of pedestrian deaths	186	182	-2.3%
Number of deaths from crashes involving a heavy vehicle	254	210	-17.2%
<i>Safe people – irresponsible road use¹⁰</i>			
Number of drivers and motorcycle riders killed with a blood alcohol concentration (BAC) above the legal limit ¹¹	149	94	-36.9%
Number of deaths from crashes involving a driver or motorcycle rider with a blood alcohol concentration (BAC) above the legal limit ¹¹	214	128	-40.2%
Number of deaths from crashes involving an unlicensed driver or motorcycle rider ¹²	143	120	-15.9%
Number of vehicle occupants killed who were not wearing a restraint	215	156	-27.6%
	2010¹³	2016	
Number of drivers and motorcycle riders killed who had an illegal drug in their system ¹⁴	53	73	
Number of deaths from crashes involving a driver or motorcycle rider who had an illegal drug in their system	84	114	

⁹ Uses data from the National Crash Database

¹⁰ Fatality counts for each of the following indicators are lower-bound estimates – due to a substantial number of cases with unknown values.

¹¹ Data excludes Victoria as BAC data were unavailable, and excludes Western Australia as licensing data (needed to determine legal BAC limit) was unavailable.

¹² Excludes data from Western Australia as licensing data was unavailable.

¹³ Excludes data from ACT

¹⁴ Excludes data from Victoria, Queensland and Western Australia

Action Plan 2015-2017 – Implementation status November 2017



Prioritising our investments in infrastructure



Complete or well advanced



Commenced and progressing



No significant action to date

No	Action	Responsibility	Implementation Status
1	<p>Prioritise and treat high-risk rural and urban roads, focusing on the main crash types and vulnerable road users.</p> <p><i>Implementation:</i></p> <p>Apply spatial analysis (e.g. severe injury rate/cost heat maps, ANRAM analysis) to identify and prioritise sections of rural corridors and urban locations with high collective risk (fatal/serious injury crashes), focusing on:</p> <ul style="list-style-type: none"> crashes at major intersections run-off-road crashes head-on crashes crashes involving vulnerable road users. <p>Treat identified locations with tailored Safe System measures, to minimise fatal/serious injury risks. This may include demonstration/evaluation projects of emerging Safe System solutions.</p> <p>Progress to be tracked with measures including: lane-kilometres and numbers of intersections treated, estimated savings in targeted fatalities and serious injuries, and programme expenditure.</p> <p><i>By end-2017:</i></p> <p>Jurisdictions have identified, prioritised and commenced treating the top 10% of priority locations.</p>	States and territories	<ul style="list-style-type: none"> Most jurisdictions have identified and prioritised high-risk sections of state and national networks based on the frequency and severity of casualty crashes, and are working to treat these locations. <ul style="list-style-type: none"> The ACT is establishing ANRAM assessment for its arterial network to prioritise improvements, based on risk. NSW has assessed over 95% of the state road network using AusRAP and over 90% using the High Risk Curves model, to prioritise its annual \$70m Safer Roads Program, to target crashes at intersections and involving vulnerable road users. QLD is targeting high severity crashes through its Targeted Road Safety Program, with planning works completed or underway for High Risk Roads. With the Australian Government, QLD is continuing to deliver targeted safety treatments on the Bruce Highway and is planning more safety projects for future delivery. SA has identified high collective risk rural roads and is using the risk reductions to identify the most effective treatments. In 2017-18 SA will invest \$23.2 million into smaller scale metropolitan and rural road safety projects calculated to prevent 27 serious injury crashes over five years; with further savings expected from larger infrastructure improvements. Victoria is addressing run-off road and head-on crashes with safety barriers and wide centerline treatments on high speed rural roads. Other treatments on high-risk rural roads include mass action treatments of rural curves, black lengths and blackspots; and on urban roads roundabouts, 40km/h speed limits near shopping centres and traffic calming treatments to reduce crash risk to vulnerable road users.

