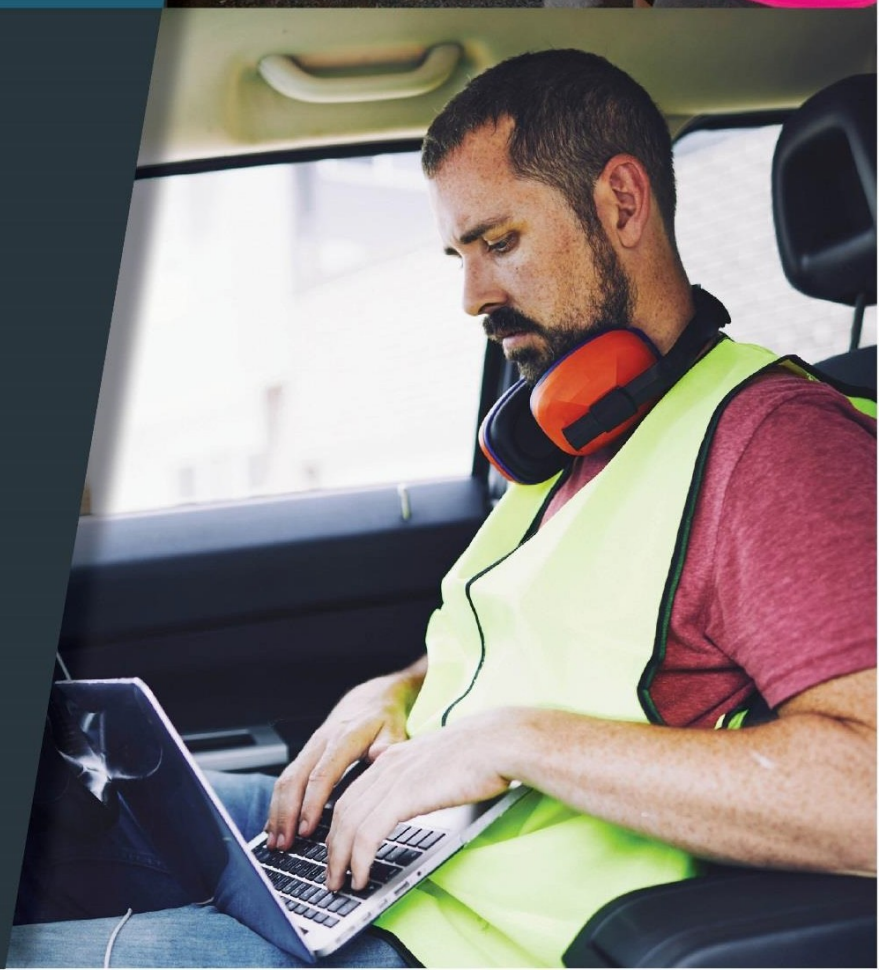
VEHICLES AS A WORKPLACE

Work Health & Safety Guide



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1. Introduction

Vehicle use is the most significant contributor to work-related traumatic injury.

This guide is for firms, organisations and individuals who use vehicles for work purposes on the road networks of Australia or New Zealand.

The guide describes a process for dealing with road traffic hazards in line with work health and safety (WHS) legislation and road traffic safety (RTS) principles. It covers all vehicle use in road traffic and complements other legislative requirements that apply to businesses whose primary purpose is transport, such as bus, truck or taxi operators.

1.1 Who has a duty?

WHS laws in Australia are generally harmonised and similar principles apply in New Zealand. While there is some variation between jurisdictions, generally, a person conducting a business or undertaking (PCBU) must ensure the health and safety of workers and other persons while workers are at work. In this context, it means PCBUs must do all that is reasonably practicable to manage the risks associated with the use of vehicles, both on public roads and on private property.

A PCBU can be an individual (e.g. sole business owner/operator) as well as a corporate entity. Duty holders under WHS law have different roles in ensuring that they and their organisation meet their obligations. Duty holders also include those supplying and servicing vehicles as well as those designing,manufacturing and importing vehicles and other equipment.

- A PCBU must manage road traffic safety risks if their workers are engaged in travel on the road, regardless of who owns or operates the vehicle used. This primary duty requires them to eliminate risks to health and safety or, if that is not reasonably practicable, to minimise risks so far as is reasonably practicable.
- Officers, such as company directors, must exercise due diligence to ensure that the organisation is complying with WHS laws to ensure that the business or undertaking is using appropriate resources and processes to eliminate or minimise road traffic safety risks.
- Workers must ensure that they take reasonable care for their own and others' health and safety, and also co-operate with any reasonable policies, procedures and instructions.

These duties apply:

- to vehicles on the road, no matter how far from the premises they travel
- whether the vehicle is owned by the firm or organisation, or a worker, or a third party
- to the requirements under road traffic or transport regulations.

Safety on the road depends not just on individual behaviour but more importantly on the higher order actions and controls put in place to ensure that risk is eliminated or minimised so far as is reasonably practicable. Performing your health and safety duties requires you to take a systematic risk management approach to safety. This involves:

- identifying the hazards (sources of risk) in your road traffic operations
- where necessary, assessing the risks (considering the likelihood that an incident will happen and the consequences)
- controlling the risks (making sure the right procurement, training, maintenance, safety guidelines and other measures are in place to reduce the risks)
- reviewing the controls (regularly checking to make sure your controls are still relevant, effective and up to date).

Organisations are required to consult with their workers and others affected by the business or undertaking when identifying hazards and risks and deciding on measures to control those risks.

1.2 What vehicles does my organisation have WHS responsibility for?

The responsibility to provide and manage safe workplaces whenever workers use vehicles can include :

- Vehicles owned, leased or hired by the organisation as work vehicles
- Vehicles owned, leased or hired by the organisation for private use but which are used in the course of work (for example vehicles included in salary packaging arrangements)
- Vehicles operated by other organisations, which their workers use, either as drivers or passengers
- Vehicles owned or leased by workers that are used in the course of their work, either regularly or from time to time (referred to as “grey fleet” vehicles), and
- Public transport vehicles, including trains, buses, taxis and ride share vehicles.

While many organisations have comprehensive policies and procedures to manage the acquisition, operation and use of their own vehicles. Sometimes, less attention is given to vehicles that may be used, especially grey fleet.

WHS legislation does not distinguish between vehicles which an organisation directly owns or leases, including other vehicles. The degree of responsibility and what is reasonably practicable will depend on the extent of control or influence the duty holder has to eliminate or minimise the risk.

However, outsourcing vehicle operations to contractors or to employees themselves does not remove the obligation to provide a safe workplace, which retains options for how a safe workplace is achieved. The question of what WHS duties apply will always be determined on the facts and circumstances of each case, rather than contractual terms.

2. Purpose and scope

This guide promotes safe systems of work for road-based travel. It does not prescribe specific safety actions or provide an exhaustive list of risk controls to achieve a safe system ofwork. It provides a framework and supporting advice for organisations to consider and manageroad traffic safety risks within their work environment.

The guide does not attempt to provide a complete reference to all the potential hazards, risks and controls that relate to vehicle use which are unique to each organisation. However, use of this framework should allow organisations to develop the policies and procedures they need to ensure they meet their obligations to provide a safe workplace.

2.1 Purpose of this guide

Vehicle use is the most significant contributor to work-related fatalities in Australia. Safe Work Australia's *Key WHS statistics Australia 2020* reports there were 79 fatalities from vehicle collisions in 2019, accounting for 43 per cent of all fatalities. This document also reports that there were 2,660 serious claims by from vehicle collisions in 2018–19.

In 2016, there were 98 work-related fatalities recorded by Safe Work Australia involving a vehicle on a public road. However, this significantly under-states the true situation. Road traffic safety agencies recorded 213 people killed in crashes involving heavy vehicles during 2016. Most of these crashes would have been work-related. Work-related crashes involving light vehicles would have added to this total. The trends are very similar in New Zealand.[1]

WHS law includes a general duty of care, and this applies in road traffic when a vehicle is used for work-related purposes. Specific guidance is available to responsible persons addressing a wide range of WHS issues. This Guide aims to address gaps about exposure to, management of and road traffic injury.

1 The data is very similar for New Zealand. For example, WorkSafe NZ data indicates that for the four years (2009-12) there were on average 60 fatalities per annum notified under the HSE Act 1992, excluding maritime or aviation sectors or fatalities due to work related crashes on the road. During those four years, an average of 61 fatalities involving trucks, buses and taxis were reported in road crash statistics. A study of over 10,000 coronial files published in 2003 by the Injury Prevention Research Unit of the University of Otago identified that there were 1688 work related fatal traffic injuries between 1985-98, to either a person engaged in work-related activity on a public road (not commuting), or a person who died in the process of another person's work activity on a public road. On average over this 14 year period, the study indicates that there were approximately 120 work related injury fatalities on the road, compared with 75 other work related injury fatalities.

The impact of harm in the road traffic system on the community and workplaces is large, and the impact on businesses in terms of productivity and business continuity is significant. Even the temporary absence of a worker could have a substantial impact on the viability of smaller and growing business. The socio-economic cost of road trauma is estimated at $27 billion per annum in Australia, and $3.79 billion per annum in New Zealand.

Organisations in different industry sectors and operating different types of fleets will identify different risks that need to be managed and will adopt different implementation processes depending on the size and maturity of their WHS systems.

For large organisations with well-established and comprehensive WHS procedures and systems, this document provides guidance in how to ensure that road traffic safety management forms an integral part of these existing systems. For smaller organisations, with a need for simpler processes that are fit for purpose, the guidance highlights risks and controls for consideration.

The broad principles for implementation are the same are governed by WHSlegislation. These principles are described in detail in other guidance documents and codes ofpractice and some of these resources are listed at the end of this Guide.

2.2 Relationship between road traffic safety and work health and safety

This guide brings together established WHS management principles and relatively new RTS management principles.

The modern “Safe System” approach to RTS, which is widely accepted and is government policy throughout Australia and New Zealand, continues to recognise the obligation of road users to comply with the design features of the road traffic system.

