Submission No 66

SPEED LIMITS AND ROAD SAFETY IN REGIONAL NSW

Organisation: National Heavy Vehicle Regulator

Date Received: 18 July 2022

NHVR
National Heavy Vehicle Regulator

Submission to the Joint Standing Committee on Road Safety

Inquiry into speed limits and road safety in regional NSW

18 July 2022

Terms of Reference

The Joint Standing Committee on Road Safety (Committee) will inquire into and report on speed limits and road safety in regional NSW (NSW), with reference to:

a) The impact of speed limits and travel times on driver behaviour and safety
b) The impact of improved vehicle technology and road infrastructure
c) The use of variable speed limits
d) Any other related matters.

Introduction

The NHVR's approach to safety

The National Heavy Vehicle Regulator (NHVR) is Australia's dedicated statutory regulator for heavy vehicles (including trucks, buses, and specialist vehicles). The NHVR administers the Heavy Vehicle National Law (HVNL) and in doing so pursues improvements to safety, productivity and efficiency outcomes across the heavy vehicle transport sector and the Australian economy.

The NHVR values safety as its number one priority. As a modern, risk-based regulator, the NHVR approach to safety is underpinned by effective partnerships and data driven intelligence to target the greatest safety risks on Australian roads.

This safety approach moves beyond a reliance on traditional compliance and enforcement to deliver tailored activities and responses that are most likely to drive positive behavioural safety change. This includes promotional and education campaigns, ensuring physical and mental health are key safety priorities, and empowering the adoption of improved and innovative safety practices. Under this approach, the focus of regulatory action is on holding to account the parties most responsible for the safety risk.

The NHVR also plays a key role in breaking down the barriers to the adoption of modern and safer vehicles and technologies that can contribute to improved safety. In particular, the NHVR administers and pursues the increased adoption of the Performance Based Standards (PBS) Scheme. PBS vehicles enable operators to use innovative and optimised vehicle design. The latest PBS research has found that PBS vehicles are 60 per cent safer than their conventional equivalents.

The NHVR's partnership approach to safety is outlined in more detail in the Heavy Vehicle Safety Strategy 2021-2025 and annual Action Plans.

Response to Inquiry

The NHVR appreciates the opportunity to provide a submission to the Committee's Inquiry into speed limits and road safety in regional NSW. The regulator has a unique understanding of regional safety issues through its daily interaction with the key parties that contribute to road safety – this includes road managers, the heavy vehicle industry, community and local businesses.

While speed limits fall under the responsibility of the states and territories, as outlined above, the NHVR works closely with partner agencies, industry and the broader community to drive behaviour and organisational culture changes that can impact the prevalence of speeding.

This submission provides an outline of the NHVR's key activities in this space, including:

- overview of the performance of heavy vehicles in regional NSW – based on data from the NHVR Roadworthiness Survey and Industry Safety Survey

- the enforcement of the Chain of Responsibility provisions – which is the key mechanism to manage safety under the HVNL

- delivery of key education campaigns to help other road users to drive around heavy vehicles, including We Need Space and Don't #uck with a Truck

- increased and ongoing adoption of heavy vehicle safety technologies and ensuring heavy vehicle infrastructure supports the adoption of safer and innovative vehicles.

An Overview of Heavy Vehicle Safety in Regional NSW

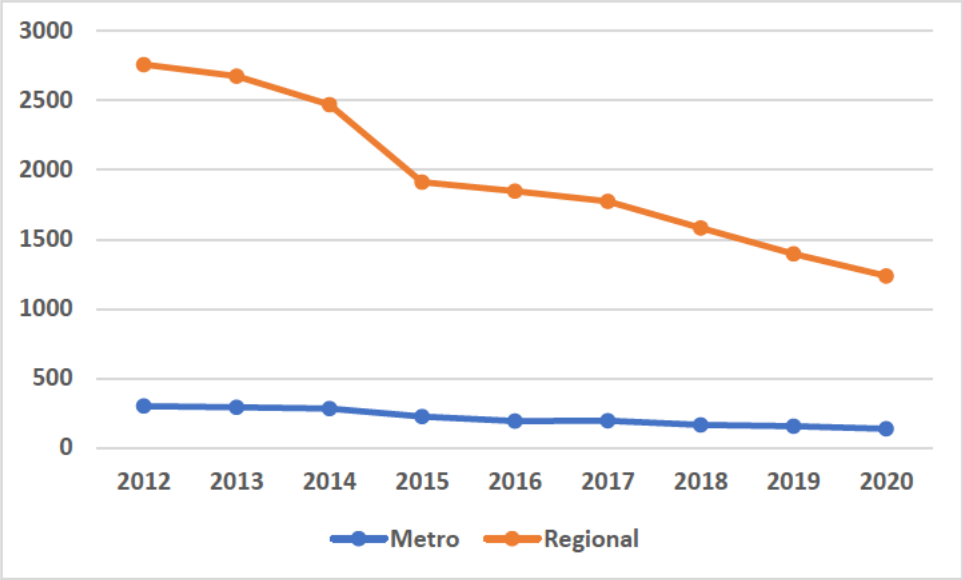
Heavy Vehicle Crash Data

Data from Transport for NSW regarding heavy vehicle crashes shows that since 2012, there has been a consistent downward trend in heavy vehicle crash incidents in regional NSW (Table 1).

