Transport for NSW Centre for Road Safety

NSW Road Safety Progress Report 2020







July 2019 - December 2020 | Version: 1

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Ministers' Message



The NSW Government is determined to put an end to the devastating impact of road trauma on our communities. We are working hard to make NSW roads amongst the safest in the world – and we are making great progress.

In 2020, 297 people were killed on NSW roads (provisional figure as at 1 January 2021), 56 fewer than the previous year and the lowest end of year road toll since 1923. We finished the year on track to achieve the 30 per cent fatality reduction target by the end of 2021 that we set almost a decade ago. The greatest reduction in fatalities was on country roads – 50 fewer than in 2019 – which tells us our continued investment to deliver lifesaving road safety improvements in these areas is having a positive impact.

In the past year, we have also seen significant reductions in serious injuries. Hospitalisation data shows that for the 12 months ending June 2020 there were 9920 serious injuries, a 14 per cent decrease compared to the previous 12 months.

However, while this marks significant progress Towards Zero, each fatality on our roads remains a tragedy and, as a community, we must do better when it comes to road safety.

As a Government, throughout 2020, we continued to invest in proven road safety measures and new initiatives as part of the Road Safety Plan 2021. Across the state, we are investing \$822 million in the NSW Safer Roads Program over five years since 2018–19 to deliver critical infrastructure safety measures such as flexible barriers, wide centreline and rumble strips. This includes investing \$640 million over five years through our Saving Lives on Country Roads program, which is working to address the disproportionately high numbers of fatalities and serious injuries in regional NSW. The 2019–20 Safer Roads Program has included vital funds for projects at locations across NSW including the Princes Highway at Wandandian, Mitchell Highway at Oaky Creek Lane, and Hill Street and Matthews Avenue at Orange.

We continue to deliver the world-first camera technology program to detect and enforce illegal mobile phone use while driving, which was recognised through the prestigious Prince Michael International Road Safety Award as well as the NSW Premier's Award for Innovation in Digital Technology.

Education is vital for equipping people to make safe decisions on the road and so we are continuing to directly deliver programs and to support a raft of initiatives undertaken by community groups and other agencies to reach different at-risk groups from pre-school children through to older road users. We also continue to roll out a suite of highly-recognised and effective communication campaigns to promote safe behaviours on our roads, with 87 per cent of the community recognising a road safety campaign across all advertising channels.

The NSW Government was proud to partner with Peter Frazer's SARAH Group to host the Australian launch of National Road Safety Week and led a range of activities to raise awareness of the impact of road trauma. The launch event livestream engaged a global audience and generated media coverage with a total reach of 114 million. More than 100 events were run by local councils, community organisations, NSW Police, emergency services and other groups to promote road safety messages and drive home our goal of reaching zero deaths on NSW roads.

Police operations are a critical part of the road safety effort. Both ongoing enforcement activities and targeted enforcement initiatives help deter people from road user behaviours we know are risky or illegal.

Ensuring the safest vehicles and equipment are being used on NSW roads is a priority. The release of the 2020 'Used Car Safety Ratings Buyer's Guide' gives vehicle buyers access to comprehensive safety information for 261 different makes and models of used cars on the market. In 2019-2020, 104 pants, jackets and gloves were assessed through our world-first rating system for motorcycle clothing, MotoCAP and the results published. Despite the reduction in road trauma over the past 12 months, speeding remains the biggest killer on our roads and was a factor in almost half (47 per cent) the deaths in 2020. Importantly, we recently announced an accelerated package of initiatives to tackle persistent safety challenges such as speeding, which included changes to enhance the NSW Mobile Speed Camera Program. These changes are based on bestpractice research evidence, and are designed to make our roads safer by reducing speeding anywhere across the State.

Since 2013, every dollar from camera detected fines has been put back into road safety programs in NSW through the Community Road Safety Fund. This report outlines how these funds, and additional funding from the NSW Government, were invested in 2019–2020 to deliver the commitments in the Road Safety Plan 2021 and improve safety for our whole community.

The Honourable Andrew Constance MP Minister for Transport and Roads

The Honourable Paul Toole MP Minister for Regional Transport and Roads

2021

Road safety outcomes 2020

The NSW Government is working towards the goal set by Future Transport 2056 of zero trauma on the transport network by 2056. Transport for NSW in conjunction with its road safety partners is doing this by delivering on initiatives and directions set by the Road Safety Plan 2021 (released in February 2018), which outlines an interim target to reduce road fatalities (from 2008-10 levels) by at least 30 per cent by 2021. This would equate to fewer than 287 fatalities on our roads by 2021.

NSW has adopted the internationally recognised Safe System approach to improve road safety on NSW roads. The approach is underpinned by these principles:

- People are human and sometimes break the rules or make mistakes - this shouldn't cost anyone their life
- Roads, speeds, roadsides and vehicles need to be designed to minimise crashes or reduce forces if a crash happens
- Road safety is a shared responsibility for government at every level, in business and industry, within communities and at a personal level.



By using the Safe System approach in NSW we can address the factors that cause crashes, and help reduce the impacts if a crash occurs.

Road toll outcomes

As at 1 January 2021, the provisional road toll for 2020 was 297 the lowest road toll in almost 100 years. It was 56 less than in 2019 when we saw the road toll rise by six to 353 lives lost. The 2020 road toll is also the lowest since 1923 when NSW had a population of around 2.2 million.

Speeding remains the leading contributor to fatal crashes and speed related fatalities rose to 47 per cent of the total road toll last year.

What was positive to see was the greatest reduction in fatalities was on country roads with 50 fewer fatalities, including 28 fewer deaths from fatigue related crashes and 19 fewer fatalities from head on crashes.

Compared with 2019, the main increases in 2020 were:

- fatalities aged 17 to 20 years (up from 14 to 31) and aged 30 to 39 years (up from 42 to 52)
- fatal crashes involving vehicle-vehicle other angle first impact types (up from 28 to 40)
- fatal crashes on unclassified "local" roads (up from 115 to 127)
- motor vehicle controllers involved in fatal crashes aged 17 to 20 years (up from 20 to 41)

Compared with 2019, the main decreases in 2020 were:

 fatalities of drivers (down from 166 to 146), passengers (down from 60 to 40) and motorcyclists (down from 68 to 49)

- fatalities of males (down from 273 to 220)
- fatalities aged 21 and 25 years (down from 47 to 24), aged between 50 and 69 years (down from 90 to 61) and aged 80 years or more (down from 36 to 22)
- fatalities on Sundays (down from 53 to 41), Tuesdays (down from 58 to 37) and Thursdays (down from 52 to 37)
- fatalities occurring Monday to Friday 3am to 9am (McLean Period A) (down from 46 to 31) and Monday to Friday 9am to 3pm (McLean Period C) (down from 80 to 58)
- fatalities on country roads (down from 234 to 184)
- fatalities in the Northern (down from 68 to 46), Hunter (down from 55 to 38), Southern (down from 52 to 39) and Western (down from 46 to 35) RMS Regions
- fatalities from crashes involving driver/ rider fatigue (down from 61 to 37)
- fatal crashes involving vehicle opposite (down from 73 to 60), on path (down from 16 to 7) and off path on straight (down from 74 to 59)

- fatal crashes involving a vehicle to vehicle head on (down from 62 to 43) and vehicle object (down from 128 to 103) first impacts
- fatal crashes on roads with a posted speed limit of 80 km/h (down from 59 to 36) and 110 km/h (down from 37 to 15)
- fatal crashes on State highway roads (down from 88 to 69) and lower order classified roads (down from 115 to 75)
- motor vehicle controllers involved in fatal crashes aged 21 to 25 years (down from 59 to 35) and aged 40 to 69 years (down from 223 to 141)
- motor vehicle controllers involved in fatal crashes who reside interstate or overseas (down from 47 to 19) and those who reside In the Sydney (down from 155 to 127), Northern (down from 69 to 49) and Hunter (down from 72 to 51) RMS Regions
- car / car derivative drivers (down from 270 to 192) and motorcycle riders (down from 70 to 51) involved in fatal crashes.

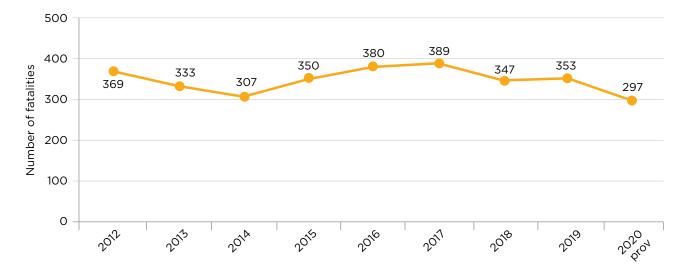


Figure 1: Road and road related fatalities in NSW, 2012 - 2020 provisional

An examination of serious injuries in 2019/20

Preliminary data for the 12 months ending June 2020 indicate there were 9,920 serious injuries (total hospitalisations). This was a 14 per cent decrease compared to the 12 months ending June 2019. The result for the 12 months ending June 2020 equates to a rate of 122.0 serious injuries per 100,000 population, the lowest June serious injury rate since these records began in June 2006.