This evolution of thinking in road safety has moved from blaming the individual and accepting that a certain level of road trauma is inevitable to a systems approach. This is underpinned by the position that fatalities and serious injuries are not an acceptable in the road traffic system.

This has brought road traffic management much closer to the safety approaches that have been adopted in the workplace for many decades. Well-managed organisations have moved beyond considering who did the wrong thing to identifying what went wrong in their processes and how this can be prevented from happening again.

This guide describes a hierarchy of controls and a broad range of potential controls that require a systematic response from management, rather than one that puts the responsibility for safety solely on the driver.

The use of vehicles in road traffic represents one of the most critical workplace risks that organisations must manage. Better workplace safety systems and practices can make a significant contribution toreducing road trauma.

2.3 WHS law

WHS laws in the Commonwealth, Queensland, New South Wales, the Australian Capital Territory (ACT), Tasmania, South Australia and the Northern Territory (model law jurisdictions) are based on the Model Work Health and Safety Act, with minor variances between jurisdictions. Victoria, Western Australia, and New Zealand each have similar health and safety laws.

Under legislation in model law jurisdictions, a PCBU has a primary duty of care and must, so far as is reasonably practicable, ensure workers and others are not exposed to a risk to their health and safety. This duty of care is owed when:

- directing or influencing work carried out by a worker
- engaging or causing to engage a worker to carry out work (including through sub-contracting)
- having management or control of a workplace.

A worker can be:

- an employee
- a contractor or subcontractor
- an employee of a contractor or subcontractor, or a labour hire company
- an outworker
- an apprentice or trainee
- a student gaining work experience
- a volunteer.

This guide has been prepared to assist compliance with the WHS laws in model law jurisdictions. Requirements in jurisdictions that have not implemented the model WHS laws will vary, and organisations should ensure that they comply with the provisions of the jurisdiction in which they are operating. However, the principles of good safety management described in this Guide are consistent with other requirements and should assist organisations to improve safety and comply with the law wherever they are operating.

2.4 Road traffic law

All jurisdictions in Australasia have enacted legislation to regulate how people and vehicles can access and use the road network. Legislation also defines the role and powers of the various regulatory agencies, such as licensing authorities and the police.

Operators of heavy vehicles in most Australian jurisdictions (Queensland, New South Wales, the ACT, Victoria, Tasmania and South Australia) must comply with the Heavy Vehicle National Law (HVNL), which puts additional obligations on the drivers, operators and others involved in the road transport industry. These obligations closely align with the obligations defined by WHS law, so that both bodies of law will include a primary duty for road traffic safety risks to be eliminated or minimised so far as reasonably practicable. New Zealand and Western Australia have their own legislation covering heavy vehicle operations.

The HVNL recognises the relationship with WHS law. If a provision of the HVNL and a provision of the primary WHS law deal with the same thing, and it is possible to comply with both provisions, a person must comply with both provisions. However, to the extent it is not possible for the person to comply with both provisions, the person must comply with the provision of the primary WHS Law.

Organisations need to consider a broad range of RTS issues relevant for all vehicles and jurisdictions whether or not they are covered by HVNL or other legislation. Those organisations involved in the road transport industry may wish to develop, implement and operate a single safety management system that will allow them to meet fully their obligations under both WHS law and HVNL.

The National Heavy Vehicle Regulator (NHVR) provides guidance to the road transport industry to help organisations achieve compliance with HVNL and enforces compliance. This guide helps organisations to establish a safety management system that will support compliance with both bodies of law. It should be used in conjunction with guidance provided by the NHVR and the regulators in jurisdictions not covered by HVNL.

2.5 Vehicle as a workplace

As a workplace, there will be numerous other requirements that apply equally in the vehicle as at the workplace or other locations. Ergonomics, particularly seating, getting in and out of the vehicle, comfort and position, provision of first aid, and environmental comfort should be considered as well as issuesarising from working remotely from the organisation.

Vehicles in the workplace are also considered to be an item of plant under WHS law and WHS responsibilities will extend to situations where vehicles are not subject to road traffic law, such as vehicles operated in a variety of industries, such as retail, manufacturing, agriculture, transport, mine sites, or otherwise off-road.

These issues are beyond the scope of this guidance document and the reader should refer to other more specific guidance from their WHS regulator.

3. Principles

Primary duty holders must as reasonably practicable ensure the health and safety of workers they engage or caused to be engaged by the person, including workers whose activities in carrying out work are influenced or directed by the person while the workers are at work in the business or undertaking.

The primary duty holder must also ensure so far as is reasonably practicable, that the health and safety of other persons is not put at risk from work carried out as part of the conduct of the business or undertaking.

'Reasonably practicable' represents what can reasonably be done in the circumstances. In relation to the duty to ensure health and safety, it means that which is, or was at a particular time, reasonably able to be done in relation to ensuring health and safety

To decide what is (or what was at a particular time) reasonably practicable in managing risk, duty holders are required to weigh up all relevant matters. This includes five factors set out in Table 1 along with considerations relevant to road traffic safety.

Table 1 WHS Duties and RTS Considerations

Duty holders must consider	In relation to road traffic, duty holders should recognise
The likelihood of the hazard or risk occurring	The likelihood of exposure to the hazard is extremely high
The degree of harm arising from the hazard	The degree of harm that can arise is extremely high
Knowledge (or what would be reasonable to know) about the hazard, and ways to eliminate or minimise the risk	The hazards and risks commonly experienced in road traffic are well known
Availability and suitability of ways to eliminate or minimise the risk	There are numerous, proven controls to minimise risks
Whether the cost of controls is grossly disproportionate to the risk (only after taking account of the above four matters)	Analyses have shown that the benefits of these controls can far exceed the costs

3.1 Compliance with road traffic law

Compliance with road traffic law are not necessarily sufficient to ensure that WHS obligations are met.

Road traffic law seeks to achieve a certain level of safety for road users,by requiring certain vehicle standards or by prescribing driving behaviour, through roadrules for example.

Whilst compliance with these will result in a certain level of safety, these requirements may not ensure that vehicle operation is safe so far as is reasonably practicable, as is required in WHS legislation.

For example, all registered motor vehicles are required to meet minimum safety standards. These are set by government, which means that all vehicles meet these standards before they can enter the road traffic system and be used on the road. Vehicle operators and drivers have an obligation to ensure that they continue to comply throughout their service life and authorities require checks of roadworthiness at various times.

However, the safety protection offered by different vehicles can vary considerably. The fatality risk for the least safe vehicles, which just meet mandated standards, can be as much as double the fatality risk of the safest vehicles. Programs such as the Australasian New Car Assessment Program provide ratings information to vehicle purchasers to allow them to make an informed choice.

To meet WHS requirements, an organisation should consider specifying vehicles with the best safety rating that meet their business needs. Many organisations are now choosing to go beyond compliance and specifying that only 5-star vehicles can be used.

This principle applies equally across all other aspects of traffic law. For example, some organisations now specify maximum operating speeds for their vehicles that are lower than regulated speed limits.

3.2 Managing road traffic risks

Road traffic risk management should be undertaken through a process to:

- identify hazards
- assess risks
- implement measures to control risks
- review control measures.

Safe Work Australia publishes a range of useful guidance on managing risk including the *How to Manage Work Health and Safety Risks* Code of Practice. Extensive guidance is also published by Worksafe New Zealand, such as *Identifying, Assessing and Managing Work Risks*.

In many cases the nature of road traffic safety risks and relevant controls are well understood. In these cases, a decision to impose a control does not depend on a formal risk assessment.

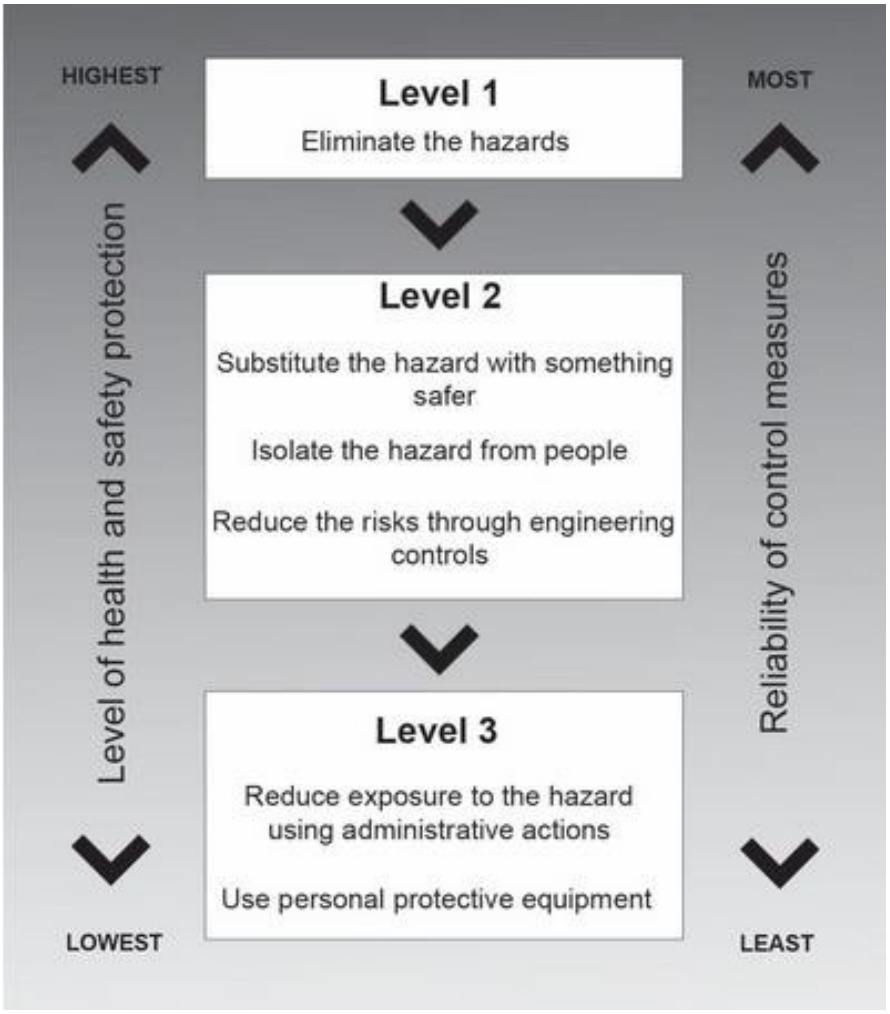
However, organisations are required to use the hierarchy of risk controls, giving the highest level of protection through to the least reliable, providing the lowest level of protection. This is summarised in Figure 1.