Despite this trend, crashes in regional NSW are still higher than those in metropolitan locations. In the period 2012-2020 there were 17,646 heavy vehicle crashes in NSW, with 89% of those crashes occurring in regional locations. Comparatively, 11% of those heavy vehicle crashes occurred in metropolitan locations (specifically Greater Sydney, comprising Wollongong and the Central Coast).

For all heavy vehicle crashes that occurred in NSW in 2012-2020, there were 518 fatalities recorded, with 91% of the fatalities occurring in a regional location.

Table 1: Heavy Vehicle Crashes in NSW (2012-2020)



Source: Transport for NSW

Heavy vehicle roadworthiness performance

The NHVR undertakes regular roadworthiness checks of the heavy vehicle fleet by working with industry and undertaking local and national operations. These checks allow the NHVR, partner agencies and industry to continue to target efforts at key safety areas.

In 2021, the NHVR undertook its second major National Roadworthiness Survey that provides a comprehensive health check of Australia's heavy vehicle fleet. Authorised officers from the NHVR and partner agencies conducted random mechanical inspections of 8,339 vehicles between May and July 2021 across all Australian states in regional and metropolitan areas.

The Roadworthiness Survey identified that for freight hauling in regional NSW, 27% of vehicles were found to have a minor non-conformity, with a further 7% having a major non-conformity. These figures are consistent with the roadworthiness compliance outcomes for regional areas in other states and with the NSW metropolitan areas.

Heavy Vehicle Safety Management Systems (SMS)

A key way the heavy vehicle industry can improve the management of safety hazards and risks in their business is by having a Safety Management System (SMS). The NHVR conducts a biennial Industry Safety Survey to understand the uptake and use of SMS by industry.

Our 2020 Industry Safety Survey found that nationally for heavy vehicle operators and drivers that focus on the primary production and farming sector, 84% of respondents were aware of the NHVR SMS guidance materials and 62% of respondents stated they monitor safety performance in their business.

As an outcome of this result, the NHVR developed a 9 Step SMS Roadmap that provides simple templates, quick guides, and toolbox talks that can be targeted to suit business needs regardless of the size of heavy vehicle operations.

Our latest Safety Survey is currently underway, which will provide an update on the implementation of SMS by industry as well as an overview of what is working well and areas for improvement. The outcome of this survey will be factored into the NHVR's safety work program.

The Impact of Speed Limits and Travel Times on Driver Behaviour and Safety

The NHVR's regulatory model is underpinned by a shared responsibility for safety across industry, the supply chain, government and the community. The safety of road transport is influenced by the:

- actions of transport workers
- decisions of transport operators
- functioning of the transport supply chain
- state of heavy vehicles and equipment
- adequacy of road infrastructure
- behaviours of people outside the transport industry, including the general public.

Greater collaboration and cooperation between all parties involved in heavy vehicle road transport will ensure longer term and positive behavioural change that will improve heavy vehicle road safety outcomes, including speeding.

Chain of Responsibility

The primary mechanism for managing heavy vehicle speed in the HVNL is the primary safety duty (also known as Chain of Responsibility).

This duty represents a shared responsibility, and it requires operators and key contracting parties who can influence heavy vehicle safety to manage safety risks arising from their activities, so far as is reasonably practicable.

The duty seeks to address unlawful business practices that could contribute to unsafe driving practices such as speeding and exceeding legislated heavy vehicle driver work hours. The HVNL prohibits requesting, directing, or contracting in a way that would cause or encourage a driver to breach fatigue requirements or speed limits or that would result in another party in the Chain of Responsibility (CoR) causing a driver to breach fatigue requirements or speed limits.

Speeding pressures under the Chain of Responsibility can relate to:

- tight or unrealistic delivery times or an unrealistic number of deliveries in a short window of time
- paying drivers per kilometre, rather than per hour, and fixing the kilometre rate at a level that incentivises drivers to speed or not take rest breaks
- pressuring drivers to take on more work that results in them having to speed to meet unrealistic work expectations and deadlines.

The NHVR addresses heavy vehicle safety through multiple interventions including:

- production of regulatory guidance in the Master Industry Code of Practice and regulatory advice
- the Heavy Vehicle Confidential Reporting Line, to receive notifications of unsafe and noncompliant behaviour
- enforcement of the primary safety duty and noncompliance with ADR 65 (Maximum Road Speed Limiting for Heavy Goods Vehicles and Heavy Omnibuses)
- enforcement of s26E of the HVNL (which prohibits various actions on the part of third parties that may cause a driver to exceed a speed limit).

In June 2022, the NHVR released specific regulatory advice (search regulatory advice on the NHVR website) that outlines responsibilities when it comes to entering into contracts that can increase the prevalence of speeding and increased safety risks on our roads.

Managing fatigue in relation to speed

The Chain of Responsibility provisions also address unlawful business practices that can impact a person suffering from the impacts of fatigue. This can relate to

- rostering that does not allow drivers to comply with work and rest requirements
- scheduling or expectations that loading and unloading activities will be undertaken during rest breaks
- rostering which could result in fatigue accumulation in drivers, for example long working hours for consecutive days
- delivery windows with no flexibility that do not take into account delays.