Compared with the 12 months ending June 2019, the main **decreases** were:

 Pedestrians (down by 19 per cent), drivers (16 per cent), passengers (15 per cent) and motorcyclists (11 per cent)

- 80 plus year olds (down by 21 per cent), 30-39 year olds (16 per cent), 50-59 year olds (16 per cent), 40-49 year olds (15 per cent) and 60-79 year olds (15 per cent)
- Western RMS Region (down by 34 per cent), Southern (34 per cent), South
 West (26 per cent), Sydney (23 per cent),
 Northern (16 per cent) and Hunter (15 per cent)
- The involvement of fatigue (down by 29 cent), alcohol (25 per cent) and speed (18 per cent).

Compared with the 12 months ending June 2019 the main **increase** was:

• Those aged under 17 years (up by 9 per cent).



Figure 2: Road and road related serious injuries in NSW, 2011/12-2019/20 preliminary



Road Safety actions in 2020

The following sections outline the key road safety activities and achievements in 2020 against each of the priority areas of the NSW Government's Road Safety Plan 2021. These were funded by the Community Road Safety Fund, which includes (but is not limited to) all speed camera detected fines, red-light running fines and camera recorded mobile phone detection revenue.

Saving lives on country roads

Two-thirds of all road fatalities occur on country roads, so the Road Safety Plan 2021 focuses on reducing fatalities on country roads. The 2020 provisional data indicates that 82 per cent of fatalities on country roads were country residents who make up only one third of the NSW population.

NSW Safer Roads Program – Funding to boost safety on country roads

Across the state, the NSW Government is investing \$822 million into the NSW Safer Roads Program between 2018/19 and 2022/23. The Safer Roads Program prioritises funding to develop and deliver road safety infrastructure projects across NSW. Transport for NSW directly delivers or coordinates local councils to deliver projects under the program. The NSW Safer Roads Program provides essential infrastructure to make roads safer.

Since commencing in 2016-2017, investment in the NSW Safer Roads Program has evolved from a focus on treating black spots to a focus on installing infrastructure solutions on the highest risk sections of the road network including black spots with a poor crash history. Therefore, there is a focus on targeting longer sections of roads in the rural road environment and larger centres in the urban environment to provide a consistent and safe travel environment for the road user. As part of this approach, black spots continue to be upgraded under the NSW Safer Roads Program, and overall investment in the program has continued to increase.

To effectively target key priority areas of the Road Safety Plan 2021, all funding for the Safer Roads Program has been strategically split across two initiatives:

- The Saving Lives on Country Roads Initiative (SLCRI) has \$640 million allocated over five years to deliver route-based, mass action road safety engineering treatments and targeted crash location treatments that reduce road fatalities and serious injuries in country areas. In January 2019, \$141 million in road safety upgrades was announced under the Savings Lives on Country Roads Initiative including installing 343 kilometres of safety barriers, 5150 kilometres of rumble strips and 3800 kilometres of wide centreline.
- The Liveable and Safe Urban Communities Initiative (LSUCI) has \$180 million allocated over five years to deliver areabased mass action treatments and targeted crash location treatments that reduce fatalities and serious injuries resulting from crashes in urban, high pedestrian activity areas.

Saving Lives on Country Roads Initiative

During 2019–2020, 110 projects were completed under the SLCR Initiative, including route based upgrades of the Princes Highway and Mitchell Highway.

Examples of Saving Lives on Country Roads Initiative 2019-2020

The following are some examples of the NSW Government's investment through the 2019–2020 SLCRI.

Princes Highway at Wandandian

The Princes Highway at Wandandian was upgraded with the NSW Government investing \$2.84 million to install 1.5kms of median safety barrier. Sealed shoulders were also widened and roadside barriers were installed at targeted locations to protect road users from roadside hazards.



Princes Highway, Wandandian prior to construction commencing



Princes Highway, Wandandian once works were completed.

Mitchell Highway at Oaky Creek Lane

The Mitchell Highway at Oaky Creek Lane was also upgraded through the NSW Safer Roads Program including shoulder widening, safety barrier installation and audio tactile line marking installation.



The Mitchell Highway at Oaky Creek Lane which was also upgraded through the NSW Safer Roads Program

Hill Street and Matthews Avenue, Orange

The intersection of Hill Street and Matthews Avenue, Orange was upgraded from a giveway intersection to roundabout control after receiving \$600,000 in funding through the NSW Safer Roads Program.



Hill Street and Matthew Street Orange prior to works commencing



Hill Street and Matthew Street, Orange after works had been completed

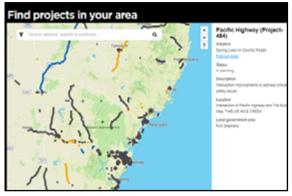
Speed Management Program (country)

Speed zones are regularly reviewed to ensure speeds listed are appropriate to the road design and use. During 2019–2020, 245 speed zones were reviewed in country NSW, and the outcome for these reviews resulted in 13 speed zones raised and 131 lowered, and a further 60 speed zone reviews resulted in no change. A further 41 locations had their existing speed limit boundaries expanded.

Safer Roads Program communications

Transport for NSW implemented a communications and engagement plan to support implementation of the SLCRI and LSUCI safety infrastructure initiatives.

Media materials, video and website content were developed to raise community awareness of the projects being undertaken across NSW and to increase understanding about the benefits of the road safety treatments being rolled out. This included the Safer Road Program interactive map, which had 180,620 page views since launching in March 2020 to June 2020, and the Safer Roads Save Lives campaign which reached over 154,000 people and achieved 72,500 video views across Western NSW.



The Safer Roads map which is available at: towardszero. nsw.gov.au/safesystem/safe-roads

Local partnerships in country areas

Partnerships with local councils, community groups, stakeholders and industry help support delivery of road safety initiatives in country areas.

In August 2020, Transport for NSW supported regional councils to partner with the Australian Road Safety Foundation to support Rural Road Safety Month. The initiative was designed to highlight the level of road trauma in country NSW and encourage local drivers to adopt safer behaviours. The month was supported through an engaging social media campaign on the NSW Road Safety Facebook page, with posts covering speeding, drink driving, heavy vehicles, level crossings and school safety. The campaign had a total reach of 630,000 (where people saw posts) with an average engagement rate of 4 per cent (where people interacted with posts).



Police enhanced enforcement on country roads 2019–2020

The Enhanced Enforcement Program provides funding for additional high visibility enforcement to target behaviours known to contribute to road trauma, with just over 60 operations undertaken in regional NSW to address unsafe behaviours and crashes on country roads.

Regional Police Area Commands and Police Districts participated in a number of police operations funded through the Enhanced Enforcement Program. For example, Operation Snowsafe targeting safe travel to and from the ski fields.

Liveable and safe urban communities

Liveable and Safe Urban Communities Initiative

A significant proportion of road fatalities happen in urban areas (around a third), and the majority of serious injuries occur in urban areas (around two thirds).

Roads in urban areas perform a range of functions. They may be quiet local streets or may be high volume high speed motorways and movement corridors. Some urban roads have both a large volume of vehicles and many pedestrians, such as around shopping centres and transport interchanges.

The challenge is to take a Safe System approach to all these types of roads to keep urban places liveable and safe, and ensure vibrant streets allow people to move about safely as demand increases.

During 2019–2020, 89 projects were completed under the Liveable and Safe Urban Communities Initiative.

Example of Liveable and Safe Urban Communities Initiative 2019–2020

The following is an example of the NSW Government's investment to create liveable and safe urban communities.

Hill Street and Coronation Parade Enfield

The intersection of Hill Street and Coronation Parade Enfield was upgraded with traffic signals to improve road safety for all road users including pedestrians at this high risk location.



The intersection of Hill Street and Coronation Parade Enfield which was upgraded in June 2020

Pedestrian Protection Program

Traffic signals are being upgraded to protect pedestrians from turning vehicles. The upgrades ensure vehicles are held while pedestrians commence crossing the intersection, providing pedestrians with additional time to clear the 'conflict point' with vehicles and increase their visibility to motorists. This is generally achieved with a red turn arrow. The improvements have been carried out as part of the NSW Government's Pedestrian Protection Program. At the end of 2019-2020, \$7 million has been spent over the life of the program and 528 of 560 locations have been completed, with only 32 locations remaining to be treated.

High Pedestrian Activity Program

NSW is expanding the rollout of new 40 km/h limits in high pedestrian activity areas including around bus interchanges, train stations and shopping districts. Increased funding has been provided under the Speed Management Program and NSW Safer Roads Program, to make urban communities more liveable and safe. In partnership with local councils, six 40 km/h speed zones were installed in high pedestrian areas, along with supporting road infrastructure.

In 2020, the first 30 km/h High Pedestrian Activity Areas (HPAAs) in NSW were installed in the Manly and Liverpool CBDs. The moves are part of the NSW Government's aim to reduce speed-related injuries in very busy pedestrian areas, prioritise the walking needs of people and make cities more liveable.



A new 30kmh zone in Manly

Speed Management Program (urban)

During 2019–2020, 130 speed zone reviews were conducted in the Sydney region a resulting in three speed zones being raised and 108 speed zones lowered.

Delivering safe integration of major transport projects

Transport for NSW's Centre for Road Safety continued to work with other parts of the Transport cluster during the year to further embed and prioritise road safety on major transport projects. Projects included all Sydney Metro projects, light rail projects in Sydney and Parramatta and the Rozelle Interchange Westconnex project.