		<ul style="list-style-type: none"> ○ WA prioritized the state network based on a risk assessment to target high risk roads. WA treated approximately 1,500km of priority roads with the Regional Run-off Roads Program. ○ Tasmania has commenced work to reduce run-off road, head-on and intersection crashes. With the Australian Government, Tasmania will deliver a minimum 3-star rating for the entire length of the Midland Highway over 10 years based on the Safe System approach. ○ The NT have used spatial analysis of crash data to identify and prioritise high risk roads. Audible edge lines have been applied to 150km on the Stuart and Barkley highways.
<p>2 Assess road safety risk on state and territory controlled roads carrying the highest traffic volumes.</p> <p><i>Implementation:</i></p> <p>Complete ANRAM model development, and establish a memorandum of understanding between road agencies and AusRAP on reporting and communication protocols for star ratings.</p> <p>Individual jurisdictions to select roads to be assessed using ANRAM, based on collective risk potential (i.e. traffic volume/crash rates).</p> <p><i>By 2016:</i></p> <p>Fully functional ANRAM model, meeting specification and scope requirements set by Austroads.</p> <p><i>By end-2017:</i></p> <p>Reports on infrastructure-related road safety risk, including risk maps, for 50% of the key routes in each state and territory.</p>	<p>States and territories</p>	<ul style="list-style-type: none"> ● Victoria has completed coding its road networks for ANRAM assessment and development of application using the ANRAM platform is underway. ● NSW has completed AusRAP star rating assessments to 95% of the state road network. ● SA has assessed all sealed rural roads using ANRAM and by end of 2017, aims to produce AusRAP star ratings for the sealed rural road network. ● WA and QLD have completed ANRAM assessments on all national and state roads, while the NT are using other tools to conduct road assessments. ● ACT has assessed its arterial road network and preparing to conduct further risk assessment with ANRAM. ● The Austroads project (ST1869) to develop the ANRAM software was completed early 2017 and is available for use by jurisdictions. A longer-term platform for its continued use will be completed in 2017.

No	Action	Responsibility	Implementation Status
3	<p>Review road infrastructure safety programmes to establish best practice processes for identifying, prioritising and developing projects based on fatal and serious casualty reduction criteria.</p> <p><i>Implementation:</i></p> <p>Establish a national committee to examine the assessment methodologies used for Commonwealth and state infrastructure programmes, and to develop best practice recommendations that align with the Safe System approach, with a focus on reducing fatal and serious injuries crashes. Jurisdictions to review their programmes, guided by the committee's recommendations.</p> <p><i>By end-2017:</i></p> <p>Establish and implement best practice programme procedures.</p>	<p>Commonwealth States and territories</p>	<ul style="list-style-type: none"> An Austroads project to review and identify <i>Best Practice in Road Infrastructure Safety Programme (RISP) Development (SAG2090)</i> is underway and will provide best practice recommendations for future RISP development that aligns with the Safe System approach, with a focus on reducing fatal and serious casualties. It is scheduled for completion in 2018.
4	<p>Establish an assessment framework and training package to help translate current Safe System infrastructure knowledge and research into practice.</p> <p><i>Implementation:</i></p> <p>States and territories, through Austroads, to develop an assessment framework and related package, including an accreditation process, summarising current Safe System infrastructure and speed management knowledge and research.</p> <p>Promote these widely, including through a programme of workshops.</p> <p><i>By 2015:</i></p> <p>Assessment framework, training package, and supporting guides developed, and accreditation process established.</p> <p><i>By 2016:</i></p> <p>Workshops and assessment framework established. Safe System Assessment framework in use in industry.</p> <p><i>By end-2017:</i></p> <p>Supporting materials feeding into updates to the Austroads Road Design Guides.</p>	<p>States and territories Austroads</p>	<p>This action is being progressed through three Austroads projects:</p> <ul style="list-style-type: none"> A project to develop a Safe System Assessment Framework for road infrastructure projects (SS1958) provides a tool to determine whether infrastructure projects meet Safe System objectives. Translating Safe System Infrastructure Research and Knowledge into Practice (SS2016) will produce a guidance document and a series of workshops for road practitioners outlining knowledge and research about designing, managing and operating roads and roadsides within a Safe System environment. This project is scheduled for completion by the end of 2017. Delivery of Safe System Infrastructure Workshops (SO2061) conducted a series of 13 workshops in Austroads member agencies to disseminate and explore the findings of the above projects as well as Understanding and Improving Safe System Intersection Performance (SS1960). Following success of the workshop series, delivery of three more workshops are planned, plus a webinar and leader's pack.