Level 1 controls aim to eliminate the hazard. This is the most effective solution but is not always practicablein the case of the road traffic system, in which many of the hazards are outside the direct control of the organisation. Considering that the use of vehicles for work purposes is necessary (as opposed to being incidental to work).

If it is not reasonably practicable to eliminate the hazard and associated risks, Level 2 controls introduce measures in the system to minimise risks which do not rely on individual behaviour.

Level 3 controls rely on human behaviour and supervision and are therefore the least reliable and effective. But an effective risk management process looks at all levels to minimise risks so far as is reasonably practicable.

Figure 1 The hierarchy of risk control



Source: Safe Work Australia (2011), How to Manage Work Health and Safety Risks Code of Practice.

3.3 Hierarchy of control applied to road traffic

Road traffic is a hazard and is the cause of many deaths and serious injuries in the community. It is the cause of many work-related deaths and serious injuries, either to an organisation's own workers, their customers, or other road users who encounter work vehicles in the road traffic system.

Organisations should consider their exposure to road traffic system hazards and apply the hierarchy of control to eliminate, substitute or isolate this hazard or to take action to minimise the associated risk. Primary RTS mechanisms for this are set out in Table 2.

Table 2 The hierarchy of control applied to RTS

Level of control	Control	Primary RTS Mechanisms
Level 1	Eliminate the hazard	Eliminate exposure to road traffic, and consider alternatives to travel
Level 2	Substitute the hazard with something safer	Avoid the use of motorcycles, and consider safer modes of transport such as buses, trains, and aeroplanes
	Isolate the hazard from people	Ensure non-road activities are adequately separated from road traffic
	Reduce the risks through engineering controls	Specify vehicles, equipment and technology to reduce the risk of crashes, and of harm arising from those crashes that occur
Level 3	Reduce exposure to the hazard by using administrative actions	Introduce policies, provide training and supervision, and develop procedures to control access to and use of vehicles and increase compliance with safety policies
	Use personal protective equipment	Ensure safety equipment is used and consider additional equipment for specific risks

3.4 Establishing a robust system supported by a culture of safety

Good practice in change management and sustainable improvement can be achieved through effective leadership, consultation and co-ordination, and planning and performance management.

Leadership

The leadership of organisations and establishing safety culture are critical to for an effective safety management system.

Leadership needs a strong policy statement that is shared with everyone in the organisation, supported by the behaviours of its leaders to show a visible commitment to safety culture. Road traffic safety policies apply to everyone equally, from the executive using their packaged vehicle to a meeting or the use of pool vehicles.

Organisational culture is very difficult to change and the behaviours of leaders often prevent change. Developing an open culture to ensure that workers' feedback is used to improve the system is vital.

Leadership is key to a safe system of work with everyone inside the organisation, and with whom the organisation interacts. Leadership needs to ensure that all understand and accept the role that they have in contributing to the establishment and operation of an effective safety management system and making it clear why staff need to support the safety culture.

Buy-in at all levels of the organisation is critical and the use of documentation to record signed commitment to the policy should be considered, particularly when the implementation represents a new and plan for safety.

Consultation and co-ordination

Consulting with workers is an obligation under WHS laws and is a key component of an effective road traffic safety management system. When conducting the risk management process you should gather information from those who are in the best position to identify risks and the feasibility of controls. The purpose of consultation is to ensure everybody has a shared understanding of the risks, who will be affected and how the risks will be controlled. The exchange of information helps each person to meet their duty and minimise gaps in WHS management.

A variety of workers within and outside of an organisation will have a role in the management of safety. Co-ordination across this is important. For heavy vehicles operations covered by Heavy Vehicle Law, these are set out in the Chain of Responsibility obligations and reference should be made to the guidance provided by NHVR.

WHS laws also require a duty to consult, cooperate and coordinate with other duty holders (including other organisations in their supply chain) on WHS matters affected by their business or undertaking. Consultation should be broad enough to encompass likely situations, including the use of the grey fleet and other third-party vehicles. The duty to consult does not require agreement. However, without agreement, negotiation will be necessary to ensure that no gaps remain.

Each duty holder retains responsibility for meeting their health and safety duties. In many large organisations, responsibilities for the management of safety policies and procedures are often quite separate from those for fleet acquisition and management. These arecommonly split between human resources, and finance or purchasing functions. In an effective road traffic safety management system, should include co-ordination, and/or integration, of these activities ensure that organisational objectives are aligned.

Planning and performance management

Managing road traffic safety should include a set of performance factors that relate to the different elements to be managed and allow for measurable evaluation of performance.

While measures such as number of crashes and their injury outcomes, lost time etc areimportant to assess progress and the need for improvement. Intermediate outcome and output measures are more useful to quickly identify trends and opportunities to adjust the program. These measures should be identified and agreed during the implementation to ensure that they match the specific risks and controls identified at that time.

Organisations should consider their obligations under WHS law relating to notifiable incidents and the process for notifying relevant agencies, in addition to any obligation to report road crashes to the police.

A notifiable road traffic incident is one resulting in:

- death
- immediate treatment in hospital as an in-patient, or
- immediate treatment for a serious injury (for example amputation, scalping, spinal injury, loss of bodily function or a serious laceration, burn, head injury or eye injury).

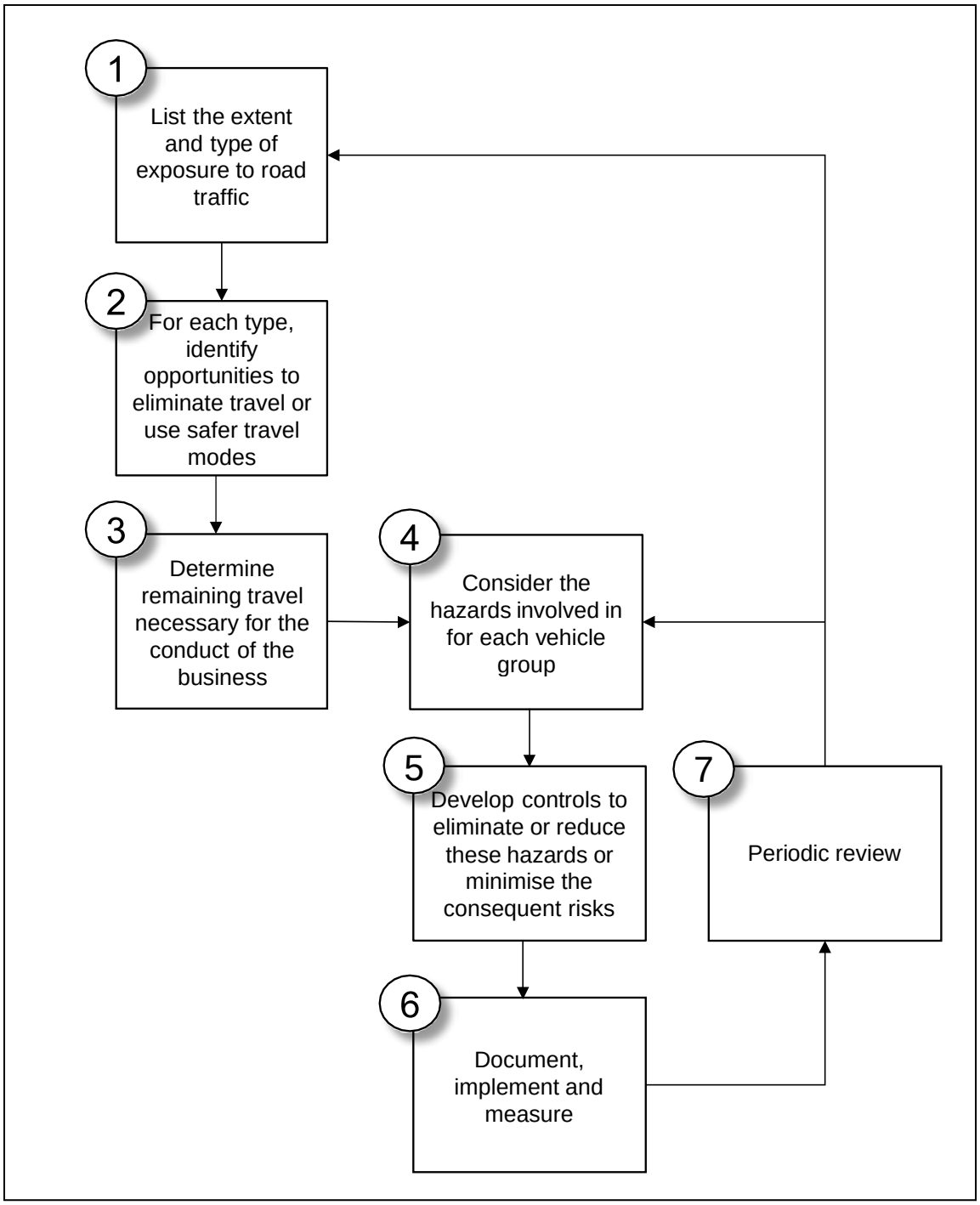
This obligation applies to any workplace vehicle but not, for example, to a crash involving a worker driving to work in their private car.

Incidents must be reported by the fastest possible means and the site of an incident should not be disturbed until an inspector arrives at the site or directs otherwise. A record of each notifiable incident must be kept for at least five years. Further information on notifiable incidents is available from Safe Work Australia WorkSafe New Zealand and other WHS agency websites.