The Centre for Road Safety undertook risk analysis through road safety audits, design package reviews, safety in design workshops and other risk reviews and assessments to highlight and prioritise any potential road safety risks. This analysis was carried out across the design, construction and final operation of the projects and assisted in identifying road safety risks to all users of the network.

Following the identification of any risks, the Centre for Road Safety worked closely with stakeholders to implement mitigation measures, removing or reducing risks 'So Far As Is Reasonably Practicable' to deliver a safe integrated network.



Sydney Light Rail



Rozelle Interchange Westconnex project

Newcastle light rail cyclist safety

In 2019 a cyclist died in a crash along the section of mixed-running light rail in Newcastle East. Following the crash, the Centre for Road Safety carried out a road safety review in consultation with stakeholders, to identify risks to cyclists along the light rail alignment and determine any appropriate measures needed to reduce the risks. All remedial actions identified in the review are either underway or completed. The risks identified in the review and subsequent mitigation strategies have also been shared with other light rail networks and operators in NSW to ensure a consistent approach to cyclist safety across NSW.

Using the roads safely

The Road Safety Plan 2021 highlights the need to continue to encourage people to use the roads safely. This is done through road rules, enforcement, licensing requirements and supporting communications. A number of significant reforms have been delivered under this priority area.

Development of a Saving Lives – Accelerated Package

To supplement the Road Safety Plan 2021 and to help bring NSW towards our road trauma reduction targets, Transport for NSW collaborated across government to develop an accelerated package aligned with the Safe System approach to improving road safety.

Designed with best practice evidence and independent modelling to deliver strong trauma savings in the immediate and long term Towards Zero, the initiatives tackle persistent and emerging safety challenges by accelerating existing programs proven to be effective in targeting road safety risks. Measures to be rolled out during 2020–2021 include:

- Enhancing the NSW Mobile Speed Camera Program towards best practice and national consistency through removal of portable warning signage (completed), updated and reduced livery on mobile speed camera vehicles (from early 2021) and increased mobile speed camera enforcement hours to 21,000 hours of enforcement per month (mid 2021). This program targets 41 per cent of the road toll.
- Increased investment into priority safety infrastructure upgrades improving the safety of country roads – using all net

revenue from penalties collected through the Community Road Safety Fund. Around three-quarters of the roll toll occurs on country roads each year.

- A new combined offence to address the significant risk posed by drivers who combine drink and drug use before driving - targeting drivers who increase their risk of a fatal crash by 23 times through a combination of illicit drugs and alcohol. Of all NSW fatalities between 2017 and 2019, 17 per cent involved illegal levels of alcohol, 21 per cent involved illicit drug presence, and 6 per cent involved a combination of illicit drugs and alcohol.
- The package was announced on 19 November 2020 and work is already underway to deliver the initiatives which are set to save hundreds of lives of the next five years.



Driver distraction – the world's first Mobile Phone Detection Camera Program



Since 1 March 2020, the Mobile Phone Detection Cameras (MPDC) program checked over 62 million vehicles (as at 31 December 2020). On average, around one in 455 drivers checked in NSW was illegally using a mobile phone and issued a penalty notice (during the period 1 March to 31 December 2020). This is a noncompliance rate of 0.22 per cent and over 137,000 penalty infringement notices were issued during the period.

A comprehensive public education program was rolled out across a range of communication channels including television, radio, social media, and outdoor, to raise community awareness about the program. Key messages include information about the road rules, which penalties apply for camera detected offences and to thank drivers for driving safely.

During the pilot, between January and June 2019, 1 in every 82 drivers (1.2 per cent) were detected using their mobile phone illegally. Thus, early data since enforcement commenced suggests a positive shift in driver behaviour and a significant improvement in compliance with the law.

Independent modelling by Monash University Accident Research Centre (MUARC) estimates that the MPDC program will contribute to a reduction in road trauma of approximately 100 fatal and serious injury crashes over a five-year period. The MPDC program won the Premier's Award for Innovation in Digital Technology and the Prince Michael International Road Safety Award in November 2020. Many organisations and partners played a role including legal, communications, procurement and operations across Transport for NSW and the Department of Justice, NSW Police Force, the Privacy Commissioner and Revenue NSW. This project was a tremendous collaboration and with an outstanding road safety outcome that will now be available to contribute to road safety across the world.



A mobile detection camera in Millers Point

Supporting National Policy Work

The Centre for Road Safety has been actively engaged in national processes to ensure positive road safety outcomes for NSW across a range of policy areas including:

- Distracted driving a review of road rules 299 and 300 (mobile phone use and visual display units).
- Requirements relating to Mobile Mobility Devices and Personal Mobility Devices.
- The Heavy Vehicle National Law Review. The NSW Centre for Road Safety is leading on the fatigue management aspect of this review.
- Developing a regulatory framework for automated vehicles.
- Development of the next National Road Safety Strategy and Action Plan.

We are also preparing for consequential changes required as we transition to the Road Vehicle Standards Act 2018 (CT) (RVSA) which will replace the Motor Vehicle Standards Act 1989 (Commonwealth) (MVSA). The MVSA is referred to in four NSW Acts, ten NSW regulations and the Heavy Vehicle National Law.

Enhanced Enforcement Program 2019–2020

The Enhanced Enforcement Program (EEP) continues to deliver high visibility police road safety enforcement in addition to normal operations, to deter unsafe road use.

The NSW Government is spending \$250 million over five years from July 2018 for enhanced enforcement, including for 50 additional highway patrol officers, training for up to 1000 general duties officers in speed enforcement, increased roadside alcohol testing and expanding the mobile drug testing program.

In the 2019-2020 financial year, almost \$18.8 million in funding was committed to additional on-road enforcement through EEP, with more than 165,000 roadside mobile drug tests and 4.607 million random breath tests conducted.

Enhanced Enforcement operations included seven Statewide operations totalling over \$3.5 million, typically conducted over long weekends and holiday periods, often complementing double demerit point periods.



The Enhanced Enforcement Program (EEP) continues to deliver high visibility police road safety enforcement

Pedestrian safety around buses

Bus Safety Week was held between 24 February to 1 March 2020 and raised awareness for all road users on how to stay safe on and around buses, helping to reduce injuries and fatalities. The Be Bus Aware campaign is promoted during the week and highlights the importance of bus safety for all road users.



Material used as part of Bus Safety Week to promote pedestrian safety around buses

National Walk Safely to School Day

Transport for NSW was a sponsor of the Pedestrian Council of Australia's annual National Walk Safely to School Day held in September 2020. The day encouraged families to walk children to and from school to help reinforce safe pedestrian behaviour and highlight the environmental and health benefits of regular walking. More than one million school students travel to and from school each day in NSW and this event helped families reinforce the key road safety messages promoted in NSW schools.

National Road Safety Week

Throughout National Road Safety Week, social media posts on the NSW Road Safety Facebook page reached over 80,600 people and achieved over 2400 engagements. The Sydney Harbour Bridge was lit up yellow for the duration of the week to honour the memory of more than 1200 lives lost on the nation's roads each year.

Fatality Free Friday 2020

An initiative of the Australian Road Safety Foundation (ARSF) supported by Transport for NSW and a range of other organisations, Fatality Free Friday (29 May) is an annual event that aims to have zero deaths on Australian roads for one day. This year things were done a little differently as ARSF took their launch event online by doing a Facebook live video stream. The event featured guests including road safety advocate Melissa McGuinness, and racing driver and ARSF ambassador Craig Lowndes. While each guest shared their own perspective, the common theme from the event was that road safety is a shared responsibility and we are all accountable for our choices on the road because even the smallest error can have a ripple effect across the community.

Speed camera enforcement

Police speed enforcement is complemented by speed camera enforcement which includes fixed speed cameras (and red-light cameras), mobile speed cameras and heavy vehicle average speed cameras. Additionally, speed surveys are conducted at 175 sites with the data collected used to assess the impact of the Speed Camera Program and inform targeted NSW Police Force enforcement operations.

During 2019–2020 Transport for NSW invested \$41.7 million in speed camera enforcement and as at 30 June 2020 there were 109 fixed speed camera locations, 201 red-light speed camera locations, 1024 mobile speed camera locations and 25 heavy vehicle average speed camera locations. Up to 31 December 2020, four more heavy vehicle average speed camera lengths were added in metropolitan areas bringing the total to 29 lengths. This was to address risks associated with a greater number of truck movements in the Sydney Metropolitan area, the new lengths were WestConnex M8, M5 East Tunnel, WestConnex M4 and NorthConnex.

Running red lights can lead to serious crashes and the NSW Government's commitment of 200 Red Light Speed Cameras (RLSCs) was completed in June 2020. The installation of the last 19 RLSCs cost \$3 million with \$2.270 million allocated in the 2018-19 Budget and \$730,000 allocated in the 2019-2020 Budget. Installation costs were covered by the Community Road Safety Fund.

People can sign up for alerts to changes in camera locations by visiting **www. saferroadsnsw.com.au**

Drink and drug drive enforcement

The NSW Police Force conducted more than 4.607 million random breath tests (RBT) in 2019 - 2020. During 2019 - 2020, \$3.52 million was invested from the Community Road Safety Fund into roadside drug testing, with over 165,000 mobile drug tests conducted, which resulted in 11,783 tests detecting the presence of an illicit drug. The Mobile Drug Testing Program is designed to deter drivers through the unpredictability of roadside drug testing and operates alongside Random Breath Testing Program.