Research has shown that fatigued drivers are more likely to undertake risk-taking behaviour such as erratic speed control or speeding to meet scheduled waypoints. In fact, poor speed control is one of the behavioural indicators used to determine if drivers are impaired by fatigue.

As it is difficult for drivers to self-assess fatigue impairment, the NHVR has commenced investigations into the potential of technology to identify biological indicators of driver fatigue.

The NHVR's work on fatigue monitoring has found that Fatigue and Distraction Detection Technologies (FDDT) that detect fatigue through eye movements have the potential to be 'game-changing' as it allows drivers and operators to better predict and avoid driver fatigue impairment.

The NHVR's work in this area and consistent advice from the heavy vehicle industry has also shown that there is not a one size fits all approach to fatigue work and rest times. It is therefore essential to focus on ensuring a driver is fit for duty and that they have the ability to rest when they are tired. The NHVR is pursuing tailored schedules that best address individual needs within outer work and rest limits. Success in achieving this approach requires positive collaboration between operators and drivers, including drivers having the agreed authority to stop when they are not fit to drive.

The fatigue monitoring work has also confirmed the importance of readily available and accessible rest areas so that heavy vehicle drivers can rest when required. The increased establishment of heavy vehicle rest area infrastructure on rural and remote roads encourages better driver rest and mitigates against potential increased risk-taking behaviours by drivers, including speeding. Early data gained from sharing of FDDT information by industry identifies locations where rest areas can assist in regional areas.

Driver safety education and information campaigns

Crash data consistently shows that light vehicles are over-represented in heavy vehicle crashes. Most recently, the recent *National Truck Accident Research Centre Major Accident Investigation Report 2021* identified that light vehicles were found to be the at-fault party in 78% of fatal multi-vehicle crashes involving a heavy vehicle and a light vehicle.

Advice from industry suggests that comparative speed, which is particularly prevalent on regional roads, can add to the increased dangerous safety behaviour in an attempt to pass heavy vehicles. This is predominantly in situations where heavy vehicles are permitted to travel at 100km/hr and light vehicles travel at 110km/hr.

A lack of understanding about driving a light vehicle around a heavy vehicle, including required stopping distances and field of vision limitations, can contribute to on-road interactions that increase safety risk. Light vehicles overtaking heavy vehicles, especially when heavy vehicles are turning or travelling on a highway, create situations where the risk of a crash is increased.

Over the past few years, the NHVR has developed and released key road safety campaigns to better assist light vehicle drivers in their interactions with heavy vehicles. Two key campaigns include:

- **We Need Space:** Partnership with Coles on the *We Need Space* campaign educates all road users about how to share the road safely with heavy vehicles. Coles trailers carried by Linfox and Toll have become giant travelling billboards in NSW, Queensland, and Victoria, with messaging urging road users to stay out of truck blind spots, learn how to overtake trucks safely, and avoid overtaking turning trucks.

This campaign includes a series of Community Service Announcements fronted by Supercars Champion Garth Tander and rolled out *We Need Space* educational resources through driver education programs and with state and territory transport authority partners.

- **Don't #uck with a Truck:** Last year, the NHVR developed and released a road safety awareness campaign targeting Learner (L) and Provisional (P) licence holders. The *Don't #uck With A Truck* campaign demonstrates how L and P licence holders can drive safely around trucks, including rules to follow when trucks are turning, stopping, and how to overtake a truck.

  It is essential L and P licence holders have the information and skills to stay safe around trucks and develop positive long term driving behaviours.

These campaigns will continue to be rolled out at targeted events and through mainstream media to continue to promote the importance and understanding of how to drive safely around trucks.

The impact of improved vehicle technology and road infrastructure

The NHVR supports the need to improve or expedite the uptake of safety technology in heavy vehicles, as well as the design and delivery of infrastructure that meets the needs of the current and future heavy vehicle fleet.

Industry and manufacturer improvements in technology

Over the past ten years, the heavy vehicle industry has made a significant investment in improved safety practices and technologies.

As the design of vehicles has advanced, the range of manufacturer safety systems offered has also grown. This includes both optional safety systems and foundational systems that are now part of the standard safety pack when purchasing a heavy vehicle.

Advanced Emergency Braking Systems (AEBS)

In its simplest terms, AEBS is an advanced active safety system fitted to vehicles that scans or monitors the area in front of the vehicle and identifies potential obstacles. In its first phase, the warning phase, where the vehicle determines that it is likely to impact an obstacle, a warning is given to the driver. Should the driver not intervene or not make a sufficient intervention (for example, the driver does not brake appropriately) the system then enters the active phase and automatically applies the vehicle's brakes.

AEBS technology seeks to prevent an incident from occurring or, where it cannot be avoided, by reducing as much speed as possible to decrease the severity of the incident. The system is agnostic to why the vehicle is travelling at an inappropriate speed relevant to its approach to a potential obstacle. This means it is beneficial for application across several scenarios, such as speeding and driver distraction.

AEBS is an example of a foundational technology that is being mandated in Australia. AEBS will be progressively introduced on all new motor heavy vehicles in Australia from November 2023.

