Vehicles as a Workplace
Road Safety Strategy Reference Group
Purpose of the pack

This pack outlines:

• why vehicles as a workplace is an important area of road safety and what we know about work-related road harms
• our current approach in this area
• examples of international approaches to improving work-related road safety

The information outlined in this pack is intended to inform discussions at the first meeting of the Vehicles as a Workplace reference group, including the facilitated workshop session. More detailed analysis and research will be undertaken on the key areas or themes the reference group decides to explore in subsequent meetings.
What we mean by “Vehicles as a Workplace”

“Vehicles as a Workplace” includes anyone travelling on the road for work; whether driving is a core part of their role (e.g. a bus, truck or taxi driver) or secondary to their main work (e.g. a plumber driving a work van between jobs or someone driving their own car between sites). It also includes bookable fleet vehicle businesses (e.g. rental car companies).

We encourage the Reference Group to think about the role of the whole workplace system in promoting road safety, rather than just the immediate cause of crashes. The group may also wish to consider road safety issues relating to people who travel via other transport modes for work, such as by bicycle or on foot.

We are excluding private roads (farms and logging roads).
The other reference groups informing the new road safety strategy will cover:

- Speed
- Road user behaviour
- Vehicles, vehicle standards and certification
- Infrastructure and planning

While there is overlap between the scope of the Vehicles as a Workplace group and each of the other groups, we would like this group to focus on the issues that are specific to a work context.

For example, while fatigue issues are within scope for both this group and the road user behaviour group, we would expect this group to focus on the risks and causes of fatigue when driving for work and approaches to reducing this risk in the workplace. Similarly, while this group will not consider broader issues relating to speed, the group may wish to consider work-specific speed issues, such as workplace systems and procedures that promote driving at a safe and appropriate speed.
The Health and Safety at Work Strategy will be published later this year.

- Asks businesses to focus on the biggest harms, including sectors with the highest harm rates – the transport, postal and warehousing sector has high fatality rates.
- Activities to support the Strategy, including focussing on high harm sectors, will be part of the implementation planning after the Strategy is released.

The NZTA is also reviewing the heavy vehicle entry certification system to provide increased assurance of the standard of heavy vehicles entering New Zealand. Given that consultation on this review recently closed, we do not expect that the reference group will focus on this particular issue.

Other topics peripheral to our group are:

- working in remote locations
- vehicle maintenance schedules
- dangerous work/worker exploitation
- future of work
Broader transport outcomes

Commercial transport, and vehicles as a workplace more broadly, plays an important role in the broader outcomes that the Government aims to promote in the transport system.

While the new road safety strategy will be focused on improving the safety of New Zealand’s roads, we will seek to do so in a way that also promotes these broader outcomes.
We do not have good current data on the overall size of work-related road harm in New Zealand. Crash records do not record the purpose of the journey, and WorkSafe’s Serious Injury Outcome Indicators do not include road crashes.

We do, however, have sufficient data to suggest that work-related crashes are a very significant part of road safety harm, and that road crashes are likely to be the single largest cause of work-related fatalities in New Zealand.
Over the period between FY2014/15 and FY2016/17, 237 people a year were killed in crashes involving trucks, buses and taxis, an average of 79 a year.

This estimate does not include crashes involving other types of work vehicles. It may also include some fatalities that did not result from work-related activity (e.g. commuting taxi drivers).

By way of comparison, in 2016, 50 work-related fatalities (excluding road crashes) were notified to WorkSafe, with an additional 13 people killed in commercial maritime and aviation incidents.
Deaths from crashes with buses are comparatively rare (average 6 per year since 2000).

Nearly 90 percent of those killed in heavy vehicle crashes are not the occupants, but the other road users involved.

This reflects the fact that, in a collision between a heavy vehicle and a light vehicle or vulnerable road user, there is a much higher probability of death or serious injury than in a collision involving only light vehicles.
The Injury Prevention Research Unit at the University of Otago is currently reviewing coronial records from 1994-2014 to identify work-related road deaths during this period, which should give us a relatively accurate overall picture of work-related road fatalities during this period.