No	Action	Responsibility	Implementation Status
5	<p>Apply national willingness-to-pay values for infrastructure investment and other road safety project appraisals.</p> <p><i>Implementation:</i></p> <p>Finalise Austroads scoping study on options for establishing Australian willingness-to-pay values.</p> <p>Jurisdictions to consider and agree on implementation arrangements, which may include the longer term option of funding a comprehensive national study.</p> <p><i>By end-2017:</i></p> <p>Initial implementation of willingness-to-pay values based on available estimates and possible commencement of a comprehensive Australian study to produce updated values.</p>	<p>Commonwealth States and territories</p>	<ul style="list-style-type: none"> • Most jurisdictions have adopted WTP values for road safety projects. Some use the WTP values previously developed by NSW. • The WTP values previously developed by NSW were updated through Austroads' NGTSM Update project. • The NGTSM successor, the Australian Transport Assessment and Planning Steering Committee, has commenced a new national WTP study, which seeks to establish values for travel time, reliability and safety. Stage 2 of the study, which is to undertake the pilot testing and design refinement for the survey, is expected to be complete by June 2018.

Improving the safety of our vehicle fleet

No	Action	Responsibility	Implementation Status
6	<p>Mandate pole side impact occupant protection standards for new vehicles.</p> <p><i>Implementation:</i></p> <p>Prepare a regulatory package early in 2015.</p> <p><i>By early-2017:</i></p> <p>Adoption of an Australian Design Rule (subject to RIS outcomes).</p>	Commonwealth	<ul style="list-style-type: none"> ADR 85/00 was adopted by the Commonwealth in 2015, applying to light passenger vehicles from November 2017 and light commercial vehicles from July 2018. ANCAP is preparing to include a test within its rating system based on the ADR.
7	<p>Mandate anti-lock brake systems for new motorcycles.</p> <p><i>Implementation:</i></p> <p>Prepare a regulatory package in mid-2015.</p> <p><i>By mid-2017:</i></p> <p>Adoption of an ADR (subject to RIS outcomes).</p>	Commonwealth	<ul style="list-style-type: none"> The Commonwealth issued a Regulation Impact Statement in early 2017 and is finalising a proposed regulatory package for late 2017.
8	<p>Mandate electronic stability control for new heavy vehicles.</p> <p><i>Implementation:</i></p> <p>Prepare a regulatory package in accordance with Heavy Vehicle Braking Strategy (HVBS) Phase II around end 2015.</p> <p><i>By end-2017:</i></p> <p>Adoption of an Australian Design Rule (subject to RIS outcomes).</p>	Commonwealth	<ul style="list-style-type: none"> The Commonwealth is preparing a Regulation Impact Statement for consultation in late 2017 after sourcing alternative effectiveness data. In parallel, the Commonwealth is continuing to work with the heavy vehicle industry on detailed draft technical requirements towards a proposed regulatory package.