Road Speed Sign Recognition

As more advanced vehicle systems and components are fitted to a heavy vehicle as part of mandatory safety systems, an opportunity is created for vehicle manufacturers to apply this technology and these functions in supplementary systems. Due to the advanced systems being adopted in a larger number of vehicles that utilise cameras, such as lane departure warning, some vehicle manufacturers have taken the opportunity to introduce a supplementary safety system that uses these cameras to read or recognise road speed signs.

RSSR enables the vehicle to obtain important information that may improve road safety, namely:

- smart cruise control systems that prompt the driver that the speed limit has changed and requesting a change be made to the cruise control system

- notification systems where the vehicle provides a warning when the vehicle exceeds the posted limit and continues to display the speed limit on the dash to provide the driver a point of reference when travelling between speed signs.

Introduction of increased technologies into the Australian fleet

The NHVR's Heavy Vehicle Safety and Environmental Technology Uptake Plan (SETUP) is a program of work that seeks to accelerate the introduction of safety and environmental technologies into the Australian heavy vehicle fleet. This includes promoting and reducing barriers (such as width and mass) to increase the uptake of safer heavy vehicles.

Key SETUP deliverables the NHVR seeks to achieve in consultation with government and industry include:

- remove dimension barriers that prevent the uptake of devices to improve a driver's visibility (delivered February 2021)

- advocate for harmonising Australian standards with the markets where heavy vehicles are sourced to realise the benefits of safety technologies mandated in those markets

- work with road managers and industry to determine how access and productivity can be improved for vehicles fitted with modern safety and environmental technologies

- provide fleet purchasing guidance and safety and environmental technology education to industry to assist in making informed purchasing decisions.

Performance Based Standards

The uptake of safer and more productive vehicles including Performance-Based Standards (PBS) vehicles, will continue to improve safety on our roads.

PBS vehicles are found to be 60 per cent safer than their conventional equivalents and improve productivity outcomes by an average of 15 to 30 per cent. PBS combinations have the capacity to transport more freight per trip therefore reducing the total number of heavy vehicles on our roads.

At present, only PBS truck and dog combinations are provided widespread network access under a notice compared to other types of innovative vehicles. The success of this combination has shown

that when access restrictions and uncertainty are removed, a safer and more efficient PBS combinations becomes the first choice of combination by industry.

We have a collective responsibility to ensure national and local policies better support the uptake of these safer and more productive vehicles. Importantly, this includes significantly expanding the number of PBS networks available to heavy vehicles.

Infrastructure that caters for heavy vehicle access

Newer, safer, and more productive heavy vehicles are larger and can carry longer loads. This means that infrastructure planning and investment decision makers need to consider changes to existing and future infrastructure to accommodate the modern heavy vehicle fleet. This includes, for example, heavy vehicle parking bays, fuel stations, rest stops, roundabouts, and heavy vehicle inspection areas.

Consultation with industry and governments has highlighted examples where everyday general access heavy vehicles (e.g. waste removal trucks) and emergency vehicles (e.g. fire engines) could not service properties safely and effectively because of inadequate site and road designs. Many industrial and commercial developments and public roads, which were constructed for smaller and lighter vehicles, are unable to safely accommodate the modern heavy vehicle fleet.

There is a need to ensure that planning and design standards accommodate innovation in the heavy vehicle fleet, which will support the uptake of modern vehicles with better safety technologies. Good road design reduces friction between heavy vehicles and sensitive land uses and minimises the interaction between heavy vehicles and other road users.

Key design parameters that can improve heavy vehicle road safety include:

- road infrastructure cross-sections that safely accommodate heavy vehicles and other transport modes (including on and off-road infrastructure)
- lane and intersection geometry that allows for safe movements of the design vehicle (for example, curvature and cambers)
- grade separated crossings and intersections and removing conflicting manoeuvres or controlled movements if grade separation is not possible
- reduction in travel speed through centres and urban environments
- physical separation between heavy vehicles and other road users on key freight routes
- predictable, logical, and clear heavy vehicle access management (e.g. the location and frequency of driveways, driveway designs, and control mechanisms such as traffic lights and roundabouts)
- reasonable and predictable transitions between different road conditions
- sight distance, clear sightlines, and appropriate lighting
- visible, legible, logical, and periodic signage.

NHVR Strategic Local Government Asset Assessment Program

The NHVR's Strategic Local Government Asset Assessment Project (SLGAAP) is an Australian Government-funded initiative to assist road managers to better understand their on-road assets (e.g. bridges and culverts) by providing engineering assessments, and support road managers' decision-making capability for heavy vehicle access. Informed access decisions help ensure that heavy vehicles travel on the most appropriate route.

The SLGAAP focuses on national heavy vehicle assets that support the local and national freight task. This optimises heavy vehicle access on the local road networks across Australia and can help to reduce additional travel time, particularly on regional roads.

The NHVR continues to build capability with road managers so they can make informed decisions about heavy vehicle access. We conduct regular webinars where specific heavy vehicle access is discussed, and produce educational material to assist road managers to understand the challenges associated with access decisions in relation to newer, safer, and more productive heavy vehicles.