While this work will not be published until 2019, the lead researcher has agreed to provide provisional data to this reference group in October on an in-confidence basis.

The last time this analysis was undertaken, covering the period from 1985-1998, it identified 241 workers, 192 commuters and 1447 bystanders (e.g. occupants of other vehicles and pedestrians) killed in work-related road crashes. 37 percent of fatalities could not be classified.

Vehicle registration shows that around 16 percent of vehicles are owned by companies and other bodies corporate. This does not include vehicles registered to individuals but used for work purposes.

(using matched MVR and CAS data 2012 – 2016)
Analysis of the kilometres travelled by New Zealand’s vehicle fleet also gives an indication of the likely scale of work-related road harm, noting that some light passenger vehicles will be used for work-related purposes, while some commercial vehicles will be used for personal purposes.
Current requirements

Health and safety obligations when driving for work

Businesses have broad duties under the Health and Safety at Work Act 2015 (HSWA) to protect people at work. This means businesses must ensure the health and safety of:

- workers when they are driving for work – workers include employees, contractors, volunteer workers, and people gaining work experience
- any other workers who are influenced or directed by the business, when driving for work
- other people (bystanders, customers and visitors).

Businesses must:

- provide and maintain safe vehicles, and ensure they are used, handled, and stored safely.
- ensure workers have adequate experience, training, and supervision to use a vehicle.

Workers driving for work must also take reasonable care of themselves and others.

The HSWA provides for a chain of responsibility for workplace health and safety. This includes requiring that importers and suppliers ensure that “plant” (defined as including vehicles) is, to the extent reasonably practicable, without risks to health and safety.
In addition to the broader health and safety obligations on businesses, some commercial vehicle services are required to be licensed and comply with requirements under the Land Transport Act (LTA) aimed at improving road safety, consumer protection and personal security:

- Goods service: delivers or carries goods, with a vehicle of 6000kg or more
- Small passenger service: carries 12 people or fewer (taxis, Uber, shuttles, dial-a-driver)
- Large passenger service: uses vehicles that carry more than 12 people
- Vehicle recovery service: tows or carries vehicles
- A rental service: hires out vehicles to carry goods or passengers
## Current requirements - commercial vehicles

<table>
<thead>
<tr>
<th>Risk</th>
<th>Control</th>
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<tbody>
<tr>
<td>Inadequate safety systems</td>
<td>• Operator rating system (goods and large passenger services)</td>
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<td>• Chain of responsibility obligations</td>
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<td>Personal safety</td>
<td>• P endorsement for passenger services, including fit and proper person test</td>
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<td>Driver competency / safety</td>
<td>• Class 2-5 driver licence for heavy vehicles.</td>
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<td>• Medical certificate</td>
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<td>• P endorsement requires the driver to have had licence for 2 years</td>
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<td>• Medical certificate</td>
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<td>• 90km/h maximum speed limit for heavy vehicles</td>
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<td>Driver Fatigue</td>
<td>• Work time and logbook requirements</td>
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<td>Overloaded vehicles</td>
<td>• Vehicle weight limits</td>
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<tr>
<td>Vehicle safety standards</td>
<td>• Certificate of Fitness requirements</td>
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</table>
Current requirements - commercial vehicles

Contractual arrangements

► Some commercial vehicle operators encourage good driving through incentives that are linked to monitoring through GPS/telematics systems.

► Ministry of Education contractually requires telematics systems in school buses that allow them to monitor things like harsh braking as a mechanism to discharge their responsibilities under Health and Safety legislation. Ministry of Education has stepped up auditing of school bus operators, paying attention to vehicle maintenance records.

► Regional Councils now require reporting of public transport near misses and incidents under PTOM contracts.
Regulators

Worksafe is responsible for monitoring and enforcing compliance with the HSWA. It also warrants NZ Police officers to enforce health and safety requirements. Other agencies can be designated as health and safety regulators for particular sectors.

The NZ Transport Agency is responsible for the operation and enforcement of the commercial licensing and certification system under the LTA. NZ Police are responsible for roadside enforcement activity under the LTA.