4. Process

A recommended process for identifying road traffic hazards and developing effective controls to eliminate or minimise the risks arising from these hazards is shown in Figure 2.

Figure 2 Risk Management Process



The process is in three parts. The first part:

1. Identifies the vehicle types and their operations to understand the exposure to road traffic.
2. Determines actions to eliminate road travel or use safer transport modes.
3. Identifies remaining travel that is essential for the business and the vehicles involved in that travel.

The second part:

4. Considers the hazards in road traffic that need to be addressed generally and for each vehicle group.
5. Develops controls to reduce risk so far as reasonably practicable.
6. Establishes the documented policies, procedures and measurement processes to ensure that these controls can be implemented.

The third part:

7. Defines a periodic review process to continually improve the effectiveness of the safety management system.

While the controls developed may be common across different vehicle types, this process ensures that all exposure to road traffic injury is identified and allows the organisation to consider specific controls for specific situations.

4.1 Step 1: List the extent and type of exposure

The risk associated with road traffic varies according to the vehicle type used, where and how it is operated, and how well it is managed. Organisations need to consider the circumstances that result in an exposure to road traffic, and how significant these are.

Checklist 1 (see attachments) below provides guidance in assessing the nature and extent of this exposure. Which prompts organisations to consider their operational fleet and other vehicle groups in which their workers may be exposed to the road traffic hazard.

These have the potential to present a high risk to organisations. Even though occasional use may not require the same controls to operate a large operational fleet, the lack of adequate control of individual use could collectively result in a significant risk.

Exposure to the extent and type of risks should be carried out for each of the vehicle group identified for the organisation. High use groups may represent the greatest exposure to the hazard but other groups with higher individual risks should not be overlooked.

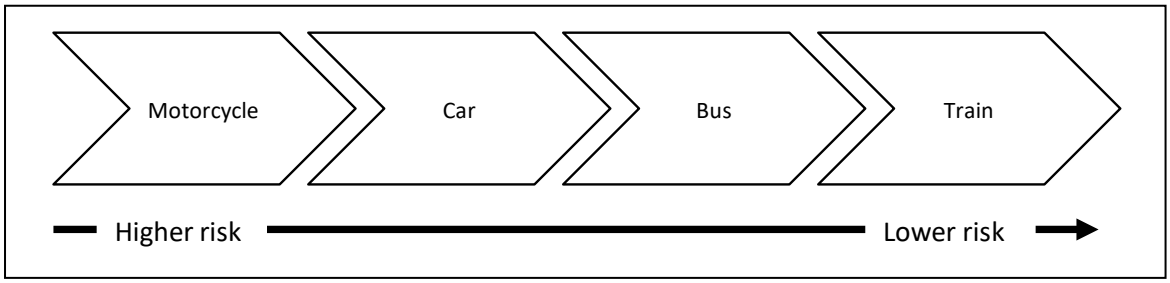
4.2 Step 2: Identify opportunities to eliminate or substitute safer travel

The risks associated with vehicle use should be examined, the more effective control is to eliminate road travel or substitute it with something safer. These opportunities should be considered first.

Options for eliminating the road traffic hazard include telecommuting, teleconferences, and combining trips to eliminate duplicated travel.

Substituting the hazard for a safer alternative requires work travel to be organised through safer means by selecting safer modes of transport as shown in Figure 3. Substitutionmight also include the use of taxi services in situations where a worker is for whatever reasonunfit or unauthorised to drive, such as after a long workday.

Figure 3 Motorised land transport risk



A review by Austroads in 2010 estimated that casualties would increase if car drivers transferred to walking, cycling or riding motorcycles, but would decrease if they used a car or in a bus. While these findings were based on population-wide shifts, similar trends could be expected for individual organisations and individual journeys. Risk reduction could also be expected from the use of trains or aeroplanes.

Organisational programs to enhance health and well-being through increased walking and cycling can have a role in determining transport modes. These need to be considered in conjunction with responsibilities to reduce road traffic risks to ensure that both health and safety outcomes can be achieved.

The wider use of virtual meetings is now used as a substitute for long-distance travel. If travel is necessary, public transport options may be safer, cheaper and environmentally beneficial.

The safety of the whole journey from door-to-door should be considered but is unlikely to remove the safety benefits of public transportuse providing adequate controls are in place. For example, personal security at night..

For freight operations, different transport mode choices should be an integral part of supply chain strategies to reduce costs and improve reliability. Safety needs to be a factor in this assessment.

4.3 Step 3: Determine remaining exposure to road traffic hazards

Review Checklist 1 to identify which type of vehicle travel is essential to the business. This is where further attention is required to eliminate risks or reduce them so far as reasonably practicable.

This should identify the vehicle group most in need of attention through its:

- Risk (for example, use of motorcycles)
- Nature and extent of exposure (for example, how often they are used)
- Controls (for example, on grey fleet).

4.4 Step 4: Identify the particular hazards associated with each vehicle group

You can use Checklist 2 which provides guidance on the characteristics of different vehicle groups and the ways they might be managed and operated.

Consultation with the people involved in each vehicle group as drivers, passengers or managers will be an essential part of this process to ensure that controls are developed from an understanding of the actual situation and not on existing policies that may or may not be followed in practice.

4.5 Step 5: Develop controls

You can use Section 5 of this Guide for guidance on the controls associated with different risks in the road traffic system. These are also summarised in Checklist 3. There are however, extensive resources available from a number of sources to help identify further controls or to provide more detail on the controls listed. A list of resources is provided below.

4.6 Step 6: Document and implement policies and procedures

Accurate and complete records can help sustain the viability of the safety management system and provide valuable data to identify trends in performance. Including the evidence necessary for the continual improvement of the system.

Collecting incident data encourages the reporting of incidents and the rigorous analysis of this data is a key to gathering evidence of risks and the ability manage and track the performance of the system.

Documentation should be implemented and integrated with existing safety management systems and be appropriate for the size and complexity of the organisation.

Documentation may include sensitive and personal information, so appropriate controls should be in place to ensure that the collection, storage and retrieval of this information complies with relevant privacy principles and legislation.

Performance measures will also be improved through alignment with other organisational aspects, such as individual performance management and development plans.

4.7 Step 7: Conduct periodic reviews

Reviewing and improving policies/procedures is essential to ensure the continuation and relevance to reduce risks.

Support this by seeking:

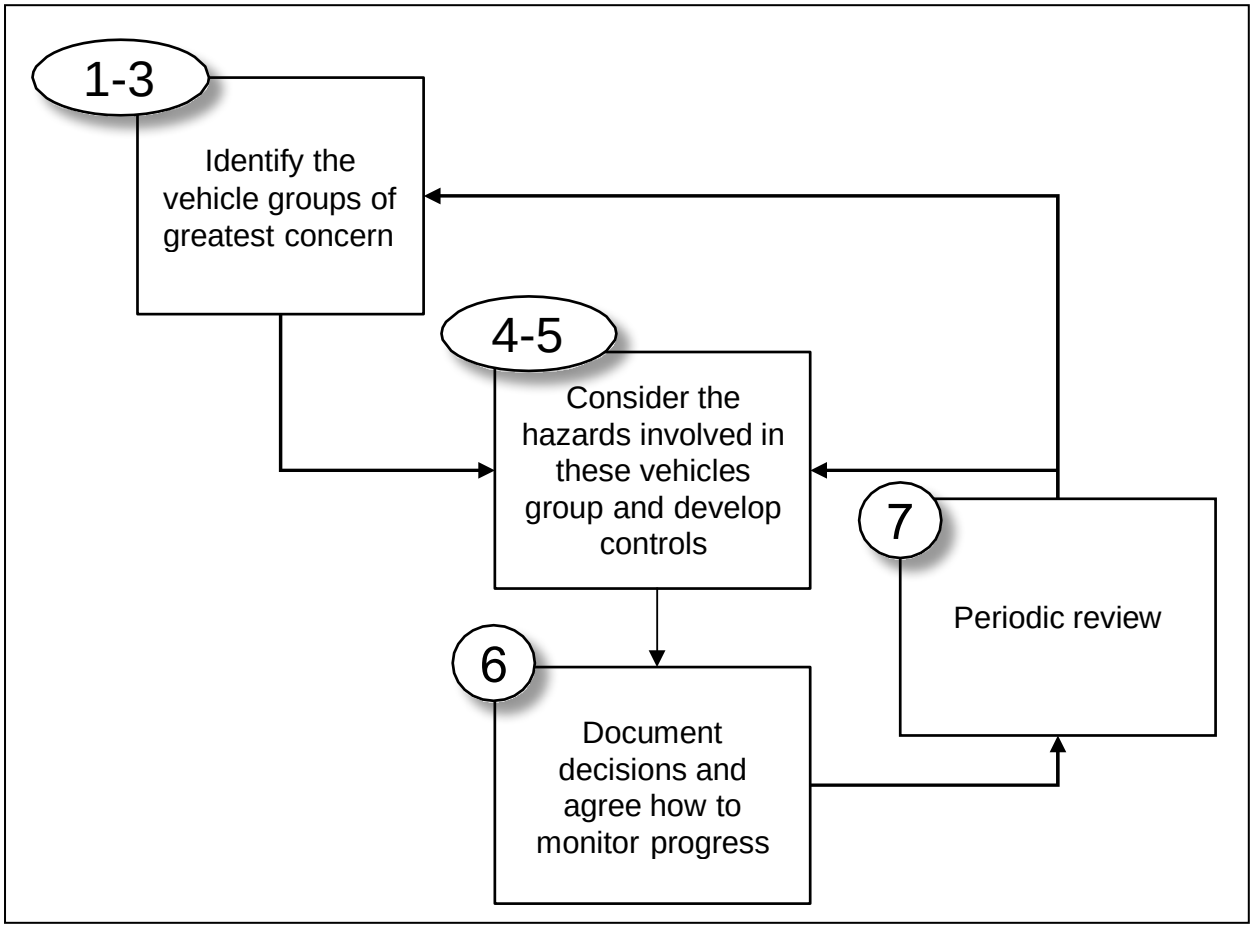
- Workers provide feedback on how they use vehicles
- Incident investigation and hazards are reported
- Performance measures are reported
- Information on new technology and safety devices are reported

The review of control measures are conducted and there is a need to systematically review the process to test assumptions about vehicle use. These reviews may perhaps be less frequent but should be informed by data that measures exposure to road traffichazards for all vehicle groups.