The Mobile Drug Testing Program operates alongside the Random Breath Testing Program.

Mandatory Alcohol Interlock Program (MAIP)

The Mandatory Alcohol Interlock Program is a court-ordered penalty for high-range, mid-range and repeat drink drive offenders. The requirement is to only drive a vehicle with an alcohol interlock device installed. In December 2018, the program was expanded to also apply to mid-range drink drive offenders. Interlocks prevent drivers from drink driving, and allow offenders to learn how to separate their drinking from their driving.

Over 18,000 drivers have participated in the interlock program since it began in 2015 with 9943 active interlock participants as at 27 November 2020.



An alcohol interlock device

Driver Reviver Program

The NSW Government supports Driver Reviver sites across NSW, which are open during peak travel times to encourage drivers to stop and take a break. In 2019-2020, Driver Reviver sites across the state were open for the equivalent of 779 days.

Safer Drivers Course

Transport for NSW continued to support the Safer Drivers Course (SDC) with \$4.96 million in funding for 2019–2020 and over 170,000 learner drivers participating in the course since it began in 2013, including more than 26,085 learners participating between July 2019 and June 2020.

Level crossing safety

To improve safety at railway level crossings, three major upgrades were delivered as part of the Level Crossing Improvement Program in 2019–2020.

The speed limits approaching some level crossings have begun to be reduced as part of a statewide initiative to improve safety. Speed limits will be reduced to 80km/h or lower on approach to around 107 actively controlled level crossings in NSW by 2023. Active level crossings are those secured with boom gates, flashing lights, or both, rather than only 'stop' or 'give way' signs.

Road safety campaigns

In 2019–2020, Transport for NSW delivered a range of highly-recognised and effective behavioural communication campaigns to promote safe behaviours on the roads.

The investment in campaigns for 2019–2020 was \$18.644 million with 87 per cent per cent of NSW motorists recognising a road safety campaign across all channels.

Saving Lives on Country Roads public education campaign

The 'Saving Lives on Country Roads' education campaign continued to effectively raise awareness of road trauma in country areas in 2019–2020. It demonstrates how everyday driving decisions in country areas can result in serious consequences, while encouraging drivers to make safe, positive choices to reduce their risk on the road with 68 per cent of regional NSW motorists recognising the campaign, and 80 per cent agreed 'that everyday driving decisions can result in serious consequences'.

Stop It... Or Cop It enforcement campaign

The 'Stop It...Or Cop It' campaign continued in 2019-2020 to increase awareness that NSW Police can enforce illegal road user behaviour anywhere, anytime. High visibility enforcement combined with the perceived certainty of enforcement and immediacy of a penalty is known to provide a strong deterrent to illegal road user behaviour. Enforcement is targeted and coordinated so that police address risks identified in particular geographic areas and respond to emerging issues. In 2019, the campaign evolved to include drug driving and double demerits. Campaign recognition continued to remain strong at 70 per cent, and importantly the campaign made the target audience recognise that police are out there enforcing the road rules. Eighty per cent of male drivers aged 17-59 years who had seen the campaign noticed police activity on NSW roads versus 54 per cent who had not seen the campaign.

What's your Plan B? drink driving campaign

The 'What's your Plan B?' campaign is designed to encourage NSW drivers to make positive choices to get home safely after drinking.

The role of the advertising campaign is to:

- Reinforce and drive awareness in moments before, during and following drinking occasions that if you drink you should not drive.
- Promote alternative transport options to empower drivers to make the choice not to drink and drive.
- Remind people at the point-of-behaviour of the consequences of drink driving.

The 'What's your Plan B?' campaign messages are delivered via outdoor, transit and advertising within licenced venues to target drivers at the point of behaviour. The campaign is also supported state-wide with social media activity. In 2019–2020 the campaign recognition remained strong at 65 per cent, performing well above normal for a campaign without TV. The campaign also performed well against key advertising diagnostic measures and positively impacted past behaviour and future intentions in relation to 'planning ahead' to avoid drink driving in metro areas.



Material from the Plan B public education campaign

Don't Trust Your Tired Self driver fatigue campaign

The 'Don't Trust Your Tired Self' campaign continued in 2019–2020 to educate drivers on the actions they should take to combat fatigue and avoid driving tired. The campaign recognition remains strong with 66 per cent of the target audience recognising the campaign. The campaign website (**testyourtiredself.com.au**) provides drivers with a way to assess their tiredness before getting behind the wheel. Since its launch in 2013, this website has had over one million visitors.

Be Truck Aware heavy vehicle safety campaign

The 'Be Truck Aware' campaign aims to prevent road crashes and potential fatalities by highlighting the unique driving factors affecting trucks. A new 30 second television commercial was developed to highlight "blind spots", this new television commercial showed a significant improvement in recognition, improving recognition to 60 per cent.

Ride to Live motorcycle safety campaign

The 'Ride2Live' motorcycle campaign in 2019–2020 continued to remind motorcyclists to be aware of the potential hazards they face on the road, educate them on the actions they can take to keep safe, and alert drivers to be aware of motorcyclists and check their blind spots. The campaign is now recognised by nearly all motorcyclists with 86 per cent recognition, and has long term evidence of positively influencing motorcyclists to ride safely on the road.

The Ride2Live campaign continues to be highly recognised. Creative development is underway for the integration of MotoCAP messaging into the 2020-2021 Motorcycle Safety campaign which will include the development and production of digital video, display and social creative to highlight the benefits of choosing safe gear.

Look Out Before You Step Out pedestrian safety campaign

The pedestrian safety campaign 'Look Out Before You Step Out' continued in 2019–2020, to encourage pedestrians to be more aware of their own safety, and to think before taking risks when crossing the road.

The campaign targets all pedestrians in metropolitan NSW including Newcastle and Wollongong, and is particularly focused on suburbs and Local Government Areas where there have been high incidents of pedestrian crashes, serious injuries and fatalities.

Launched in October 2016, the campaign includes outdoor, radio, print, digital and pavement stencils/decals advertising targeting key hotspots, 2089 'Look Out Before You Step Out' pavement decals were installed across NSW in 2019–2020.

The Pedestrian safety campaign achieved 63 per cent recognition in 2019–2020. Those who have seen the campaign were significantly more likely (8 per cent) to talk to their friends and family about the need to pay attention to the road and traffic when crossing the road.

School Zones Advertising Campaign

School Zone safety messaging continued to be communicated through paid advertising at key back-to-school periods in the year. The campaign has performed well with 79 per cent of people who have seen the advertising stating that they would intend to slow down to 40km/h in school zones during operational hours.

Bus Safety Week

Bus Safety Week took place 24 February to 1 March 2020 with the aim of improving the safety of all drivers, riders, pedestrians and passengers and helping to reduce deaths and injuries involving buses. The campaign included social media, radio, on-mode assets and media. Over 1.58 million people were reached on social media during the campaign with an expenditure of \$26,628.

Mobile Phone Detection Cameras campaign

The Mobile Phone Detection Cameras campaign launched in November 2019 and continued into 2020, to communicate the enforcement of illegal mobile phone use using new mobile phone detection cameras. Results from the campaign were positive, with 78 per cent of people who have seen the campaign indicating the risk of being caught by mobile detection camera was high versus 67 per cent who haven't seen the campaign. Over the four-month period the campaign was live there were 345,000 webpage views to the Know the Rules landing page (https://roadsafety.transport. nsw.gov.au/stayingsafe/mobilephones/ know-the-rules.html).

COVID-19 Tactical Response campaign

The arrival of the COVID-19 pandemic resulted in the development of a bespoke tactical campaign communicating the importance of road safety in light of the shifting conditions on NSW roads. Launching on 31 March 2020 the campaign consisted primarily of paid social media posts and radio advertising. The campaign has performed well reaching around 6 million people while maintaining exceptionally strong average engagement rate of 13.14 per cent across social media. Despite the short time in market, 87 per cent of people who have seen the campaign agree about its importance of maintaining a strong commitment to road safety, despite uncertain times.



Material from the COVID-19 Tactical Response campaign

Level Crossings Safety

In 2019–2020, Transport for NSW delivered three level crossing police enforcement operations in regional NSW, supported by three bursts of the 'Don't rush to the other side' level crossing safety education campaign under the Level Crossing Improvement Program. The regional Level Crossings Safety 'Don't rush to the other side' advertising campaign was introduced in June 2013. The role of the advertising is to continue to raise awareness of the safety risks at level crossings, to educate drivers on the actions needed when approaching a level crossing, and reinforce the consequences of not obeying traffic controls at level crossings and keep them top of mind. Results for key diagnostics remain high, with 59 per cent of participants recognising the advertisement. The main message continues to maintain high results at 80 per cent.

Road Rules Awareness Week

Road Rules Awareness Week ran from 30 March to 4 April 2020 and gave road users – drivers, pedestrians, motorcyclists, passengers and bicycle riders – the chance to refresh and improve their knowledge of the NSW road rules. The week long campaign highlighted the road rules linked to causes of trauma, promote the rules that have the biggest impact on reducing road trauma and provide road users with the opportunity to have their questions answered.