No	Action	Responsibility	Implementation Status
9	<p>Promote the market uptake of new vehicle technologies with high safety potential.</p> <p><i>Implementation:</i></p> <p>Jurisdictions to collaborate with ANCAP, industry and other stakeholders on the development and implementation of a promotional plan (coordinated through SVSEG).</p> <p>Targeted technologies to include Autonomous Emergency Braking, Lane Departure Warning and Intelligent Speed Advisory systems.</p> <p><i>By end-2017:</i></p> <p>Plan for promotional activities developed and implemented, with measurable increase in numbers/proportion of new vehicles equipped with targeted technologies.</p>	<p>Commonwealth States and territories (coordinated through SVSEG)</p>	<ul style="list-style-type: none"> • SVSEG has promoted a harmonised adoption of five-star rated vehicles across all jurisdictions, including supporting the alignment of ANCAP ratings with EuroNCAP from 2018. • The Commonwealth has extended its fleet purchasing policy to include five-star rated light commercial vehicles. • The Australian Government has written to major businesses promoting the purchase of safer vehicles with advanced features such as AEB. • Jurisdictions and industry have developed codes or advisories promoting safety features, such as the NSW heavy vehicle purchasing guide, 'Safety Technologies for Heavy Vehicles and Combinations,' as well as the heavy vehicle industry braking code, bus fire code and heavy vehicle improved visibility code.

Encouraging safer road use

No	Action	Responsibility	Implementation Status
10	<p>Strengthen speed compliance provisions in the Heavy Vehicle National Law (HVNL).</p> <p><i>Implementation:</i></p> <p>NTC to assess proposal to empower enforcement officers to ground heavy vehicles travelling 15 km/h or more over the posted speed limit; and to develop implementation options for consideration of Transport Ministers.</p> <p>NTC to progress related proposal to enable heavy vehicles travelling at speeds over 115 km/h to be deemed to have non-compliant speed limiters.</p> <p><i>Intermediate:</i></p> <p>Transport and Infrastructure Council to consider proposed implementation arrangements.</p> <p><i>By end-2017:</i></p> <p>Implementation of HVNL changes as agreed by Transport Ministers.</p>	NTC	<ul style="list-style-type: none"> The NTC project to assess enforcement approaches to reduce speeding by heavy vehicles considered options including the creation of a new sanction, grounding; or a simpler administrative process to effectively 'automate' existing penalties, through deeming speed limiters to be defective. Following consultation, Ministers agreed not to change laws relating to the speeding of heavy vehicles, as most states and territories did not support the proposed reforms and there was insufficient evidence supporting the need for such a change.

No	Action	Responsibility	Implementation Status
11	<p>Implement measures to improve heavy vehicle roadworthiness.</p> <p><i>Implementation:</i></p> <p>Examine the operation and effectiveness of periodic roadworthiness inspections, industry accreditation schemes, including the National Heavy Vehicle Accreditation Scheme (NHVAS), and other roadworthiness assurance practices.</p> <p>Develop recommendations for the implementation of a more effective national roadworthiness regime.</p> <p><i>Intermediate:</i></p> <p>Transport and Infrastructure Council to consider proposed improvements to heavy vehicle roadworthiness assurance processes.</p> <p><i>By end-2017:</i></p> <p>Implementation of arrangements as agreed by the Council.</p>	NTC and NHVR	<ul style="list-style-type: none"> • The Heavy Vehicle Roadworthiness Program was jointly established by the NHVR and NTC and is now being delivered by the NHVR on behalf of the Transport and Infrastructure Council. • Amendments have been made to the HVNL (these are to be formally enacted in 2018) to: <ul style="list-style-type: none"> ○ insert a primary duty for parties in the chain of responsibility to ensure the safety of the party’s transport activities relating to the heavy vehicle. ○ introduce enforceable undertakings, involving regulated parties being bound to take agreed steps (with penalties for failing) to rectify an identified shortfall in safety management, as an alternative to prosecution. ○ expand the scope of formal warnings for roadworthiness breaches, by introducing a new category of defect notice called a self-clearing defect notice for minor defects that do not warrant the mandatory clearance steps associated with existing defect notices. • The NHVR has carriage of a range of actions aimed at changing industry behaviour to ensure industry proactively maintains and operates their vehicles by adhering to the heavy vehicle safety standards. The Roadworthiness Program continues to consider a risk-based approach for ensuring compliance to vehicle standards by auditing, monitoring and inspecting heavy vehicles on a common basis. The Program consists of four work-streams: <ol style="list-style-type: none"> 1. Consistent Inspection Framework 2. Management and Clearance of Defects 3. Roadworthiness Data Collection 4. National Risk-based Inspection Criteria Framework