• The two agencies are working together via the Road Safety Partnership to review that operating model to maximise effectiveness.
In 2013, ACC and the National Road Safety Partnership Program (an Australian initiative aimed at improving road safety) published *A Guide to Applying Road Safety within a Workplace*. The Guide aims to assist businesses and other organisations in addressing road safety risks and provides practical guidance for small through to large organisations.

The Guide emphasises the importance of ensuring that the simple things are managed and done well and on building a supportive culture and environment for road safety, rather than relying on detailed, but poorly implemented corporate policies and procedures. It also notes that minimum legal requirements are not necessarily sufficient to adequately manage road risks.

NZ programmes and initiatives

The NZ Transport Agency and ACC also issued guidance in 2007 for businesses on safe driving policies. This guidance outlines the importance of businesses having a safe driving policy as part of meeting obligations under health and safety legislation. It outlines the systems and policies that businesses should have in place to:

- buy and hire vehicles with a high safety rating
- provide driver education to any employee who drives a vehicle for work
- reduce the potential for driver fatigue and distraction
- reduce the number of infringement notices received
- reduce the risk of serious injury in the event of an accident.

The **Operator Rating System** (ORS) aims to improve heavy vehicle safety by assessing operator safety. It is one of the tools that the NZ Transport Agency and New Zealand Police use to identify potentially higher-risk operators for further investigation and assistance to improve their safety practices, and for auditing and targeting purposes.

There are questions about whether the ORS gives an accurate overall picture of operator safety, given its reliance on road side inspection results and Certificate of Fitness inspection pass rates. As part of the Road Safety Partnership, NZ Transport agency and Police are looking at a wider range of intelligence tools to target their activities.

**SAFED NZ** is a driver development course established to help organisations reduce fuel and maintenance costs, reduce carbon-dioxide emissions and improve safety. It was developed and implemented by the Ministry of Transport and the NZ Transport Agency and supported by the Energy Efficiency Conservation Authority, Bus and Coach Association, Contractors Federation and Road Transport Forum.

The New Zealand programme has been adapted from a successful scheme in the UK. The SAFED NZ has been running in New Zealand since 2010, and has trained more than 2000 drivers, with fuel savings averaging 7.37 percent for trucks and 5.31 percent for buses.
NZ programmes and initiatives: government vehicles

NZ Transport Agency / ACC / NZ Police / WorkSafe:

Safe Driving Guidelines – under development

The Guidelines aim to support agencies to:

• incorporate vehicle safety features into government fleet vehicle purchasing requirements
• minimise the risk and exposure of workers to workplace injuries and harm
• reduce the number of crashes and severity of vehicle related injuries
• reduce workplace direct and indirect vehicle crash related costs, and
• minimise the financial and social cost to the community

The framework will help New Zealand government agencies to own safer vehicles. The development and implementation of the framework will:

• contribute to improved safety outcomes and culture in the workplace
• promote the benefits of safe vehicles to all New Zealanders
• influence vehicle manufacturers to raise the safety standard of their vehicles
• demonstrate to the community at large the benefits of a safe driving policy.
NZ programmes and initiatives: telematics

The increasing use of telematics could be providing significant workplace driving safety benefits. Telematics systems record and transmit information about vehicle travel, typically using an in-vehicle device, and can be used for monitoring road safety risks, such as driver behaviour.

The introduction of electronic Road User Charges (eRUC) in 2010 has been a key factor driving strong uptake of telematics systems in commercial diesel vehicles. As of early 2018, the majority of heavy truck RUC is recorded electronically.

Most of the approved electronic distance recorder providers also include monitoring, reporting and analytics of key safety issues, such as speed and seatbelt use, and direct driver feedback. These systems are marketed as assisting businesses to comply with their duties under the HSWA. As a result a range of corporates, including local authorities, use telematics in their small commercial vehicles.