NATIONAL
HEAVY
VEHICLE
REGULATOR

HEAVY VEHICLE SAFETY STRATEGY

2021 – 2025

NHVR

Foreword

We're seeing encouraging trends in heavy vehicle road safety, with an average of almost four per cent fewer lives lost in heavy truck crashes each year over the past three years. However, we believe there's much more that can be done to drive this number down.

Significant safety gains lie ahead – provided we, the industry and its supply chain, government and the community work together to make them happen. Effective partnerships will be pivotal to delivering improved safety outcomes – not just for industry but for all those who use our roads.

The *NHVR Heavy Vehicle Safety Strategy 2021–2025* (the Strategy) sets out our strategic ambitions to lead industry towards a safer future. It supports our agenda to create positive change in individual behaviour and industry safety culture, and to drive uptake of a modern, safer heavy vehicle fleet that reduces the likelihood and impact of crashes.

The Strategy not only encapsulates all that we're currently doing, it also plots a course for the next five years.

As a modern, risk-based regulator, we target the greatest safety risks on our roads by using data-driven intelligence. This enables us to better identify non-compliant behaviours and reduce the rate of repeat offending. Greater data-sharing between entities will increase this capability and provide a more complete national picture.

However, we recognise that education and the encouragement of better safety management practices are just as powerful as enforcement, and so we're increasing our efforts in this regard. We're also focusing more attention on promoting the adoption of safety technology by industry and ensuring regulation supports ground-breaking, life-saving innovation.

Furthering our initiatives to educate light vehicle drivers how to safely share the road with heavy vehicles will also be a key priority into the future.

Together we can make a difference, and we look forward to working with our customers, regulatory partners and communities to save lives on Australia's roads.

The Hon Duncan Gay
Chair of the Board

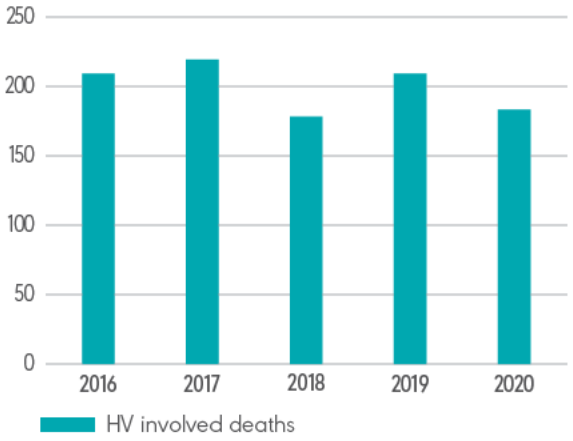
Sal Petroccitto
Chief Executive Officer

Introduction

A NHVR primary objective is to promote public safety.

Through its commitment to reducing the number of crashes, fatalities and serious injuries across the heavy vehicle road transport industry and its supply chain, the NHVR will contribute to achieving the targets outlined in the *National Road Safety Strategy 2021–2030*.

Heavy Vehicle Involved Fatalities – Australia



Source: BITRE, Fatal Heavy Vehicle Crashes Quarterly Bulletin, October to December 2020

The NHVR is setting an ambitious agenda to:

Create positive change in individual behaviours and culture to improve safety.

Drive uptake of a modern, safer heavy vehicle fleet that reduces the likelihood and impact of crashes.

Influence road network design and use to support road safety.

Partnerships - The NHVR approach to heavy vehicle safety

The NHVR delivers a regulatory model that provides clear accountabilities, and encourages and empowers the entire heavy vehicle industry, including buses and specialist vehicles, to embrace a positive and innovative safety culture.

The NHVR focuses on:

- partnering with industry and the supply chain to lead behavioural and cultural change that improves safety
- collaborating with industry, regulatory partners, including jurisdictional transport agencies and police, and government to drive a consistent national safety approach
- acquiring, sharing and using data to lead decision-making in relation to safety
- educating the broader community about shared responsibility for road safety
- targeting regulatory activities towards unsafe and high-risk drivers, operators and Chain of Responsibility parties.

Road safety is not simply a road transport problem. Transport safety outcomes are determined by many factors, including the:

- actions of transport workers
- decisions of transport operators
- functioning of the transport supply chain
- state of heavy vehicles and equipment
- adequacy of road infrastructure
- behaviours of people outside the transport industry, including the general public.

The responsibility for improved safety outcomes is shared across industry, the supply chain, government and the community. Other enforcement and regulatory partners have key powers and responsibilities, and collect key information, that can deliver improved safety outcomes for the public in relation to heavy vehicles.

Data-driven, risk-based enforcement underpins the Strategy. However, the shared accountability for road safety highlights the need for greater collaboration and cooperation between the NHVR and other road safety stakeholders to achieve improved heavy vehicle safety outcomes.

The Strategy lays the foundation to move beyond reliance on traditional compliance and enforcement approaches to embrace new types of regulatory activity that will deliver long-term safety outcomes for the heavy vehicle industry and other road users. For the NHVR, this means expanding its efforts beyond traditional regulatory responses, to include greater collaboration with key regulatory partners, delivering promotional and education campaigns, proactively influencing policy changes, and other non-traditional approaches to dealing with heavy vehicle road safety.