No	Action	Responsibility	Implementation Status
12	<p>Implement programmes to build community understanding and support for effective speed management measures.</p> <p><i>Implementation:</i></p> <p>Austrroads project work will examine potential ways of building community understanding and identify suitable interventions to trial in one or more jurisdictions. Recommended interventions will be considered for trial implementation.</p> <p><i>By 2016:</i></p> <p>Completion of initial project work with recommended interventions to be trialled.</p> <p><i>By end-2017:</i></p> <p>Trial interventions to be initiated.</p>	<p>Austrroads States and territories</p>	<ul style="list-style-type: none"> • The NHVR has conducted a national roadworthiness baseline survey and the data will contribute to the development of a framework for consistent inspections. The results showed a sound performance by industry in maintaining vehicles, with some room for improvement. • Austrroads has completed a project, resulting in the report <i>Public demand for safer speeds: identification of interventions for trial</i> (AP-R507-16), which identified evidence-based interventions for trial and evaluation. • Austrroads has commenced a further project to develop a compendium of effective speed management countermeasures and strategies for government and the community (SAG6043). The project is scheduled for completion in August 2018. • Some jurisdictions are proactively trialling countermeasures that seek to improve community acceptance of safer speeds and promote the benefits of safer speeds.

No	Action	Responsibility	Implementation Status
13	<p>Expand the application of lower speed limits in areas with high pedestrian and cyclist usage.</p> <p><i>Implementation:</i></p> <p>States and territories to work with local governments and key stakeholders to identify candidate areas and progressively implement reduced speed zones.</p> <p><i>By end-2017:</i></p> <p>Increased kilometres of the road network where there is high pedestrian and cyclist activity, covered by lower speed limit zones.</p>	<p>States and territories in consultation with local governments</p>	<ul style="list-style-type: none"> • All jurisdictions have implemented some additional lower speed limits in areas with high levels of pedestrian activity and/or cyclist usage, and are continuing to do so. <ul style="list-style-type: none"> ○ ACT: Previously implemented 40 km/h in town centres and similar areas; a 20 km/h shared zone in the city and 30 km/h in selected school zones. Evaluation and assessment of reduced speed limits is continuing. ○ Victoria: In addition to implementing 40 km/h speed limits near shopping centres, projects are being developed for rural roads (Safe Travel Speeds on Low Volume Rural Roads) and local streets (Safe Travel Speeds in Local Streets) to reduce crash risks to vulnerable road users. ○ SA has introduced 40 km/h speed limits at locations with high pedestrian use and plans to implement variable speed limits on mixed use arterial road to address pedestrian crashes (under the Australian Government Black Spot Program). The City of Charles Sturt Council is considering 40 km/h areas to improve safety to pedestrians and cyclists (decision expected end of 2017). ○ WA is trialing speed limit reductions and traffic calming treatments on urban roads with a high mix of vulnerable road users and drivers. ○ NT: Speed limits have been reduced by up to 30 km/h to protect pedestrians, cyclists and in school zones. Speed limits on the Stuart Highway have been recently reinstated. ○ NSW: Continuing to roll out 40 km/h zones in high pedestrian activity areas (over 900km) including the Sydney CBD. Evaluation of permanent 40 km/h zones has successfully reduced casualty crashes by 38 per cent.