4.8 Guidance for small business

The principles and risk management process outlined in this Guide are applicable to organisations of any size and in any industry. However, for small businesses, where there is a small and well-defined fleet of vehicles to consider, and where communication between all levels of the organisation is informal, some of the steps outlined below can be combined and simplified.

Figure 4 Small business risk management process



Use Checklist 1 (for steps 1 to 3 above) to determine the vehicle groups. These may be owned or leased by the business, or be other vehicles that workers use. Because of the amount of use, the risk associated with the type of vehicle, and the controls in place. Businesses should focus on the main vehicle groups.

You can use Checklist 2 and 3 (for steps 4 and 5 above) at the same time. This involves staff in a process to help identify the hazards and come up with controls to eliminate or reduce risks. A few key actions to address the greatest risks and to start a process of continuous improvement are recommended. nature and extent of documents should be appropriate for each organisation's needs, Step 6 is a critical step. For small business, simple checklists and direct communication to workers can be adequate to provide information of decisions to clarify roles.

Step 7 remains a requirement for all organisations, and a periodic review should be

undertaken, this includes:

- changes in the size of the business
- changes in operations or the nature of the business
- opportunities to improve, such as the acquisition of new vehicles.

5. Road traffic safety hazards

Modern road traffic safety management is heavily influenced by the systems approach to safety and is adopted in other critical safety domains, such as the workplace.

In the traffic system, considers three factors:

- *Human behaviour* - The road traffic system needs to accommodate the behaviour, risk perceptions and management of risk by workers that influence road use, and respond to the vast bulk of serious road crashes as system failures.
- *Human frailty* - There are known physical limits to the amount of force a human body can withstand before it is seriously injured. Exposure of workers to the transfer of energy involved in a vehicle crash is comparable to the exposure of workers to heat or to electricity. Neither road traffic nor the workplace can be considered safe unless the exposure is managed in such a manner that allows the human body to withstand the exposure without suffering injury.
- *Shared responsibility* - System designers have the final responsibility for the design, operation and use of the road transport system. They are therefore responsible for the level of safety in the entire system.

Road users are responsible for following traffic rules, and showing due regard, judgment and responsibility on the roads. If road users cannot, are incapable, or unwilling to take their share of this responsibility, then “system designers” must make further efforts to ensure that people are not harmed. The “system designer” is any organisation or professional that influences the safety experienced by system users, including the use of vehicles in the course of work.

Not all individual hazards in the road traffic are required to be considered the appropriate controls to eliminate or reduce risk. For example, improved vehicle safety technology which protects occupants from impacts with roadside objects, will be of value in a wide range of situations. Therefore, it’s not necessary to identify this particular hazard in order to conclude that vehicle safety technology is necessary.

RTS management functions and processes have been codified by the International Standards Organisation in *ISO Standard 39001 – Road traffic safety management systems*.[2] ISO 39001. Categorises safety performance factors used here to identify the critical hazards that each organisation will need to consider to meet its WHS obligations.

2 Organisations can use ISO 39001 to align their RTS management systems alongside their quality and environmental management systems which they may have developed in line with ISO 9001 Quality Management Systems or ISO 14001 Environmental Management Systems.

These hazards and potential controls are discussed below.

5.1 Inadequate journey planning

Journey planning is an essential control that spans the full hierarchy of controls from potential hazard elimination through to administrative procedures.

Risks

When a journey is required for business operation and cannot be reasonably avoided, it's important to recognise that some journeys are more hazardous than others. For example, the route options that are available (high speed country roads or access restrictions for heavy vehicles), the time of day and/or weather conditions, or the demands of the journey on the driver.

The way work is designed and managed influences the safety of the journey. Such as long distances and travel times, the number and length of stops in a journey, and driver fitness should be taken into account. Early consideration of the journey planning should be taken into account, and identify opportunities to substitute with safer modes of travel.

Potential controls

Planning the journey before driving can help control some of the risks identified in this section. These include:

- schedule to avoid fatigue – planning rest stops, encouraging overnight stays after all day meetings, for example
- avoid times when travel may be more risky, due to weather conditions or the driver's sleepiness, presence of wild animals, etc
- allow sufficient time to avoid pressure to speed
- avoid certain roads, intersections or turning movements and selecting safer, higher-standard roads
- ensure that the driver can navigate with minimum distractions.
- ensure any equipment or goods will be adequately restrained or stored so that is will not bea hazard for other road users or occupants of the vehicle.

Drivers should also have the ability and authority to alter plans should circumstances change.

5.2 Roads providing inadequate protection

Different roads present different hazards and risks, which makes the choice of roads and conditions of their use critical.

Risks

The safety afforded by different roads varies with depending on the characteristics of the road. The overall rating of a road's risk can be obtained from audit programs such as Australian Road Assessment Program (AusRAP) or New Zealand Road Assessment Programme, KiwiRAP. Which regularly assesses major highways, and an assessment of relative risk can be made by considering the differences between alternative routes. In general, main roads and highways in urban and rural areas provide significantly greater safety than more minor roads.
PCBUs should be aware that most metropolitan workers are unfamiliar with the hazards associated with regional driving. Australia is a relatively urbanised country, and many Australians do not leave the metropolitan area at all. If a worker is asked to undertake rural or regional driving on an exceptional or occasional basis, some further detail about the hazards and how to undertake the driving task safely should be provided.

Potential controls

Consult with drivers to provide information about particularly problematic roads or locations.

Characteristics of safer roads include:

- separation of opposing traffic
- separation of local traffic from through traffic
- elimination of or protection from roadside obstacles
- wide, sealed shoulders or emergency stopping lanes
- safe provision for pedestrians and cyclists
- speed limits aligned to the safety of the infrastructure
- well-maintained road surface
- roundabouts instead of traffic lights
- clear line marking.

In determining whether it is practicable to avoid certain roads, it should be noted that use of higher-standard roads might also result in reductions in vehicle operating costs. On the other hand, a longer route may also increase time on the road and hence the risk of the driving whilst fatigued. u
If alternative routes are neither available nor reasonably practicable then the organisation should consider whether the risks warrant additional controls. This can be selected from the remaining factors described below and tailored to the specific needs of the route.

5.3 Vehicles providing inadequate protection

Vehicles themselves are not a major causal issue in road traffic injury and present major risk management opportunities.

Risks

Vehicles that do not have the latest safety technologies will have a far greater chance of being involved in a crash and offer far less protection than those that do.

Mechanical failure is a significant factor in relatively few vehicle crashes, but the safety performance of vehicles can be degraded by inadequate maintenance. This can include poor tyres and brakes leading to loss of control and damage or deterioration of safety equipment such as seat belts and air bags leading to lack of protection in the event of a crash.

Potential controls (specification)

Recent and emerging vehicle technologies represent a significant opportunity for organisations to improve the safety of their vehicle workplace. Technologies can reduce the likelihood of crashes and reduce the harm from those crashes.

Side airbags that protect the head and torso have been estimated to reduce the risk of death or injury by 51%; electronic stability control has been estimated to achieve 53% reductions in run-off-road crashes, which accounted for 38% of road fatalities. These technologies are now standard on the light vehicle fleet but will not be on all older vehicles. Policies that allow the purchase of used vehicles should consider including these features as mandatory requirements.

Some emerging technologies are showing similar promise. In particular, autonomous emergency braking (AEB) which can detect other vehicles and apply the brakes if the driver has failed to react. In some cases this technology can also detect pedestrians and cyclists and apply the brakes. . An analysis of crashes involving vehicles fitted just with low speed AEB demonstrated a 38% reduction in crashes, even in higher speed roads. These technologies are being continually being improved and being fitted to an increasing number of vehicle models.

The assessment of these technologies is included in vehicle ratings provided by the Australasian New Car Assessment Program (ANCAP). These ratings are continually reviewed and are displayed with a date stamp to attempt to keep pace with developments and to ensure that star ratings reward the most effective technologies. Some vehicles with an older date stamped rating will not have been tested to the latest, most stringent, standards. Fleet policies that require vehicles to have the most recent 5-star rating, or alternatively no more than three years old, can ensure that safety performance is maintained.

However, the rapid development of new technologies is can also be achallenge for

organisations to identify those with the greatest safety potential. Simply relying on a five-star rating policy does not guarantee that these vehicles have these technologies and other important safety features fitted, such as lane departure warning and speed limit warnings. Organisations should consider specifying features over and above those included in current ratings.

While these ratings do not cover heavy vehicles, the same technologies are being supplied into the heavy vehicle fleet and should be considered.

The pace of development of vehicle technology should prompt organisations to consider their fleet turnover policies to determine whether shorter periods are necessary.

If a fleet incorporates used vehicles, the Used Car Safety Ratings provides information on the significant differences in crash performance between different car models and these can be used to help select the safest used vehicles. These ratings also demonstrate that the newer the vehicle the greater the protection it likely provides.

Specific road types may warrant further consideration of the vehicle specification required. For example, a road with many sharp curves or freeway exit ramps, will increase the risk that a poorly loaded or unsuitable vehicle to lose control or roll over.

While fleets under the control of the organisation can be managed in this way, other controls should be considered for other workplace vehicles. These include:

- Mandatory minimum features and/or maximum age for grey fleet and other vehicles
- Requiring similar standards for contractors' vehicles.

Potential controls (modification and maintenance)

Vehicle safety performance can be very sensitive to alterations in vehicle configuration. Some vehicle modifications are only allowed with the approval of the vehicle registration authority. Requirements for this vary in different jurisdictions. In some situations, particularly for large fleets with significant modifications, organisations should seek the advice and/or approval of the vehicle manufacturer.