Road safety engagement and partnerships

Yellow Ribbon National Road Safety Week

This annual initiative is led by the Safer Australian Roads and Highways Group (SARAH) and is supported by the Commonwealth and all states and territories. National Road Safety week is normally held in May however, due to COVID-19, it was postponed to November 2020. The NSW Government was the lead agency in 2020 and hosted the launch event on 15 November 2020.

Partnerships

League legends help tackle deaths on local roads

Rugby league legends are helping drive the road safety message by speaking with local students about the knock-on effect of road trauma in country communities. For example NSW Blues coach Brad Fittler and NSW Blues advisor Greg Alexander visited Lismore school students as part of the NSW Government's Knock-On Effect campaign to tackle road deaths and serious injuries. Our partnership with NSW Rugby League connects local football clubs across the state with important road safety messages because road safety is everyone's responsibility, whether you're a driver, rider, passenger or pedestrian.

Wanderers kick road safety into overdrive

The NSW Government continued its partnership with the club who unveiled their new kit with the call for drivers to 'slow down' as part of the 'who do you slow down for?' campaign. With the help of the Western Sydney Wanderers, we're using the power of football to raise awareness and start conversations about road trauma and how everyone can help prevent it. The Wanderers partnership with Transport for NSW dates back to 2015, and is set to continue into 2022. As well as featuring the 'slow down' message on the sleeve of their new jerseys, road safety messages will be showcased at Wanderers match days, as well as on digital and social media campaigns.



Material from the 'who do you slow down for?' campaign on display at a Wanderers game

Building a safer community culture

To support road safety as a partnership with the community, a range of activities were implemented to support engagement in road safety and to inform and motivate road users to use the road safely. Aligned to the Road Safety Plan 2021, these activities included:

Younger drivers

Since the Graduated Licensing Scheme (GLS) was introduced in June 2000, young driver fatalities have reduced by around half. However, young drivers continue to be over-represented in casualty crashes in NSW. Despite making up only around 15 per cent of all licence holders, younger drivers represent almost a quarter of annual road fatalities.

Transport for NSW in partnership with local government, delivered free Helping Learner Drivers Become Safer Driver workshop for parents and supervisors of learner drivers. In 2019–2020, 177 workshops were delivered across NSW to 1960 attendees.

In 2019–2020, 61 TAFE workshops targeting young apprentices, who are at high risk of crashes due to their age, inexperience and the need to travel long distances, were delivered to over 1475 participants.



Older road users

In 2019–2020, 395 Older Driver (65Plus) workshops were delivered to 8287 people. These aim to provide advice and safety tips for road users aged 65 or over to help make safer choices when driving, riding, walking, using a mobility scooter or catching public transport.

Community Road Safety Grants

The Community Road Safety Grants Program provides community groups funding to implement local road safety programs within their communities.

Round five saw thirty community groups awarded grants totalling \$435,375 to implement road safety projects across NSW. However, due to COVID-19, the delivery of some projects from Round five were impacted and timeframe extensions were provided to the grantees to deliver by end of December 2020 or return all or part of their funding.

Since 2015–16, 167 projects have been funded under the Grants.

Round six of the grants has been finalised and announced and delivery will commence in early 2021. In total there were 62 applications submitted.

Towards Zero Community Partnerships

A Steering Committee comprising representatives of local government, NSW Government agencies, the community sector and academic and training organisations continued to advise on the project that commenced in 2019.

Across the 2019 - 2020 financial year the project moved into stage two which saw the results from the surveys conducted in stage one developed into key recommendations. These include the construction of an online portal which would consolidate multiple information sources into a one-stop-shop for Safe Systems integration with councils and engaged businesses/stakeholders.

Working with employers

Almost 30 per cent of workplace fatalities are a result of road crashes, and around 26 per cent of road fatalities are a result of people using a vehicle for business, which is why the Road Safety Plan 2021 highlights the need to work with employers to embed a positive road safety culture in their workplaces.

Uptake of the 'Road Safety and Your Work: A Guide for Employers' and supporting resources continued to be strong with many organisations being involved during 2019 - 2020 including small, medium and large employers and NSW Government agencies. Following successful face-to-face events and workshops in late 2019, an interactive webinar was held in March 2020 with above benchmark levels of engagement, resulting in sustained support of the program through the early stages of COVID-19.

This project has continued to evolve, with development commencing on an interactive and engaging road safety eLearning module for use by workers (with partial funding from icare NSW and support received from risk management professionals in Western NSW Local Health District), production of video case studies with recognised organisations leading the way in road safety, the design and build of an interactive online employer toolkit to aid organisations on their road safety journey, development of supporting resources and collateral, and the framework for a comprehensive and integrated engagement campaign to be launched in 2020-2021.

This project is a collaboration between Transport for NSW and the State Insurance Regulatory Authority who regulates motor accidents compulsory third party insurance (green slip).



Transport for NSW, Mid-Western Regional Council, Mudgee Chamber of Commerce and local industry working together in 2019 to engage local employers to embed a positive road safety culture in their workplace.

Kidsafe Partnership

Kidsafe offer accredited child restraint training for intervention support agencies at a subsidised rate and in 2019–2020 they received \$35,000. The project aims to conduct five courses in Regional NSW, five courses in Hunter/Illawarra regions and 10 courses in the metropolitan area. Due to COVID-19, restrictions were placed on the delivery of the program and as of September 2020 the KidSafe training snapshot is as follows:

• 93 participants received the training for 2019-2020

- 41 per cent (35) participants identified as Aboriginal
- 12 training sessions conducted
- 5 sessions were conducted for Aboriginal services
- 12 different agencies benefitted from the training
- 4 sessions conducted in regional areas
- 7 sessions conducted in metropolitan areas
- 1 session conducted in Hunter/Illawarra.

Aboriginal road safety

During 2019-2020, Community Road Safety Fund investment in Aboriginal road safety included:

Aboriginal community events

Aboriginal people from across NSW were engaged in conversations about safe road use at several major events in 2019–2020, these events included the Yabun Festival and NSW Koori Ruby League Knockout.

Aboriginal people and disadvantaged drivers

Transport for NSW continued to deliver the Driver Licensing Access Program (DLAP), which assists people from communities with lower rates of driver licence attainment to obtain and retain their driver licence, including many Aboriginal communities, some Culturally and Linguistically Diverse communities (including refugee and resettlement communities identified by Multicultural NSW), and people from low socio-economic backgrounds.

DLAP was expanded again in 2019–2020 with \$3.3 million allocated to DLAP providers including \$3 million from the Community Road Safety Fund and \$300,000 from the State Insurance Regulatory Authority. 946 learner licences and 922 provisional licences were achieved across more than 80 communities and 4839 (preliminary figures) supervised driving hours being achieved.

AFL NSW/ACT Indigenous Youth Leadership Program

Transport for NSW has been a partner of the AFL NSW/ACT since 2014, harnessing the power of football to bring young people together from Indigenous communities across NSW.

Transport for NSW in partnership with AFL NSW/ACT Indigenous Leadership Program normally deliver Leadership camps however, in line with COVID-19 protocols, these camps were delivered as an online workshop to engage young Aboriginal and Torres Strait Islanders aged 13 to 15 years from various communities across NSW as part of the Sir Douglas Nicholls Indigenous round in August. These two workshops provided a practical understanding of leadership in road safety and leadership styles in a variety of sporting and non-sporting situations.

The online workshop also involved a broad discussion with Sydney GIANTS AFL player Toby Greene in leadership skills and Q&A session with Sydney GIANTS players Zac Williams, Jeremy Finlayson and Bobby Hill about their culture, leadership and what AFL's Indigenous Round means to them. The AFL NSW/ACT Indigenous Leadership Program (formerly the Adam Goodes Talent Program), has been supported by the Centre for Road Safety since 2014. The cost for three year agreement 2019–2022 with the AFL NSW/ACT is \$285,000.



Sydney Swans player James Bell speaking at the AFL NSW/ACT Indigenous Youth Leadership Program webinar in 2020

Early childhood and school road safety education

Transport for NSW has funded the Road Safety Education Program since 1986. The program is a partnership between Transport for NSW, Department of Education, Catholic Schools NSW, the Association of Independent Schools of NSW, and Kids and Traffic Early Childhood Road Safety Education Program. All NSW primary and secondary students learn about road safety as part of the mandatory Personal Development, Health and Physical Education (PDHPE) syllabus. In NSW early childhood services, road safety is integrated as part of the Early Years Learning Framework.

In 2019 – 2020, the NSW Government invested \$5 million to provide road safety education consultancy support to schools and teachers, as well as classroom resources to 3103 primary and secondary schools, and 4000 early childhood services across NSW. The program provides a focus on professional development for school teachers and early childhood educators, and quality learning resources to support the teaching about road safety in NSW.

Transport for NSW's Safety Town website (**www.safetytown.com.au**) for primary school students had 104,723 users visit the site during 2019–2020, viewing 1,219,119 pages.



Safety Town is the road safety website for primary school teachers, students and parents

The On the Move website (**onthemove.nsw. edu.au**) for secondary PDHPE teachers had 5871 users visit the site during 2019-2020, viewing 38,002 pages.

The Kindergarten Orientation Road Safety Library Bags attracted strong demand again in 2019–2020, with 85,622 bags ordered by NSW primary schools to share road safety information with new families.