No	Action	Responsibility	Implementation Status
			<ul style="list-style-type: none"> ○ Tasmania is reviewing remaining 60 km/h urban arterial roads, as most urban roads in Tasmania have 50 km/h speed limits. ○ QLD: A successful trial of Township Entry Treatments at 6 townships is being expanded to an additional 49 locations. The flashing school zone sign program continues to treat 100 school zones each year and has been extended to 2019-20.
14	<p>Continue to review and adjust alcohol interlock programmes to improve their effectiveness in addressing convicted drink driving offenders.</p> <p><i>Implementation:</i></p> <p>States and territories to review the use of alcohol interlocks for drink driving offenders.</p> <p><i>By end-2017:</i></p> <p>Jurisdictions to have reviewed their alcohol interlock schemes for convicted drink driving offenders and considered potential improvements.</p>	States and territories	<ul style="list-style-type: none"> ● All jurisdictions now have alcohol interlock programs in place for drink driving offenders. ● Most jurisdictions are either currently reviewing the effectiveness (ACT, NSW, SA, NT, QLD,) or have plans in place to do so (WA). ● QLD is considering community feedback on a range of drink driving reforms to expand the alcohol interlock program. ● Victoria is expanding its program beyond repeat and high BAC offenders to all convicted drink-drivers whose driver licence or learner permit is cancelled as a result of the offence. Legislation to mandate alcohol interlocks for all drink-drivers is expected to enter the Victorian Parliament in late 2017 with implementation in mid-2018.
15	<p>Strengthen national police enforcement operations to improve road safety compliance.</p> <p><i>Implementation:</i></p> <p>States and territories to work with ANZPAA to identify and implement improvements to national enforcement operations, including opportunities to strengthen Operation AUSTRANS and Operation CROSSROADS.</p> <p><i>By end-2017:</i></p> <p>Demonstrable improvements to enforcement operations and compliance outcomes.</p>	States and territories ANZPAA	<ul style="list-style-type: none"> ● ANZPAA is no longer responsible for facilitating national police road safety enforcement operations. Some jurisdictions have continued to run Operations AUSTRANS and CROSSROADS individually and in 2017 Victoria Police was the lead agency for AUSTRANS. ● Police jurisdictions are continuing to take their own approaches to road safety activities based on intelligence and taking into consideration local knowledge, resources and needs. Targeted operations are conducted in all jurisdictions focusing on key priorities including speeding, drink and drug driving, seatbelts and fatigue.

No	Action	Responsibility	Implementation Status
			<ul style="list-style-type: none"> • Most jurisdictions participated in national education and awareness campaigns (Rail Safety, Fatality Free Friday, United Nations Global Road Safety Week). • NSW, QLD and ACT have now included mobile phone offences in their double demerit schemes. • A coordinated cross-jurisdictional effort targeted drug driving in the first ever National Day of Drug Testing (20 March 2017)

Advancing the Safe System

No	Action	Responsibility	Implementation Status
16	<p>Establish an operational framework to enable the introduction and operation of Cooperative Intelligent Transport System (C-ITS) safety applications in Australia.</p> <p><i>Implementation:</i></p> <p>Austrroads to lead the establishment of an operational framework, which will include licensing of radio communications, certification of equipment and services, and other supporting systems (e.g. security, privacy, positioning, etc).</p> <p><i>By end-2016:</i></p> <p>C-ITS deployment to be enabled so that equipment and applications fitted to new vehicles can be introduced and operated in Australia.</p>	Austrroads	<ul style="list-style-type: none"> • Austrroads has consulted widely with key stakeholders and confirmed a strong preference to align the operational arrangements for C-ITS in Australia with the relevant C-ITS deployment frameworks in Europe. Austrroads is progressing several projects to investigate feasibility for aligning various elements with the European approach. • The international market deployment of C-ITS has been delayed relative to earlier forecasts for a number of reasons, including the need to resolve outstanding issues with security and positioning services, and the authorisation of C-ITS equipment and services. European stakeholders have revised their anticipated commencement date beyond 2019. • In August 2016 the Transport and Infrastructure Council endorsed the National Policy Framework for Land Transport Technology, intended to prepare Australia for emerging transport technologies such as automated vehicles. Actions relating to C-ITS include development of a C-ITS statement of intent and infrastructure roadmap, a plan for addressing security with connected and automated vehicles, and options for providing enhanced positioning services to these vehicles. The Commonwealth is leading these actions, with input from Austrroads and other key stakeholders. • Communications technology for C-ITS has required further investigation. Although previously the focus had been on a Dedicated Short Range Communications (DSRC) using the 5.9 GHz band, there has been a shift globally towards a hybrid communications approach, which would involve not just DSRC, but also other technologies including current and future cellular communications. This could potentially include cellular solutions using part of the 5.9 GHz band in some markets.