Collaboration and understanding across the supply chain are critical to influencing road safety outcomes. The NHVR is uniquely positioned to 'join the dots' to help improve safety in the heavy vehicle industry.

Create positive change in behaviours and culture to improve safety

NHVR priorities:

- Support industry to manage human factors that contribute to heavy vehicle crashes, with a specific focus on fatigue.
- Educate, inform and empower operators and the supply chain to improve their organisational safety culture:
  - support the uptake of safety management systems
  - address driver health (including mental health and acute health) and other human factors that play a role in heavy vehicle safety
  - enable Chain of Responsibility parties to successfully discharge their legislative safety duty obligations.
- Undertake visible and consistent compliance activities:
  - ensure the right person is held legally responsible for non-compliance with the Heavy Vehicle National Law (HVNL).
- Improve road users' understanding of driving safely around heavy vehicles and promote road safety awareness initiatives about sharing the road.

The role of human factors in heavy vehicle safety

Human factors contribute to almost all heavy vehicle crashes. Motivations, habits, external factors and context-specific triggers all contribute to how people behave. Changing specific unsafe behaviours can be difficult. The NHVR is seeking to enable industry to lead behavioural change in key human factors areas that affect heavy vehicle safety.

> Human factors that relate to heavy vehicle operation include driver fatigue, being distracted while driving, driver fitness and impairment, pressure to complete a driving task within a specified timeframe, driver competency and situational experience and awareness.

Mental health is a significant issue impacting the Australian road transport industry and broader community. Mental health issues can have widespread impacts upon a person's life, including their employment. The NHVR supports an 'industry-for-industry' approach to addressing mental health issues. It will partner with organisations to advocate for the prevention and control of mental health disorders in truck drivers and logistics workers nationally, and promotion of healthier options around diet, exercise and individual wellbeing.

The link between human behaviours and industry and supply chain culture

The behaviour of individuals is strongly influenced by the culture that exists within their organisation, industry or society in general. A positive safety culture can result in improved organisational safety and performance outcomes. Expectations, rewards and consequences are all components of workplace culture that can impact on individual behaviours. A positive safety culture thrives when employees know the appropriate safety behaviours that lead to rewards.

Organisational cultural change is often necessary to support individual behavioural changes that reduce the risk of crashes and crash severity. The NHVR recommends that all operations should have established safety management systems, suited to the size and complexity of their business operations.

Long-term, sustainable and ongoing improvements to safety outcomes in the heavy vehicle industry depend on behavioural change, underpinned by organisational cultural change, that:

- supports drivers to manage their fatigue
- improves the physical, mental and acute health of drivers
- improves driver fitness, including the management of impaired driving
- improves competency in driving and loading tasks
- improves driver awareness of vulnerable road users, including cyclists and pedestrians
- reduces distraction from drivers' work environments
- reduces time pressures on drivers that contribute to unsafe on-road behaviour
- encourages drivers to drive at appropriate speeds.

How the NHVR will change behaviours and industry and supply chain culture

The NHVR will empower industry participants to deliver behavioural and organisational cultural change that leads to continuous improvement in safety by promoting:

- **effective fatigue risk management systems to provide flexibility to industry and better manage fatigue safety risks**
- **the uptake of fatigue and distraction detection technology.**

It will also provide clear guidance to individual parties on:

- **the roles and obligations they have under the HVNL safety duty**
- **tools to embed a positive safety culture and to successfully fulfil the safety duties for which they are responsible.**

The NHVR wants to embed road safety thinking as business as usual for everyone, by including working in partnership with stakeholders to change behaviours to align with safer practices across industry and the community.

Implementation and appropriate use of a safety management system can be one of the most effective ways for organisations to embed a positive safety culture and comply with their legislative safety duty obligations. Because industries and organisations vary significantly, there is no one-size-fits-all safety improvement system that meets the needs of all organisations.

Delivering visible, targeted, compliance activities

The NHVR will implement a national regulatory model that delivers a risk-based, intelligence-led regulatory approach that targets the greatest safety risks.

The NHVR's risk-based approach to regulatory activities involves setting priorities based on the likelihood of adverse outcomes and the potential seriousness of these outcomes. Once a risk has been identified, the NHVR's activities are tailored and deployed in proportion to the safety risk.

The NHVR recognises the importance of consistent application of the HVNL. It will ensure visible, targeted enforcement is deployed and directed at those drivers, operators and supply chain parties that are not willing to comply with the HVNL, and pose a serious safety risk.

Influencing other road users' behaviour around heavy vehicles

The NHVR will undertake education and information campaigns with other parties aimed at non-heavy-vehicle road users to improve driving behaviours around heavy vehicles.

Lack of understanding about driving a light vehicle near a heavy vehicle, including required stopping distances and field-of-vision limitations, can contribute to on-road interactions that increase safety risk. Light vehicles overtaking heavy vehicles, when heavy vehicles are turning or travelling on a motorway, also create situations where the risk of a crash is increased.

Drive uptake of a modern, safer heavy vehicle fleet that reduces the likelihood and impact of crashes

NHVR priorities:

- Enable industry to increase heavy vehicle safety technology uptake.
- Support the uptake of newer, safer, more-productive vehicles.
- Target operators that do not properly maintain heavy vehicles.