The impact of vehicle modifications should be subject to a rigorous risk assessment. For example, the installation of roll bars to mitigate risks associated with vehicle rollover may in fact increase the risk of rollover occurring by increasing the centre of mass of the vehicle.

Similarly, the installation of bull bars may increase risks for pedestrians and cyclists and preventthe correct operation of airbags within the vehicle.

Modifications and additional equipment must be installed in a way that preserves the performance of safety equipment such as air bags and thatdoes not interfere with the driver's ability to operate the vehicle safely. Modifications or accessories such as cargo barriers should by specified to ensure than any loads can be carriedsecurely and safely.

Vehicle regulators around Australasia have varying requirements and processes for roadworthiness inspections. Poor roadworthiness is associated with a relatively small proportion of crashes, particularly for light vehicles. As a result, compliance with statutory requirements may be sufficient in many cases, but the obligation to ensure roadworthiness at all times remains with theorganisation.

Enabling and encouraging drivers to provide feedback is very important to ensure roadworthiness is maintained. Organisations need to pay attention to tyres and brakes. Vehicles that are found to be unroadworthy either from a regular inspection or based on driver feedback should be removed from the fleet until it is fixed.

For heavy vehicles, reference should also be made to the NHVR or other authorities to determine statutory requirements relating to vehicle modifications and roadworthiness.

5.4 Speed in excess of safe thresholds

Moderating speed is one of the most effective controls to reduce risk. Lower speeds reduce both the likelihood of being in a crash and the impact on the human body in the event of a crash

Risks

The risks associated with exceeding the speed limit are well documented, and they begin at what might be regarded as a relatively low level of speeding. For example, exceeding a 60 km/h speed limit by just 5 km/h doubles the relative risk of involvement in a casualty crash and the risk approximately doubles with each increment of 5 km/h. This is similar to the risk associated with driving at the legal .05 drink driving limit in Australia and New Zealand.

A leading research institute in the Netherlands has set out safe impact speeds for different road environments, set out in Table 3 below. "Safe" in this context is where there is only a 10% risk of a fatal injury arising from such a crash.

Table 3 Safe speeds for different road environments

Type of Road	Safe Speed km/h
Roads with possible conflicts between cars and unprotected road users	30
Intersections with possible lateral conflicts between cars	50
Roads with possible head-on conflicts between cars	70
Roads where head-on and side conflicts with other road users are impossible	> 100

Currently, speed limits on urban and rural roads are typically weighted towards the free movement of motor vehicles but do not imply that it is always safe to travel at the limit. Lower speed limits may be imposed at locations and times where the risk is greater, such as schools or where there is a concentration of pedestrians.

Potential controls

Regardless of the known safety risks associated with excess and inappropriate speed, considerable attention is required to ensure an understanding the underlying issues. Compliance with speed limits should be a critical component of any safety management system. However, organisations might consider policies to reduce speeds where warranted. In addition to safety improvements, reductions in vehicle operating costs are also likely.

Drivers should also slow down to drive to the conditions whenever necessary, as the safe speed may be below the posted speed limit. This might include poor road conditions, times of inclement, weather, dusk and dawn when visibility may be limited and wild animals, or when pedestrians and cyclists are in the area.

Control measures to manage speed by seeking and to alter the attitudes and consequent behaviorsof individual drivers will have limited success unless supported by other measures. Controls that can be considered should include:

- Strong communication and leadership to demonstrate total commitment to the policy at all levels and to ensure that everyone understands the correlation between safe driving speeds and road conditions and the implications of non-compliance.
- Monitoring of vehicle speeds and speeding infringements with triggers for intervention with offending drivers.
- In-vehicle technology to assist compliance through alarms or speed limiting.
- Organising schedules to prevent speeding being necessary or inadvertently encouraged.

These controls can be applied either to statutory speed limits or any lower operational limits imposed by the organisation.

Further detailed guidance on managing speed through driver awareness and technology is available from a number of sources (for example, ETSC, 2011).

For operators of heavy vehicles and others involved in the Chain of Responsibility, the HVNL has specific requirements and the NHVR can provide guidance.

5.5 Unauthorised drivers

For many vehicle operations, legislated authorisation requirements are likely to be sufficient, and the focus should be on managing compliance and related information.

Risks

The driver licensing process provides some assurance that an individual has reached an age and has undertaken the pre-requisite activities to be allowed access to drive a certain category of vehicle. Unlicensed drivers are significantly over-represented in crash statistics.

However, fully licensed drivers still represent a risk as the perception and management of risk are key behavioural factors that influence road use and safety. The broad access to vehicles and the road traffic system enabled bythe licensing process may represent a greater risk to an organisation than if authorisation weremore restricted.

Potential controls

Organisations should have checks in place to ensure drivers have the appropriate licence forthe category of vehicle that they are driving and that drivers comply with any conditions on the licence. Certain drivers, such as young and novice drivers may have additional conditions imposed. Organisations should also be aware of different restrictions that might apply in different jurisdictions or with licences from other jurisdictions.

A documented process of driver authorisation provides the organisation with a record of these checks. Combined with a process of logging each vehicle use, this provides a record of who is driving at any particular time. The process also provides a point of engagement to ensure that drivers are aware of organisational policies and procedures.

This process allows organisations to impose additional conditions or restrictions on drivers' access to vehicles, which may be necessary to mitigate particular risks in a more targeted way than is possible for licensing authorities, which can only apply broad policies across the community.

Less experienced drivers may be limited in their access to certain vehicle types or the times and locations they are permitted to drive.

Establishing a process of driver authorisation also allows for a process to remove this authorisation should the driver be found to be unfit to drive safely. In the case of medical conditions that affect fitness to drive, reference to the relevant licensing authority should be made.

In other cases, questions over authorisation to drive may arise as a result of traffic infringements or more serious traffic offences. A single offence can be used as a trigger for intervention with the individual to assist them to improve. Organisations can establish a process of escalating controls in the event that subsequent offences are committed with the removal of authorisation to drive being one available sanction, and control measure.

Duty holders need to identify information needs regarding authorisation to drive such as the current driver licensing status. Some licensing agencies have mechanisms to assist in ensuring that this information is made available in a manner which meets privacy and safety considerations. Where this is not available, other mechanisms within the workplace should be considered.

5.6 Unsafe drivers

Drivers' perception and management of risk are the key behavioural factors that influence road safety, their fitness before and during each journey is essential, and they need to be supported by technology.

The holding of a valid licence is insufficient to ensure fitness to drive at any one time. Authorities generally apply risk-based approaches to focus enforcement on the greatest risks, but organisations should consider other measures to ensure that risk is reduced so far as reasonably practicable.

Medical Fitness

Risks

The ability to identify risks and operate vehicles depends on a wide range of cognitive and physical capabilities.

In many cases these can be well managed by the individual to ensure that their ability is not impaired. However, the risk associated with uncontrolled issues can be significant. While these medical issues may be more prevalent with age, organisations should be aware that many of the significant contributors to risk can occur at any age.

Processes for regulating medical fitness vary from jurisdiction to jurisdiction but the general principles are similar and are based on extensive research that has linked different medical conditions to crash risk. Apart from eye tests at initial licensing, assessment of medical fitness for the car licence is generally only undertaken after a report of a problem or at a certain age. More stringent requirements are imposed on commercial vehicle drivers and organisations should refer to driver licensing agencies in their jurisdiction.

Potential controls

Guidance for medical fitness standards used by driver licensing agencies is publicly available (Austroads, 2016), and provides examples of conditions, such as:

- blackouts
- substance misuse/ dependency
- diabetes
- psychiatric conditions
- musculoskeletal conditions
- vision problems
- sleep disorders
- neurological conditions such as epilepsy and dementia
- cardiovascular disease.

Programs to manage driver fitness may also provide other benefits in relation to worker health and wellbeing, as many of the issues of concern in the driving situation are symptoms of broader health effects.

Organisations with concerns regarding medical fitness of drivers are advised to seek professional advice or to refer the driver to the relevant driver licensing authority for their review.

Fatigue

Risks

Fatigue can be defined as “...a state of mental and/or physical exhaustion which reduces a person’s ability to perform work safely and effectively.”

Fatigue can contribute to inattention to the driving task and poor judgement. However, lack of adequate sleep will inevitably lead to loss of consciousness, initially momentarily (micro sleeps) but then longer as the body demands its only remedy for fatigue: sleep.

There are no statutory limits to define what is legal for most drivers, but fatigue may be a factor indetermining liability in the event of a crash. However, for heavy vehicle operators there are extensive regulatory controls over driving hours, rest breaks etc.

Factors that can increase the risk of fatigue include lack of quality sleep, driving long hours without a break, driving at times when the person is usually asleep or in the mid-afternoon.

Signs of fatigue

A driver must not drive a fatigue-regulated heavy vehicle on a road while impaired by fatigue. Drivers may be impaired by fatigue even when complying with work and rest limits. It is important to spot the signs of fatigue and take a break.

Your body

- A lack of alertness
- Inability to concentrate
- Making more mistakes than usual
- Drowsiness, falling asleep or micro-sleeps
- Difficulty keeping your eyes open
- Not feeling refreshed after a sleep
- Excessive head nodding or yawning
- Blurred vision
- Mood changes
- Changes to personal health or fitness

Your vehicle

- Near miss or incident
- Not keeping in a single lane
- Not maintaining a constant speed
- Overshooting a sign or line
- Poor gear changes

Please refer to the National Heavy Vehicle Regulator (NHVR) guidance - About fatigue management | NHVR

Potential controls

Organisations should use controls to reduce this risk, both by reducing the hazard of sleepiness and take actions to mitigate the of fatigue:

- check that workers have adequate sleep before driving
- schedule meetings to avoid driving after a long day of work, particularly at night, or driving early in the morning
- require and facilitating regular rest breaks
- share the driving where possible
- identify and treating sleep apnoea
- arrange alternative transport for workers who are fatigued.