No	Action	Responsibility	Implementation Status
17	<p>Implement and promote a range of Safe System demonstration projects in urban settings, with a focus on the safety of vulnerable road users.</p> <p><i>Implementation:</i></p> <p>States and territories, in consultation with local governments, to identify candidate locations and initiate Safe System transformation projects.</p> <p>Jurisdictions to prepare case studies that will inform the development of Safe System transformation guidelines, and contribute to broader awareness of road safety needs in urban/transport planning.</p> <p><i>By end-2017:</i></p> <p>A range of demonstration projects to have commenced, with some progressed to completion.</p>	States and territories in consultation with local governments	<ul style="list-style-type: none"> • The Australian Communications and Media Authority (ACMA) undertook consultations in 2016 regarding the proposed allocation of the 5.9 GHz band for ITS use, during which the issue of a hybrid communications approach was raised. ACMA has been liaising with Austroads, the FCAI and other stakeholders during 2017 to determine an appropriate band allocation and device licensing approach. It is anticipated that the ACMA could finalise this process by the end of 2017 or early 2018. • Real-world C-ITS trials are now progressing in several jurisdictions and Austroads has formed a technical working group to assist with coordination and knowledge sharing across these trial projects. • All jurisdictions have implemented projects using Safe System treatments and principles to improve safety for vulnerable road users: <ul style="list-style-type: none"> ○ Pedestrian countdown timers have been trialled or are planned in some jurisdictions (NSW, WA, Tasmania). ○ The NSW Safer Roads Programs allocates funding for pedestrian-specific Safe System demonstration projects and project identification is underway. ○ Wombat crossings have been either installed or encouraged in the ACT, SA and Victoria. ○ Victoria has installed vehicle-activated signs to warn drivers of approaching cyclists at two intersections, and half width green markings on-road bicycle lanes to prevent car door collisions on a busy shopping arterial road. Safety platforms and wombat crossings are included in the Safe System Intersection Transformation and Safer Speeds on Local Streets programs.

No	Action	Responsibility	Implementation Status
			<ul style="list-style-type: none"> ○ The ACT has targeted school zones at four primary schools with a Safe System approach in 2015-16. After evaluation, this approach will be expanded to a further 25 schools. Schools will receive educational material on safe routes, infrastructure improvements such as dragon's teeth road markings and 30 km/h zones. ○ The NT has implemented Safe System principles when designing and upgrading road infrastructure projects in both urban and semi-urban locations. ○ SA has implemented treatments at locations with higher crash rates for pedestrians and cyclists, including raised intersection platforms, wombat crossings and two-way paths for cyclists and pedestrians alongside the Darlington Upgrade Project. ○ QLD's Targeted Road Safety Program commits funding to safety projects to protect vulnerable road users. QLD has also developed guidelines for pedestrian countdown timers; developed smart crossing guidelines which detect pedestrians in traffic signals for safety and efficiency; and mandated minimum passing distances to protect cyclists. ○ WA is planning to trial minimum passing distances for cyclists and expanding 40 km/h zones for inner-metropolitan areas.