Increase industry uptake of safety technology

The NHVR will:

- **implement the NHVR *Vehicle Safety and Environmental Technology Uptake Plan***
- **identify changes to Australian Design Rules that may expedite safety technology uptake.**

As heavy vehicle designs evolve, the development of new technology is playing a growing role in improving safety in the heavy vehicle industry. Technology specifically intended to assist the driver to safely operate the vehicle has also emerged and is becoming more common in heavy vehicles. Safety technology systems have the proven potential to assist the driver of a vehicle to operate the vehicle in a safer manner, and to reduce the number and severity of road crashes.

While the available technologies have progressively increased over recent years, the adoption of these technologies into the heavy vehicle fleet remains slow. The NHVR strongly supports the uptake of new technologies in the Australian heavy vehicle market, and the reduction of operational barriers to help industry, and the community realise the benefits of a more modern fleet.

Continue to support the uptake of safer and more-productive vehicles

The NHVR will empower industry to increase the range of innovative, safer vehicles adopted via a reformed Performance Based Standards scheme (PBS).

PBS vehicles deliver significant safety and productivity benefits. Supporting the industry to innovate in this area is a key priority for the NHVR. The NHVR will implement key improvements to incentivise industry uptake and accelerate growth in the PBS scheme.

To ensure the heavy vehicle industry can meet the country's growing freight demand, an enhanced focus on a reformed PBS scheme will allow more goods to be delivered with fewer vehicles, in a safe manner. The NHVR will build the new scheme on the established PBS scheme.

Vehicle maintenance

The NHVR will establish a national heavy vehicle inspection framework to identify and target operators that do not maintain heavy vehicles appropriately.

Ongoing maintenance of heavy vehicles plays a role in reducing the likelihood of a crash occurring. Ensuring vehicles comply with heavy vehicle maintenance standards is fundamental to heavy vehicle safety, and is therefore an essential part of the national heavy vehicle regulatory regime.

Influence road network design and use to support road safety

NHVR priorities:

- Collaborate with decision-makers to help design and deliver infrastructure that is safe for heavy vehicles:
  - provide information and advice to jurisdictions on heavy vehicle interactions with infrastructure to help inform future safety-related infrastructure decisions.
- Partner with stakeholders to improve the number and quality of rest areas.
- Work with road managers to improve network access and road use to support heavy vehicle and other road user safety.

Safe network design

The NHVR will seek involvement in, and provide input into, related policy decisions that affect improved and innovative safety outcomes.

Road network design and infrastructure are key factors in facilitating safe heavy vehicle movements.

Design standards should be progressively and suitably updated to provide access to modern vehicles that are safer, more productive and better for the environment.

Number and quality of rest stops

The NHVR will provide advice to road transport agencies on the availability and quality of facilities that assist heavy vehicle drivers to manage fatigue.

Fatigue is a problem for many heavy vehicle drivers in the long-distance transport industry. While there are a range of initiatives that are directed at heavy vehicle drivers to address fatigue-related issues, it has been proposed that good-quality rest stops could reduce cases of heavy vehicle crashes caused by driver fatigue, inattention, and vehicle or load-related issues.

Safe heavy vehicle road use

The NHVR will work in collaboration with industry and governments to identify safe and consistent access solutions for the current and future freight task.

Industry and road managers have a role to play by ensuring the right heavy vehicles are using the right road at the right time. A range of factors may lead to operators taking unlawful actions and using roads without an appropriate authority/permit. Inappropriate road use can lead to increased risk to community safety and may compromise infrastructure, including bridges.

National Heavy Vehicle Regulator
PO Box 492, Fortitude Valley QLD 4006

P 1300 MYNHVR (1300 696 487)
E info@nhvr.gov.au
www.nhvr.gov.au

NATIONAL HEAVY VEHICLE REGULATOR

HEAVY VEHICLE SAFETY STRATEGY ACTION PLAN

2021–2022

The Heavy Vehicle Safety Strategy Action Plan outlines the activities and projects that the NHVR will undertake during the 2021–22 financial year to support the delivery of the Safety Strategy. A new Action Plan will be released annually and include details of the activities that the NHVR will undertake each financial year to support the delivery of the Safety Strategy.

HEAVY VEHICLE SAFETY STRATEGY

2021–2025

The NHVR's Heavy Vehicle Safety Strategy 2021–2025 articulates the NHVR's ambitions in relation to achieving better heavy vehicle safety outcomes and reducing the number and seriousness of crashes involving heavy vehicles.

The Safety Strategy reflects the NHVR adoption of a "Partnerships" approach to delivering improved heavy vehicle safety. Effective partnerships with regulatory, industry and community partners will enable the NHVR to initiate, support and contribute to work programs that lead to sustainable safety improvements for all road users.

The NHVR will seek to improve safety in the heavy vehicle industry by:

- Creating positive change in individual behaviours and culture to improve safety
- Driving uptake of a modern, safer heavy vehicle fleet that reduces the likelihood and impact of crashes
- Influencing road network design and use to support road safety.