Workers also need to understand the context of local driving conditions considering that fatigue is a major factor in crashes. According to the Australian Automobile Association indicates that 20 to 30 per cent of all car crashes in Australia are attributed to fatigue.

PCBUs and workers both have responsibilities in the fatigue space, especially PCBUs often direct when and where a worker must drive.

Further guidance is available from a number of sources and those responsible for heavy vehicles should refer to NHVR.

Alcohol and drugs

Risks

The connection between alcohol consumption and driver impairment is well established, with numerous studies showing how the risk increases exponentially with increasing concentration of alcohol in the blood. Also well-established is drink driving legislation with 0.05 blood alcohol concentration now the standard limit across Australasia. Lower limits, effectively zero, are applied to drivers who are in higher risk categories, such as young drivers or previous offenders, or who are in control of vehicles with potentially greater consequences of harm in the event of a crash, for example heavy vehicles and buses.

Drug use is also associated with increased risk either from the consumption of illegal stimulants or of prescription drugs, particularly in excessive quantities.

Potential controls

Many organisations have workplace alcohol and drug policies and procedures in place. However further controls are available to isolate the alcohol hazard from driving. These include:

- Workplace alcohol testing before driving
- Removal of any authority to drive work vehicles
- Installation of alcohol interlocks to be used by all drivers
- Limitation of alcohol and/or provision of alternative transport at work-related functions.

While high intensity random breath testing provides a general deterrent to drink driving, there remains a cohort of drivers, (including those who are alcohol dependent and need to managed in terms of medical fitness), who may continue to drive after consuming alcohol. A number of jurisdictions have now introduced legislative alcohol interlock programs. These require the installation of a device that prevents the vehicle from being started unless the driver has provided a breath sample with alcohol. Alcohol interlocks are widely available for organisations to control this hazard through technology.

Distraction and inattention

Risks

The rise of mobile communication technologies and social media has led to an increase in the use of mobile phones and similar technology in vehicles. Road rules generally prohibit the use of hand-held devices, and any communication technology should be assessed to ensure that its can be used within the law. However, research data indicate that there are also risks associated with hands-free use. In particular, taking eyes off the road to look at a screen or press buttons is a significant risk factor. Sending an SMS whilst driving a heavy vehicle has been measured to increase risk by 23 times.

However, there are other sources of distraction that should be considered, such as loose objects in the vehicle, other passengers, map reading or reading or filling in paperwork.

Potential controls

Anything that could take eyes away from the road for more than a glance should be prevented.

Organisations have a responsibility to design any work that is required to be carried out in the vehicle. Must ensure that it can be done safely and does not distract a drivers' ability to undertake the primary task of driving safely.

Specific controls include:

- organisations and their staff understand the mobile phone rules f and ensure compliance for all staff
- strict policies to eliminate unsafe mobile phone use
- if handsfree use is essential, then using vehicle bluetooth connections that remove the need to touch the phone – these vehicle connections are usually designed to restrict access whilst the vehicle is in motion
- whether factory-fitted or aftermarket, any required communications technology should be installed and operated to minimise the potential for distraction whilst driving
- ensure that scheduling allows for non-driving activities to be undertaken before or after driving
- ensure that journeys are planned and routes determined before starting

Immaturity and inexperience

Risks

In the driving context, the immaturity of drivers can be a hazard. Combined with inexperience, it represents one of the most significant risk factors on the road. Australasian licensing authorities require young drivers to accumulate experience and impose restrictions on them to manage their elevated risk.

Potential controls

Organisations should consider this hazard when requiring young workers to drive. Young drivers will demonstrate varying maturity and many will have the attitudes to manage the driving task quite safely. However, until the age of about 26, there is a likelihood that they will be less able to assess risks and decide appropriate responses. Laws restricting young drivers vary considerably covering areas such as vehicle selection, speed, use of mobile phones, curfews etc and organisations should ensure that they understand these and ensure compliance. Mentoring by older drivers, minimising travel at night or with other young passengers, and paying particular attention to potential distractions should be considered.

5.7 Non-use or misuse of personal protective equipment

While the use of equipment such as seat belts and motorcycle helmets are mandatory, other personal protective equipment also has the potential to significantly reduce risk when all other controls have failed.

Risks

The use of seat belts has been mandatory in Australasia for decades, there still is a proportion of drivers and passengers who do not use them. Each year, approximately 20% of vehicle occupants killed in crashes were not wearing a seat belt and it is known that unrestraineddrivers and passengers are eight times more likely to be killed in a road crash.

Potential controls

Organisational policy should maintain that everyone must use a seat belt, all the tims when driving. Workers should be instructed that, if a seat belt in the vehicle is not operative, or has been removed, then they should immediately seek alternative transport. Organisations may consider monitoring systems for seat belt use, and escalating consequences for failing to adhere to their policy

The use of seat belts in buses is also mandatory, where they are fitted. In low-speed urban settings, bus crashes seldom reach a level of energy requiring seat belts but, at higher speeds, when the risk of rollover increases, specifying that only buses with seatbelts can be used may be practicable.

In some situations, workplace vehicles will need to transport children. The rules governing this are complex and organisations should ensure that they are aware of the current regulations for the location they are operating, from the point of view of both road traffic safety and child protection.

Poor installation of restraints is a common fault and organisations should ensure that all installation instructions are followed and that the restraint is installed by a competent person. All road safety agencies and motoring organisations provide extensive guidance on the correct selection, installation and use of child restraints.

While helmet use by motorcyclists and cyclists is a legal requirement, attention should be paid to ensuring the selection of the safest helmets, their prompt replacement if damaged and their correct use. The Consumer Rating and Assessment of Safety Helmets (CRASH) program provides advice on the safety performance of different helmets available in the Australasian market.

Additional protective equipment over and above that required by traffic laws should be considered where practicable. Helmets for quad bike riders and others in relatively unprotected vehicles or high-risk activities should be considered. Additional protective equipment for motorcycle riders, such as gloves, boots, protective clothing and armour have proven benefits.

High visibility clothing should be considered for vulnerable road users such cyclists, motorcyclists and workers who have to exit their vehicle, particularly at night.

Additional protective equipment over and above that required by traffic laws should be considered where practicable. Helmets for quad bike riders and others in relatively unprotected vehicles or high-risk activities should be considered. Additional protective equipment for motorcycle riders, such as gloves, boots, protective clothing and armour have proven benefits.

Please note: Tasmania amended the Work Health and Safety Regulations 2012 to improve quad bike safety.

The new regulation 216A includes a duty on a person conducting a business or undertaking (PCBU) with management or control of a quad bike to:

- ensure an approved helmet is available for use with the quad bike
- ensure the person using the quad bike has appropriate training
- ensure the quad bike is not used to carry a passenger unless designed for that purpose.

Regulation 216A also requires a user of a quad bike to:

- have had appropriate training
- wear an approved helmet
- not carry a passenger unless the quad bike is designed for that purpose.

5.8 Inadequate post-crash responses

Systems to alert emergency services and the organisation to a crash, and the response by the organisation can be critical to reducing the incidence and severity of an injury.

Risks

Vehicles should be equipped to support the provision of first aid and should also be considered in the organisations' emergency management plans. These provisions should apply across all vehicles used as workplaces, whether the vehicles are under the control of the organisation or not, such as grey fleet vehicles or vehicles being driven by third parties. However, the nature of these provisions is likely to vary.

Risks will arise from both the use of the vehicle and its isolation from the organisation.

Potential controls

Fast response to crashes is one of the most effective measures for reducing fatality risks. Whether notification is by individuals or through automated alerts triggered by vehicle safety

systems both depend on adequate communication network performance. The risk management process should consider whether communications to notify emergency services would be adequate in all the locations where the vehicle may be.

In the event of a crash, following the management of the immediate response, a review should be undertaken to assess hazards to determine whether current controls are adequate.

There is evidence that the involvement of drivers in discussion groups to review incidents and their own behaviour can provide improvements in their safe driving performance that outweigh any benefits that might accrue from driver training programs, at far less cost.

In the longer term, systematic collection and analysis of all incidents will provide a vital source of information to drive continuous improvement in the safety management system.

Glossary

Buses: Light or heavy vehicles carrying passengers for hire or reward

Controls: Actions to eliminate health and safety risks so far as is reasonably practicable, and if that is not possible, minimising the risks so far as is reasonably practicable

Grey fleet: Vehicles used for work that are not directly provided by the organisation that employs the driver

Hazard: A situation or thing that has the potential to harm a person.

Heavy vehicles: Vehicles requiring specific heavy vehicle driver licences

Hire cars: Cars hired for short-term or long-term use and driven by a worker

Light commercial vehicles: Vans, pick-up or other utility vehicles able to be driven on a passenger car licence

Motorcycles: two- or three- wheeled motor vehicles, including scooters and mopeds, requiring a motorcycle licence to ride

Packaged cars: Cars supplied to an individual by the organisation for use as a private vehicle but which may also be used as a pool cars during work hours

Plant: Specialised vehicles, such as fork lifts, that may be registered for use on public roads

Pool Cars: Cars operated by the organisation that are used by a number of people on a regular or ad hoc basis

Public road: Roads or other areas where road traffic law applies

Risk: The possibility that harm (death, injury or illness) might occur when exposed to a hazard

Road traffic safety: management of hazards and consequent risks associated with the use of public roads so as to ensure death or serious injury does not occur

Taxis: Taxis, ride sharing services or other services in which workers may ride as passengers

Third party vehicles: Vehicles operated by customers, suppliers, clients or other third parties in which workers may drive or ride as passengers

Work health and safety: management of hazards and consequent risks associated with a workplace

Resources

Websites with resources relating to vehicles in the workplace

National Road Safety Partnership Program (NRSPP): www.nrspp.org.au

Preventing Road Accidents and Injuries for the Safety of Employees (PRAISE): www.etsc.eu/projects/praise

Driving for Better Business: www.drivingforbetterbusiness.com

United States Department of Labor: www.osha.gov/Publications/motor_vehicle_guide.html

Work health and safety processes

"Code of Practice – How to Manage Work Health and Safety Risks", Safe Work Australia, Canberra, December 2011

"Code of Practice – Managing the Work Environment and Facilities", Safe Work Australia, Canberra, December 2011

"Code of Practice – Work Health and Safety Consultation, Co-operation and Co-ordination", Safe Work Australia, Canberra, December 2011

"Guide for Managing the Risk of Fatigue at Work" Safe Work Australia, Canberra, November 2013

"Guide to The Model Work Health and Safety Act ", Safe Work Australia, Canberra, March 2016

"Work Health and Safety - Seven Steps for Small Business", Safework SA, Government of South Australia, www.safework.sa.gov.au, October 2013

"Identifying, Assessing and Managing Work Risks", Worksafe New Zealand, Wellington, July 2017.