No	Action	Responsibility	Implementation Status
18	<p>Encourage private sector organisations to implement best practice fleet and workplace safety policies.</p> <p><i>Implementation:</i></p> <p>Work with the National Road Safety Partnership Program (NRSPP) and state-based partnership initiatives to encourage road safety improvements in the workplace.</p> <p>Promote the benefits of alcohol interlocks as a key safety measure for vehicle fleets.</p> <p><i>By end-2017:</i></p> <p>Increased private sector participation in road safety partnership programmes, and demonstrated implementation of best practice road safety policies.</p>	Commonwealth States and territories	<ul style="list-style-type: none"> • The NRSPP launched a new website in September 2017 and removed the previous requirement to register for access, so all content is now openly available. The new website contains nearly 1,200 items structured around the Safe System pillars and there are over 2,300 registered partners. There are 90 active partners involved in webinars, case studies and working groups. • The list of Core Funders has expanded to include all major states and the NHVR. • A significant number of case studies/webinars demonstrate substantial improvements in workplace road safety, with 12 webinars featured as part of Safe Work Australia’s Safe Work Virtual Seminar Series, and three provided international insights. In addition, 36 Quickfacts translate research into infographics. • Activities of the NRSPP’s three active Working Groups include: <ul style="list-style-type: none"> ○ The Utilities Forum, hosted by Telstra in Melbourne in 2016 and by Water Corporation in Perth in 2017; brings together 20 companies from across Australia, with more than 35,000 vehicles, to benchmark their road safety systems, culture, performance and compare risk management. Fatigue was the focus in 2017, working with partners to identify how best to engage their workers on sleep and fatigue management. ○ The Grey Fleet (GF) Working Group includes 25 partner organisations who have collaborated to create a Grey Fleet Safety Management Guide and supporting material. GF is defined as any vehicle used for work but not directly provided by the organisation. ○ NRSPP, QBE Insurance Box and University of Melbourne are conducting a collaborative research trial for 2,500 telematics devices, in lots of 50, to provide NRSPP Partners a reality check of the organisation’s GF risk. Following six months of monitoring

a final report will explore risk variances between traditional and GF among core sectors –government, not for profit, businesses and utilities.

- Construction Logistics and Community Safety Australia (CLOCS-A) is based on Transport for London (TfL)'s Construction Logistics and Community Safety (CLOCS) program. NRSPP is helping to coordinate and form a bridge between Australia and TfL to introduce CLOCS-A. A MoU has been agreed in principle between programs, with TfL conducting two webinars to assist.
- Austroads will complete Project SAG 1871 - *Vehicles as Workplace* in 2018 which will provide a Workplace Health and Safety Guide for Motor Vehicle Traffic Injury Prevention for use by all industry sectors.

19 Examine and progress options to improve measurement and reporting of non-fatal and disabling injury crashes, particularly through the development of matched crash and hospital database systems.

Implementation:

Establish a national working group through Austroads to examine best practice options, review the position of individual jurisdictions, and develop recommendations for consideration and implementation.

By end-2017:

Recommendations developed and considered by all jurisdictions.

Commonwealth
States and
territories
Austroads

- This action is being progressed through an Austroads project, *A national approach to measuring non-fatal crash outcomes (SS2034)*, which involves linking police-reported crash data and hospital admissions data.
- This pilot project is demonstrating proof of concept and usefulness as a national source of injury data for National Road Safety Strategy reporting.
- Funding proposals will be prepared for Stage 2 (historical series) and Stage 3 (on-going annual update) by end of January 2018.
- A final pilot report to Austroads is expected March 2018.
- A draft report for the Pilot to Austroads will be completed by end October 2018, covering process and method, and preliminary data for 3-4 jurisdictions for the reference year.