School Crossing Supervisor Program



There was continued investment in 2019–2020 of \$16.6 million into the School Crossing Supervisor Program.

Transport for NSW is currently implementing the NSW Government's program of 300 additional school crossing supervisor locations over three years. By June 2020, 80 of those new school crossing supervisors had been appointed within Round 1 of the program.

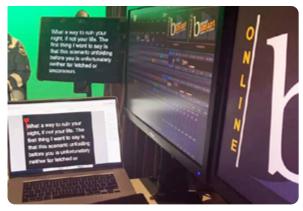
During July–December 2020 within Round 2 of the program, TfNSW announced a further 187 additional School Crossing Supervisor locations, with a total of 267 of the 300 new school crossing supervisor locations announced by 31 December 2020.

Progress is continuing as Transport for NSW continues to work with school communities to assess and identify school crossing supervisor locations, prioritised based on road safety need.

Bstreetsmart event

Transport for NSW was the major sponsor of Western Sydney Local Health District's bstreetsmart event. In August 2020, the event was livestreamed to 145 high schools. The event complemented what students learn about road safety education programs in schools, such as strategies to help make decisions that improve their chances of avoiding a crash.

To support the bstreetsmart event, all schools that attended were provided with road safety information and curriculum activities to complement student learning in the classroom.



Bsteetsmart was streamed online in 2020

Local Government Road Safety Program

The Local Government Road Safety Program is a partnership between Transport for NSW and local councils. Participating councils receive up to 50-50 funding for a Road Safety Officer position and/or funding for local road safety projects. The Council's propose programs and projects to address local road safety priorities. In 2019-2020 the program spent \$5.84 million across the State. Of the 129 LGAs in NSW, there are 79 participating in the program employing 77 Road Safety Officers in 2019-2020. The continued delivery and refinement of the Local Government Road Safety Program is a commitment under the Road Safety Plan 2021.

Road Safety Behavioural Program

During 2019–2020 the Community Road Safety Fund invested \$7.7 million into the delivery of the NSW Road Safety Behavioural Program. The Program delivers behavioural-focused road safety initiatives at a regional and local level to reduce the incidence and severity of crashes in the NSW road environment. The program delivers a range of sub-programs targeting key road safety behavioural issues and at-risk road user groups with a focus on engagement and education. This includes delivery of a range of works including:

- programs targeting key behavioural issues i.e. speeding, drink and drug driving, distraction, fatigue, restraint use
- programs targeting key road user groups i.e. motorcyclists, young drivers, heavy vehicle drivers, bicycle riders, pedestrians and older road users
- support to the Enhanced Enforcement Program
- program management of the Local Government Road Safety Program.

Examples of work delivered under the Program are covered throughout this report such as the Older Driver (65Plus) and Helping Learner Drivers Become Safer Drivers workshops.

During the COVID-19 pandemic, the program successfully adapted by using technology to engage with stakeholders and communities. The success of these approaches will see some remain as ongoing delivery options even after COVID restrictions ease, to enable an even greater and more efficient audience reach.

NSW road safety online activity





@nswroadsafety

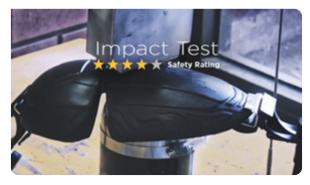
The NSW Road Safety Facebook page

The NSW Road Safety Facebook page had a total reach of over 14 million (where people saw posts) and achieved over 3 million engagements (when people interacted with posts) from 1 July 2019 to 30 June 2020.

The top performing posts published on NSW Road Safety Facebook during 2019– 2020 were part of our COVID-19 tactical campaign which consisted of contextually relevant messaging developed in line with the evolving changes to the road safety landscape, including regional travel bans, the enforcement (and lifting) of restrictions, people out exercising and safety around delivery drivers and riders. The campaign has had a total reach of around 6 million with an average engagement rate of over 13 per cent, exceeding industry benchmarks.

More than 2.2 million users visited the Transport for NSW Centre for Road Safety website (**roadsafety.transport.nsw.gov.au**) during 2019–2020, resulting in about 5.73 million page views. Some of the most popular pages included Mobile phones– Know the rules (564,000 page views), the P1/P2 restricted vehicle search for provisional drivers (406,000) and Speed cameras – Current locations (264,000). The Towards Zero website (**towardszero. nsw. gov.au**) was regularly updated with content related to the Safe System and Road Safety Plan 2021, including media releases and topic-based videos. The website had more than 103,000 users in 2019–2020, resulting in more than 331,000 page views. Some of the most popular pages included Saving Lives on Country Roads (136,000 page views), the Road Safety Plan 2021 (26,261 page views) and the Safe System (12,383 page views).

The MotoCAP website (**motocap.com.au**) was regularly updated with safety ratings for motorcycle rider jackets, pants and gloves. The website had more than 25,000 users in 2019–2020, resulting in more than 190,000 page views. Some of the most popular sections of the site were ratings for jackets (25,000 page views), pants (17,000) and gloves (11,000).



The MotoCAP website is regularly updated with safety ratings for motorcycle rider jackets, pants and gloves.

Transport for NSW's Safety Town website (**www.safetytown.com.au**) for primary school students had 104,723 users visit the site during 2019–2020, viewing 1,219,119 pages.

The On the Move website (**onthemove.nsw. edu.au**) for secondary PDHPE teachers had 5871 users visit the site during 2019–2020, viewing 38,002 pages.

New and proven vehicle technology

As highlighted by the Road Safety Plan 2021, vehicle design and safety equipment can significantly improve safety when on the road. Transport for NSW delivers a range of programs to drive safety through vehicle and equipment safety, and also support informed consumer choice.

Safer vehicles

The Safe System approach shows that driving on roads with appropriate safety features at appropriate speeds, in the safest vehicles reduces crashes and crash outcomes. In 2019–2020, 47.3 percent of all new light vehicle models available for sale in Australia had a five star ANCAP rating.

At the end of 2019, 49.5 per cent of all light vehicles registered in NSW that were manufactured on or after 2000 had a five-star ANCAP rating, an increase of 4.5 per cent from 2018 (45 per cent). In metropolitan areas, 67.7 per cent of light vehicles registered that were manufactured after 2000 (up 19.7 per cent) have a five-star rating, compared to 31.7 per cent in regional areas (down 9.3 per cent).

Expansion of bicycle helmet standard to cover wheeled recreational devices

With Transport for NSW as a member, the Standards Australia committee for Bicycles and Bicycle Accessories released in May 2020 an updated Australian and New Zealand Standard AS/NZS 2063:2020 Helmets for use on bicycles and wheeled recreational devices. This standard includes specific provisions for helmets designed for wheeled recreational devices, and was informed by a study into helmets for wheeled recreational devices commissioned by Transport for NSW.

Safety features and technologies for heavy vehicles

The updated publication 'Safety features and technologies for heavy vehicles' was issued in May 2020. The publication (**roadsafety. transport.nsw.gov.au/downloads/safetytechnologies-heavy-vehicles-2020.**

pdf), is one of the Road Safety Plan 2021 commitments to work with the heavy vehicle industry to support smarter safer vehicle design and technologies with lifesaving features and encourage more people to choose the safest vehicle.

This updated publication is intended to be a handy reference that encourages heavy vehicle safety by explaining a range of technologies that benefit heavy vehicle safety, and describing how they operate. It also provides research findings on the reduction of fatal heavy vehicle crashes by the adoption of some of the technologies referenced.

The release was promoted to key heavy vehicle stakeholders to encourage safer vehicles selection by heavy vehicle operators and drivers.

SW SW



The 'Safety features and technologies for heavy vehicles' publication was issued in May 2020

Motorcycle safety

Motorcycles only account for around 4 per cent of all motor vehicle registrations but in 2020 (provisional), 16 per cent of all road fatalities (49 fatalities) were motorcyclists.

Completion of an evaluation of the NSW Motorcycle Graduated Licence Scheme during 2019–2020 will pave the way for enhancements under the next Road Safety Plan to be developed in 2021.

Since 2012, Transport for NSW has been sponsoring Motorcycle Awareness Month which was held in October 2020 with the aim of improving safety for riders and other road users.

The safety ratings were released on 14 October 2020 for 30 helmets under the Consumer Rating and Assessment of Safety Helmets (CRASH), a consortium of Transport for NSW, Insurance Australia Group and Transport Accident Commission.

Australasian New Car Safety Ratings (ANCAP)

Transport for NSW is a key contributor to and member of the ANCAP Board, Council and Technical Group. ANCAP released safety ratings for 36 light vehicles models covering 151 variants in 2019-2020. Of these, 32 were awarded 5 stars, and the lowest score was 3 stars. In 2019 - 2020, 47.3 percent of all new light vehicle models available for sale in Australia had a five star ANCAP rating. Vehicles are evaluated against four key areas of assessment: adult occupant protection; child occupant protection; vulnerable road user protection; and safety assist. ANCAP frequently conducts crash testing at Transport for NSW's Crashlab, and assesses vehicles' safety assist technology at Transport for NSW's facility in Cudal.

During the 2019-2020 financial year, the Vehicle Safety Research Group which publishes the Used Car Safety Ratings (UCSR) joined ANCAP as a sub-committee. The two groups are currently working on a system to publish the one vehicle star rating, dependent on whether the UCSR or ANCAP rating is most appropriate, creating a more user-friendly experience for the consumer.