NHVR

HEAVY VEHICLE SAFETY STRATEGY ACTION PLAN 2021–22

STRATEGY THEME	STRATEGY PRIORITY	ACTION	DELIVERABLE
Create positive change in individual behaviours and culture to improve safety **PEOPLE** 	Support industry to manage human factors that contribute to heavy vehicle crashes, with a specific focus on fatigue.	Promote uptake of safer fatigue risk management options and technology to better address individual driver fatigue safety.	1. Encourage the uptake of Advanced Fatigue Management through new and clearer guidelines and direct engagement with transport companies. 2. With industry and regulatory partners, develop a Fatigue Risk Management Systems Standard and commence a trial. 3. Work with technology providers and industry to increase the uptake of Electronic Work Diaries and Fatigue and Distraction Detection Technology.
	Educate, inform and empower operators and the supply chain to improve their organisational safety culture.	Promote and educate industry in safety management, and develop guidance material that can be practically applied by industry in target sectors.	4. Deliver improved and more accessible Safety Management System material for industry, focused on practical and easy to implement safety business practices and initiatives. 5. Develop clear and targeted Regulatory Advice to assist industry to comply with the HVNL, including for the safe loading of freight containers, and managing risks associated with workers that are inadequately trained.
		Support industry to develop, promote and adopt codes of practice targeting sector-specific risks.	6. Deliver Improved industry Codes of Practice guidelines and templates in consultation with industry and regulatory partners. 7. Assist industry to deliver sector specific codes of practice with a particular focus on Log Haulage; Waste, Effluent and Cranes; Agricultural Commodities; and Livestock Loading.
	Undertake visible and consistent compliance activities.	Deliver targeted on-road operations and intercepts focusing on high-risk safety behaviours and recidivist offending.	8. Update and publish a new National Compliance and Enforcement Strategy underpinned by risk-targeted activities. 9. Undertake investigations and prosecutions of serious safety breaches across industry and the supply chain targeting greatest safety risks. 10. Conduct intelligence led national road safety operations alongside regulatory and enforcement partners.
	Improve road users' understanding of driving safely around heavy vehicles and promote road safety awareness initiatives about sharing the road.	Develop, promote, and deliver road safety education campaigns to raise community awareness of how to safely share the road with heavy vehicles.	11. With key partners, continue the NHVR's *We Need Space* road safety education campaign to raise community awareness of how to safely share the road with heavy vehicles. 12. Conduct a nationwide campaign, with industry and governments, to educate young light vehicle drivers about safely sharing the road with heavy vehicles. 13. Partner with industry stakeholders to promote the importance of not illegally tampering with vehicle speed limiters.
Drive uptake of a modern, safer heavy vehicle fleet that reduces the likelihood and impact of crashes **VEHICLES** 	Enable industry to increase heavy vehicle safety technology uptake.	Influence changes to the regulatory framework to recognise technology.	14. Provide fleet purchasing guidance to increase awareness and uptake of vehicle safety and environmental technology. 15. With industry partners, advocate for the removal of barriers to the uptake of vehicles fitted with modern safety and environmental technologies.
	Support the uptake of newer, safer, more-productive vehicles to reduce the average heavy vehicle fleet age.	Promote the adoption of safer, cleaner and more efficient heavy vehicles and environmentally sustainable technologies.	16. Working with road managers, expand gazetted networks for PBS vehicles. 17. Implement a 'generic tyre' approach in the PBS scheme, in consultation with industry, to simplify PBS vehicle assessment and provide operators with flexibility in choice of tyres. 18. Improve PBS vehicle design and approval processes in consultation with industry.
	Target operators that do not properly maintain heavy vehicles.	Conduct a National Roadworthiness Survey.	19. Publish the findings of the National Roadworthiness Survey to improve industry awareness of identified issues and help prioritise compliance effort. 20. Use the results from the National Roadworthiness Survey to develop and test a Vehicle Risk Profile tool to assist in determining the safety risks associated with specific vehicles, combinations or components.
Influence road network design and use to support road safety **INFRASTRUCTURE** 	Collaborate with decision-makers to help design and deliver infrastructure that is safe for heavy vehicles.	Seek involvement in, and provide input into, infrastructure policy decisions that affect the heavy vehicle industry.	21. Provide road managers with information and insights on heavy vehicle issues, through national and other working groups related to infrastructure policy, planning, and investment. 22. Work with state agencies and other regulators to reduce the risks of heavy vehicle crashes at rail level crossings.
	Partner with stakeholders to improve the number and quality of rest areas.	Provide advice to road transport agencies on the availability and quality of facilities that assist heavy vehicle drivers to manage fatigue.	23. Provide transport agencies and other road managers with data, information and advice to assist decision making in relation to truck rest area planning, design and operation. 24. Continue to work with *Healthy Heads in Trucks and Sheds* to improve facilities at truck rest areas.
	Work with road managers to assess infrastructure assets to support heavy vehicle safety.	Partner and Collaborate with industry and governments to identify safety solutions for the current and future freight task.	25. Support safe heavy vehicle access through infrastructure assessments and development of assessment tools for road managers under the Strategic Local Government Asset Assessment Project. 26. Through national notices, enable the uptake of safer, higher productivity vehicles to reduce the number of vehicles required for the same freight task. 27. Provide road network asset information through the NHVR Portal to support safer access decisions by road managers.