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"The business case for managing road risk at work", PRAISE report, European Transport Safety Council, Brussels, May, 2014

"Workplace road safety risk management: An investigation into Australian practices", Warmerdam et al, Accident Analysis and Prevention, 98 (2017)

"Improving Fleet Safety – Current Approaches and Best Practice Guidelines", Austroads Publication AP-R321/08,

"Guide to safe work related driving", Transport Accident Commission, WorkSafe Victoria,

"A guide to applying road safety within a workplace – A Bilateral Approach to Organisational Road Safety in Australia and New Zealand", National Transport Commission (NTC),Australia, Accident Compensation Corporation (ACC), New Zealand.

"Driving at Work – managing work-related road safety", Health and Safety Executive, UK, INDG382, 04/14, www.hse.gov.uk/pubns/indg382.htm

"Road Safety Manual for the Queensland Government Fleet" Qfleet, Department of Housing and Public Works, Third Edition

"Thought Leadership: Road Safety Management Systems", National Road Safety Partnership Program, Melbourne, October 2015

"Thought Leadership: 'Just culture' – The key to an effective safety culture", National Road Safety Partnership Program, Melbourne, November 2015

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"Managing young drivers at work", PRAISE report, European Transport Safety Council, Brussels, May 2015

Australasian New Car Assessment Program (ANCAP): www.ancap.com.au

Australian Road Assessment Program (AusRAP): www.ausrap.aaa.asn.au

New Zealand Road Assessment Programme, KiwiRAP, www.kiwirap.org.nz

"Grey Fleet Safety Management Guide", National Road Safety Partnership Program, Melbourne, October 2017.

Used Car Safety Ratings (UCSR) www.howsafeisyourcar.com.au

Consumer Rating Assessment of Safety Helmets (CRASH) www.crash.org.au

Child Restraint Evaluation Program (CREP) www.crep.com.au

Appendix A Attachments

Table 4 Checklist 1 - Assessing the nature and extent of exposure

Vehicle	Vehicle Use					
	Small to Medium Enterprises			Large Firms		
	Low use	Medium use	High use	Low use	Medium use	High use
Bicycles	Occasional use	Regular use	Regular use as part of our business	Occasional use	Regular use	Regular use as part of our business
Motorcycles	1 or 2 vehicles occasional use	Operate a small fleet – it supports our business	Operate a small fleet – it is our business	Operate a small fleet – it supports our business	Operate a large fleet – it supports our business	Operate a large fleet – it is our business
Pool Cars	1 or 2 vehicles occasional use	Operate a small fleet – it supports our business	Operate a small fleet – it is our business	Operate a small fleet – it supports our business	Operate a large fleet – it supports our business	Operate a large fleet – it is our business
Packaged cars	Used only by the vehicle custodian	Occasional use as a pool vehicle	Used regularly as a supplement to the pool fleet	Used only by the vehicle custodian	Occasionally used as a pool vehicle	Used regularly as a supplement to the pool fleet
Grey fleet	Occasional use	Regular use	Regular use as part of our business	Occasional use	Regular use	Regular use as part of our business
Third party vehicles	Occasional use	Regular use	Regular use as part of our business	Occasional use	Regular use	Regular use as part of our business
Hire cars	Occasional use	Regular use	Regular use as part of our business	Occasional use	Regular use	Regular use as part of our business
Taxis	Occasional use	Regular use	Regular use as part of our business	Occasional use	Regular use	Regular use as part of our business

Vehicle	Vehicle Use					
	Small to Medium Enterprises			Large Firms		
	Low use	Medium use	High use	Low use	Medium use	High use
Light commercial vehicles	1 or 2 vehicles occasional use	Operate a small fleet – it supports our business	Operate a small fleet – it is our business	Operate a small fleet – it supports our business	Operate a large fleet – it supports our business	Operate a large fleet – it is our business
Heavy vehicles	N/A	Operate 1 or 2 trucks	Operate a small fleet	Operate a small fleet	Operate a small fleet	Operate extensive fleet
Buses	Public transport use	Operate 1 or 2 buses	Operate a small fleet	Public transport use	Operate a small fleet	Operate extensive fleet
Plant	Occasional use on the road	Regular use on the road	Regular use on the road as part of our business	Occasional use on the road	Regular use on the road	Regular use on the road as part of our business

Table 5 Checklist 2 - Issues to consider for each vehicle group

Vehicle	Issues to consider
Bicycles	Are bicycles maintained adequately? Are helmets worn correctly? Is additional PPE provided (high visibility jackets etc.)? Are riskiest times (e.g. wet or dark conditions) minimised? Do any locations or modes of operation increase risk? How are any loads carried?
Motorcycles	Are latest safety features provided, particularly advanced braking? Are riders experienced with the models used? Is additional PPE provided (gloves, boots, jackets, pants, armour)? Are riskiest times (e.g. wet or dark conditions) minimised? Do any locations or modes of operation increase risk? How are loads carried?
Pool Cars	What are the vehicle standards for purchasing/leasing? Are cars available for use by all or only specific roles? Is there a policy on garaging and private use? Who is responsible for management of the vehicle

Vehicle	Issues to consider
Packaged cars	Same as for pool vehicles What access and use controls are in place?
Grey fleet	Is usage incidental or a de facto outsourced fleet Are there any controls over vehicle specification/age? Are there controls in place to ensure vehicles are roadworthy, particularly in respect of tyres and brakes? Is there an authorisation process and are there controls over use? Are pool cars offered as a preferred option? Are drivers aware of their obligations to comply with organisational policies? Is there adequate insurance coverage?
Third party vehicles	Whose vehicles might be used: customers', suppliers', others? Are there any controls over vehicle specification/age?
Self-drive hire cars	Planned, regular use or irregularly in response to particular needs? Are there minimum vehicle standards? Are there risks from drivers operating in unfamiliar vehicles, locations, when fatigued etc.? Are there standard hire contracts?
Taxis, hire cars, Uber etc.	Planned, regular use or irregularly in response to particular needs? Are there standing arrangements/contracts allowing additional controls? Can workers provide feedback regarding their experience as passengers?
Light commercial vehicles	What are the vehicle standards for purchasing/leasing? How are loads and equipment carried? Are vehicles available for use by all or only by specific roles? Are drivers familiar with the characteristics of the vehicle, laden/unladen?
Heavy vehicles	Are processes fully compliant with HVNL or other road transport legislation, particularly in relation to Primary Duty and Chain of Responsibility? Are there other potential risks not covered by this legislation?
Buses – as operators	For hire or reward: Refer to advice from transport safety regulators See Light commercial and heavy commercial issues, as relevant
Buses – as passengers	Planned, regular use or irregularly in response to particular needs? Are hazards for the total door-to-door trip considered? Where relevant, are there contractual requirements to require seat belts? Are workers advised of their obligation to wear any available seat belts?

Vehicle	Issues to consider
Plant	What are the circumstance in which vehicles such as lawn mowers, fork lift trucks, tractors etc. are used on the road (or footpath, verges etc.)? Have all required permits been obtained and any conditions complied with? What vehicle safety features, e.g. roll-over protection systems, and PPE are required? If vehicles cannot mix with general traffic, what traffic management arrangements are required? Are drivers aware of their traffic law obligations?

Table 6 Checklist 3 - Road traffic safety controls to consider

Road safety hazards	Controls to consider
Inadequate journey planning	Is the trip necessary? Can trips be combined? Are there alternative modes to use? How can trip preparation and scheduling reduce risk?
Roads providing inadequate protection	Are there any roads of concern? Are there practicable alternatives? What controls are required to reduce risks?
Vehicles providing inadequate protection	Do all vehicles comply with standards? Do maintenance and inspection programs ensure continuing compliance? Are vehicles and options specified to be as safe as reasonably practicable? Do all vehicle modifications preserve the vehicle's safety performance? Are measures in place to ensure that unsafe vehicles are not used? Do other organisational WHS programs consider the vehicle as a workplace?
Speed	Is speed compliance monitored? What measures are needed to improve compliance? Are lower speeds necessary in some situations?
Unauthorised drivers	Are all drivers licensed for all the vehicles that they drive? Are additional limitations required to authorise drivers for all or particular situations? Are measures in place to ensure that unfit or at risk drivers are supported and, if necessary, prevented from driving?

Road safety hazards	Controls to consider
Unsafe drivers – fatigue distraction, alcohol etc.	Are drivers medically fit? What measures are in place to prevent drivers being fatigued when they start driving? What practices ensure drivers do not suffer fatigue while driving? Are people with alcohol or drug impairment prevented from driving? Is there an adequate policy on mobile phone use? Have other distraction risks been identified and managed? Do younger drivers require particular controls?
Non-use or misuse of personal safety equipment	Are seat belts and other restraints fitted correctly? Are seat belts and other restraints always worn correctly? Is any other equipment required?
Post-crash response	Do organisational first aid and emergency management plans consider vehicle use? Are processes in place to respond when an incident or breakdown occurs and to advise drivers and passengers what to do? Is systematic incident data used to identify hazards and help develop controls?

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