Occupant restraints and child safety

The Child Restraint Evaluation Program (CREP) tested 34 child car seats in 2019– 2020. The results were published as they became available to ensure the currency of information provided to consumers.

The Child Car Seats website (**childcarseats. com.au**) allows parents and carers to compare the price and safety ratings of more than 250 different types of seats and to find Authorised Restraint Fitting Stations. During 2019–2020, more than 350,000 users viewed about 1.7 million pages on the website and since its 2014 launch there have been more than 2.2 million visitors to the site. The star ratings on the website were colour coded to help customers differentiate between forward facing, rear facing and booster seat modes.

In 2019–2020, 286 child restraint fittings days were delivered by local council Road Safety Officers and 25 restraint fitting days were delivered by Transport for NSW Road User Safety teams.

Heavy vehicle safety

The Australian Design Rules for heavy vehicle stability control came into effect for new applicable models from 1 November 2020, and will come into effect for all new applicable vehicles from 1 January 2022.

Transport for NSW through the rural seatbelt program has delivered safer buses, and

- 893 buses have been replaced, with another 245 yet to be replaced with seatbelts.
- 403 buses have been retrofitted with seatbelts, and a further 502 buses will be retrofitted by December 2021.

In May 2020, Transport for NSW released the updated heavy vehicle safety features and technology publication. This publication outlines safety technologies that would help a driver avoid a crash or reduce the risk of injury, and encourages consumers to ensure that they consider the safety of their vehicle when purchasing a new or used heavy vehicle, or making aftermarket modifications.

Crashlab – safety research laboratory

To ensure NSW is at the forefront of vehicle and equipment safety, Transport for NSW, via the Community Road Safety Fund, in 2019-2020 provided \$4.8 million in funding for Crashlab, which conducts national research and commercial vehicle crash testing services using the latest technologies in its accredited testing laboratory. Crashlab also carries out tests on child restraints and motorcycle and bicycle helmets.

Significant time and resources were invested in the implementation of new test capabilities and advanced test equipment at both the Huntingwood and Cudal facilities in 2019-2020. Distributing the existing staff across the two facilities accommodated 18 vehicle crash tests at Huntingwood and the safety assist testing of eight vehicle models at Cudal.

The Crash Barrier commissioned and commenced ANCAP testing to the 2020 advanced offset frontal test protocol using a new \$1.6 million THOR (Test device for Human Occupant Restraint) dummy and MPDB (Mobile Progressively Deformable Barrier) trolley purchased through the Community Road Safety Fund.

The Test Laboratory conducted over 450 sled tests on child restraints, bus and military vehicle seats and seat belts including the Child Restraint Evaluation Program (CREP) on 16 restraint models. The helmet test area conducted the motorcycle helmet consumer rating program (CRASH) covering 30 helmet models and R&D testing on horse racing helmets, cricket helmet neck guards, football head gear and head protection devices. The harness drop tower was used for customer compliance testing of 20 fall arrest devices and lanyards.

The Test Laboratory undertook the stability rating of 12 models of all-terrain vehicles to the Consumer Goods (Quad Bikes) Safety Standard 2019.

The future transport test facility at Cudal

The future transport testing facility located in Cudal in the State's Central West was launched in September 2019 and provides a simulated, open road to enable testing of safety systems such as autonomous braking, lane departure warnings and speed control functions. Following a capital investment of \$5.7 million (including purchasing, upgrading and equipment), the facility opened in September 2019. CRS continues to support the facility with funding from the Community Road Safety Fund to support its operational costs, and has contributed \$433,000 to its running in the 2019–2020 financial year.

During this period, the facility has accommodated on-site commissioning, formal vendor equipment training and ANCAP pre-qualification audit and validation activities. Official ANCAP Safety Assist assessments commenced in November 2019 and a joint Transport for NSW and ANCAP Industry Day was conducted in the lead up to vehicle manufacturer funded testing that commenced in December 2019.

A vulnerable road user (VRU) audit program was conducted on four ANCAP vehicles and a manufacturer pre-ANCAP program was undertaken in the fourth quarter of 2019–2020.





The Cudal future transport testing facility

Used Car Safety Ratings (UCSR) buyers guide

The 2020 'Used Car Safety Ratings Buyer's Guide' released on 14 December 2020 provides a comprehensive picture of the safety of all different types of used light vehicles on the market. The guide covers 261 different makes and models of cars and gives safety ratings out of five stars. There are five star vehicles in every category ranging from light cars and SUVs, through to people movers and utes. It also identifies 'safer picks', which are vehicles that give excellent protection to the driver, cause less serious injury to other road users and include crash avoidance technology. The ratings show that some of the highest rating vehicles are priced between \$5,000 and \$10,000. Used Car Safety Ratings (UCSRs) are determined through the analysis of more than eight million vehicles involved in policereported road crashes across Australia and New Zealand.

The 2020 Used Car Safety Ratings can be downloaded from the Centre for Road Safety website (**roadsafety.transport.nsw. gov.au/downloads/buyers_guide_used_ car_safety_ratings**)

Motorcycle Protective Clothing Assessment Program (MotoCAP)

Transport for NSW is the chair of the working group administering the Motorcycle Clothing Assessment Program (MotoCAP). MotoCAP, the world-first rating system for motorcycle clothing, provides information for riders, and encourages manufacturers to produce effective protective clothing.

In the 2019-2020 financial year MotoCAP had assessed 104 items, comprising 56 pairs of pants, 21 jackets and 27 pairs of gloves. The MotoCAP website (**motocap.com.au**) had more than 25,000 users in 2019-2020, resulting in more than 190,000 page views.

Motorcycle helmets

The Consumer Rating and Assessment of Safety Helmets (CRASH) tests motorcycle helmets against a range of criteria including protection and comfort, therefore providing riders with a guide to the safest and best helmets available. CRASH is delivered by a consortium of government agencies including Transport for NSW. By 30 June 2020, 270 helmet models had been rated since CRASH commenced in 2010.

Speed Adviser app

First released in February 2014, the Speed Adviser smartphone app provides free access to accurate speed zone information across the NSW road network, including active school zones. Downloads continue to increase each month and up to the end of June 2020 there were 217,878 downloads since the app was released. The downloads are expected to continue to increase with ongoing marketing of the app via road safety campaigns This year the app received several enhancements including a revised FAQ, a background audible speeding alert and new-look icons.

Connected and automated vehicles



The highly automated research vehicle (SAFET1) assessing the capability of the vehicle's Lane Keep Assist and Traffic Sign Recognition systems in the Snowy Mountains.

The Highly Automated Vehicle Safety Initiative (HAVSI) was expanded this year to include the testing of several after-market lane departure warning systems and a factory-fitted traffic sign recognition system. The preliminary results are being used to continually refine the testing methodology. Final results will be available in 2021. The information gained from this research will advance our understanding of the road safety benefits and limitations of highly automated vehicles. Transport for NSW has begun a threeyear automated vehicle research and development trial in collaboration with The University of Sydney's Australian Centre for Field Robotics. The trial aims to understand how connected and automated vehicles will interact with vulnerable road users (VRUs), other vehicles and local infrastructure in the future. The trial will develop intelligent vehicle and infrastructure systems to improve the safety of these interactions.

The project will begin by investigating vehicle to pedestrian (V2P) interactions and develop advanced pedestrian detection, movement prediction and path planning capabilities. The trial will then move to high-density urban environments and develop vehicle to vehicle (V2V) and vehicle to infrastructure (V2X) communication capabilities to enhance safety in these complex operating environments.

The trial is working with the Centre for Road Safety to explore particular challenges for automated vehicles and developing solutions to create new opportunities for improving road safety. Learnings from this trial will better inform Transport for NSW of the technologies and policies required to enable a safe and efficient integration of connected and automated vehicles in our future road network.

Cooperative Intelligent Transport Initiative (CITI) project

The Cooperative Intelligent Transport Initiative (CITI) was established in 2012 as Australia's first long-term cooperative intelligent transport systems testbed to evaluate potential road safety benefits with connected vehicle technology. This system provides in-cab alerts to drivers about potential road safety hazards through the sharing of information between connected vehicles and roadside infrastructure. The initial focus of the testbed was primarily heavy vehicles. CITI then expanded the trial to include 45 privately owned light vehicles over a ten-month period. Surveys and focus groups with light vehicle participants showed that they believe the equipment will assist drivers to notice hazards sooner. Furthermore, they found the equipment to be user-friendly and effective at getting their attention. Telematic data collected from the vehicles has been used by Transport for NSW to develop a dangerous intersection model. Following a successful proof-ofconcept at Port Kembla level crossing in 2018, CITI is extending the capability of the testbed with the inclusion of the Unanderra level crossing, one of the busiest crossings in NSW in terms of rail and road traffic with installation forecast to occur in the first guarter of 2021.

During 2019–2020, Transport for NSW completed the migration of the CITI messaging architecture to European Standards and commencing a CITI Asset Refurbishment Program.



A vehicle fitted with a Cooperative Intelligent Transport System (C-ITS)

Building a safe future

During 2019–2020, Transport for NSW advanced work to help better plan, develop, design, operate and maintain the transport system with a view to eliminating future trauma. The following actions were undertaken to deliver this priority area.

Pathways to target setting project

The Road Safety Plan 2021 includes a commitment to set new road safety targets every 10 years to move toward zero trauma. Transport for NSW is continuing delivery of the Pathways to Target Setting project, which has delivered a detailed database of information based on best-practice methods adopted in Sweden, and produced innovative methods for forecasting future road trauma to inform future target setting. This has enabled continued work to identify different combinations of additional road safety measures needed to eliminate future trauma, which will drive safety performance improvements across the transport system and feed into development of future road safety strategies.

Implementing safer road design

During 2019–2020 work continued implementing stereotype road cross section designs for high speed roads, supporting safe design and implementation decisions across major projects. The stereotype design demonstrates how roads can be fitted with flexible safety barriers, widened shoulders and audio tactile line marking as standard practice to achieve Safe System outcomes. In 2019–2020 Transport for NSW delivered route based improvements on the Princes Highway and Mitchell Highway.



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Safety Features

NSW is establishing safety features for mid-block cross sections on high speed roads (80km/h and above), based on the key types of crashes resulting in fatal or serious injuries. These are considered at the strategic or concept stage of any road upgrade planning and must be installed where practicable. Projects delivered under the NSW Safer Roads Program demonstrate the Safe System aligned application of these safety features.

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A strong evidence base

NSW has one of the most comprehensive crash data and information assets in the world. The information available is widely published on Centre for Road Safety website (**roadsafety.transport.nsw.gov.au**) as well as being shared with a range of stakeholders including local councils and NSW Police.

It draws on a range of sources including NSW Police Force crash reports, Transport for NSW licensing and infringements, vehicle registration, NSW Health hospital data and drug and alcohol test results, NSW Ambulance Services data, State Insurance Regulatory Authority (SIRA) Compulsory Third Party claims information, Lifetime Care and Support cases, vehicle safety features dataset and road conditions.

Other achievements include:

- enhancement of road safety data and information with the inclusion of workers compensation claims (related to cases involving work related crashes) and Institute of Trauma and Injury Management cases into the NSW road Safety Data linkage program to inform and enhance the road safety information with insights regarding safety of workers on the road and identification of crashes resulting in most severe injury and trauma to road users.
- publication of crash data and information on heavy vehicles on NSW roads on CRS website. For the first time we have provided detailed, interactive and upto-date information on heavy vehicles involvement in crashes on CRS's website.
- designed and developed a new/smart business intelligence and analytics platform for road safety information and data which facilitates access to data both inside and outside the organisation,

improves exploration and investigation of road safety issues and sets the foundation for analysing road safety data from a Safe System approach.

 continued publication of interactive data visualisations which provide evidence for organisations, researchers and the general public to help with the development of education resources, research and road safety programs and initiatives.

Research

Transport for NSW provides access to our road safety research with a Centre for Road Safety dedicated internet page (**roadsafety. transport.nsw.gov.au/research/index**). Other research funded by the Community Road Safety Fund during 2019 – 2020 included:

NSW Young Driver Telematics Trial

The State Insurance Regulatory Authority (SIRA), in partnership with the NSW Centre for Road Safety, completed a research trial that explored the potential for telematics to improve the safety of young drivers. Over nine months, 717 young drivers from across Sydney and rural and regional NSW participated in the study, which involved having a telematics device installed in their car that collected data on the vehicle's acceleration, speed and braking in real time. The final report for the trial was completed and released to the public in September 2019. The findings suggest that telematics use has an overall positive impact on young driver behaviour. The trial showed the majority of young drivers who received telematics-based feedback on their driving had reduced rates of acceleration, speeding, harsh turning and harsh braking. Feedback from participants was also favourable, with

most trial participants saying the device had some positive impact on their driving and that it helped to reduce their risk-taking behaviour on the roads.

Program evaluations

In 2019-2020 the following program evaluations were completed:

Phase 1 Review of the Driver Licensing Access Program

The Driver Licensing Access Program (DLAP) funds non-government providers to deliver driver licensing access services to disadvantaged Aboriginal people and other disadvantaged communities. It aims to remove the barriers that prevent these people from entering the driver licensing system and to assist them in obtaining and regaining their driver licence and remaining legal and safe drivers. Transport for NSW has delivered a review of DLAP to investigate the appropriateness, efficiency and effectiveness of the DLAP service model and the sustainability of the program. Phase 1 of the review focused on identifying areas of strength in the program, opportunities to improve program management and delivery, and ways to inform program expansion subject to funding. Phase 1 of the review has been completed and concluded that the DLAP service model conforms to best practice and is underpinned by evidence from the literature. Phase 2 of the review is progressing and focused on a more detailed examination of the DLAP service delivery system, how well the program has been implemented, to what extent the needs of the target populations are being met, program challenges and what requirements are needed to support an expanded program.

Evaluation Framework for the Drink and Drug Driving Reforms

Drink and Drug Driving reforms passed by the NSW Government in September 2018 aim to enhance the penalty framework to increase deterrence of drink and drug driving. The Centre for Road Safety has developed an Evaluation Framework for the reforms, in collaboration with various teams across Transport for NSW and the NSW Government, including the Department of Communities and Justice and NSW Police. The Evaluation Framework outlines three phases of evaluation to be conducted from 2019 to 2025, including an operational review, process evaluation and outcome evaluation. The Centre for Road Safety is also working across Transport for NSW and with other NSW Government agencies to monitor implementation of the reforms. These activities will inform the ongoing implementation and adaptation of reform elements to improve delivery and road safety outcomes over time.

Evaluation of the Motorcycle Graduated Licensing Scheme (MGLS)

This evaluation included a review of MGLS best practice, an outcome evaluation of the NSW MGLS, and a process evaluation of the NSW Motorcycle Rider Training Scheme (MRTS). The evaluation found that overall MGLS is closely aligned with current best practice. Comparing relevant crash and trauma trends before and after changes implemented to the MGLS in 2009, a number of positive findings were observed for P2 riders suggesting the MGLS has improved rider safety in NSW. The process evaluation of the MRTS identified that the processes for engaging rider training providers improved in 2017 and 2018 in terms of quality and consistency. The relationship between Transport for NSW policy and program development

staff, Transport for NSW delivery staff and providers was also viewed positively, resulting from recent attention to building relationships between these sectors. The evaluation was completed in October 2019 at a cost of \$249,198.

Evaluation of the 40 km/h speed limit around emergency vehicles trial

The findings from evaluation of introducing the initial rule were mixed. Interviews with kev stakeholders revealed that some felt the rule had assisted to create a safer working environment for emergency service personnel and volunteers, while others reported that slowing to 40km/h was difficult for drivers to achieve, and in some circumstances may create additional road safety risks. Community feedback regarding the rule, in response to social media posts communicating the new rule and received by stakeholder organisations, was generally negative, and highlighted a lack of understanding of the requirements and intent of the rule. The limited number of crashes and reported incidents meant that it was not possible to provide more objective measures on the impact of the rule. The evaluation was completed in September 2019 at a cost of \$95,508. Changes to the road rules were made on 26 September 2019 following the completion of the trial evaluation and based on feedback from the public and stakeholders about the trial. Community feedback since the road rule changes has been generally positive.

NSW speed zoning data has gone open data

Following a long enhancement and data guality improvement process, Transport for NSW has made speed zone data available on the NSW Open Data Hub (opendata. transport.nsw.gov.au/). Speed zone data enables researchers, policy makers, app developers, road safety partners and other interested groups to access the speed limit and speed zoning data for NSW roads. This information assists in making the roads safer by providing speed zoning data to customers where and when it is important and relevant to their journey. Since the Open Data Hub launched in 2016, speed zone data has been one of the most requested dataset from developers and researchers. Speed zone data was also ranked in the top five datasets our community wanted to see in our open data 2017 survey. By making speed zone data accessible on the Open Data Hub, innovators and entrepreneurs are empowered to find new ways to use the data to promote safety on NSW roads.

Community Road Safety Fund expenditure 2019–2020

The Community Road Safety Fund was established by legislation in 2012 and came into effect in 2013, and includes (but is not limited to) all speed camera detected, red-light running fines and camera recorded mobile phone detection revenue. The total Community Road Safety Fund expenditure for the 2019–2020 financial year was \$344 million, of which \$156 million came from camera revenue. The table below details the allocation of funding across the Road Safety Plan 2021 priority areas.

Priority areas	Expenditure 2019-2020 (\$ million)
Savings Lives on Country Roads (total)	125
Road Safety Infrastructure	123
Support Programs	1.8
Liveable and Safe Urban Communities (total)	55
Road Safety Infrastructure	52.8
Support Programs	2.2
Using the Roads Safely (total)	109
Police Enhanced Enforcement Program	27.1
Automated enforcement ¹	40.6
Road Safety Community Education Programs	12.8
School Zone Safety Program	18.5
Support Programs	10.1
Building a Safer Community Culture (total)	30
Road Safety Community Education Programs	5.6
Road Safety School Education Programs	6
Local Government Road Safety Officers Program	5.3
Support Programs	12.8
New and proven Vehicle Technology (total)	9.4
Building a Safe Future & A strong Evidence Base (total)	16
TOTAL	344

¹ NSW Speed Camera Program and Mobile Phone Detection Program

roadsafety.transport.nsw.gov.au

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ISBN 978-1-922549-01-3 Job Ref Number 21.024