**WHAT ORGANISATIONS MONITOR WITH TELEMATICS**

(Respondents could select more than one answer)

- Vehicle/equipment tracking: 79%
- Speed: 65%
- Distance driven: 56%
- Hours of service/driver hours: 46%
- Proof of service/jobs completed: 46%
- Maintenance: 37%
- Driver performance: 32%
- Idling: 23%
- Engine hours: 21%
- Fuel usage: 15%
- Harsh braking: 12%
- Other: 2%

NZ programmes and initiatives: sector led

Brake – Australasian Fleet Safety Awards

Brake’s Australasian Fleet Safety Awards recognise the achievements of organisations and individuals working in the field of road risk management.

The 2017 Award Winners included DHL and MiX Telematics, AA Driving School - Fleet & Business and Competenz.

Road Transport Forum:

• NZ Truck Driver Competition - promotes driver skills and knowledge
• Rollover Prevention Programme - provides a series of seminars to educate the sector

Log Transport Safety Council:

Membership includes the Forest Owners Association, log transport operators, Road Transport Forum, trailer manufacturers, transport engineers and the Logging Industry Research Organisation. The Council established a target of zero rollovers, through

• Education
• Vehicle dimensions
• Logistics and operations
International approaches: Australia

Amendments to the Heavy Vehicle National Law

• From 1 October 2018 the Heavy Vehicle National Law will provide that every party in the heavy vehicle transport supply chain has a duty to ensure the safety of their transport activities.

Intelligent Access Program

• The Intelligent Access Program (IAP) is a telematics compliance tool that is required for some higher mass limits vehicles and other heavy vehicles. It monitors location, mass, speed and time of day and reports breaches to road transport authorities.

National Road Safety Partnership Programme

• Published and presented a large number of case studies, guides, factsheets and support materials to manage road traffic injury risk.

The Australian Workplace Health and Safety Strategy 2012-2020

• Identifies road transport as a national priority industry – transporting freight and passengers.

Austroads

• Issued guidance to integrate workplace health and safety and road traffic safety policies to support improved road traffic safety management practices. NZ Transport Agency and WorkSafe have assessed this guidance as not suitable for the NZ context.
International approaches: USA and UK

USA - Network of Employers for Traffic Safety
• The Network of Employers for Traffic Safety is an employer-led public/private partnership dedicated to preventing work-related traffic crashes.

United Kingdom - Driving for Better Business
• The Driving for Better Business campaign is a partnership between charities, private sector, government and road safety professionals. Their mission is to promote the safe design and use of vehicles and roads by sharing knowledge and encouraging innovation.
The Haddon matrix is a tool for considering opportunities for injury prevention. It has been updated here for the workplace driving context, including a system and management focus, and may be useful for structuring approaches to improving workplace road safety outcomes.

<table>
<thead>
<tr>
<th>Management culture</th>
<th>Journey</th>
<th>Road/environment</th>
<th>Drivers and managers</th>
<th>Vehicle</th>
<th>Community</th>
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</thead>
<tbody>
<tr>
<td><strong>Pre-incident</strong></td>
<td>Policies</td>
<td>Purpose</td>
<td>Risk assessment</td>
<td>Selection</td>
<td>Regulator briefings</td>
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<td></td>
<td>Management structure</td>
<td>Need to drive?</td>
<td>Road improvement</td>
<td>Maintenance</td>
<td>Safety awards</td>
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<td>Accountability</td>
<td>Journey planning</td>
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<td>GPS</td>
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<td>Safety Champions</td>
<td>Shifts/adequate rest</td>
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<td>Safety features</td>
<td>External benchmarking</td>
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<td>Worker engagement and participation</td>
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<td>Road Safety charities</td>
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<td>Conferences</td>
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<td><strong>At scene</strong></td>
<td>Emergency support to</td>
<td>Manage scene,</td>
<td>Manage scene,</td>
<td>Dash-cam data?</td>
<td>Support bystanders, witnesses</td>
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<td>driver</td>
<td>safety of other</td>
<td>Inform Police/other regulator</td>
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<td>Escalate as appropriate</td>
<td>traffic/bystanders</td>
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<td><strong>Post-incident</strong></td>
<td>Investigate or refer to</td>
<td>Debrief and</td>
<td>Debrief driver,</td>
<td>Vehicle inspection and repair</td>
<td>Inform community of outcomes</td>
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<td>investigator</td>
<td>review</td>
<td>counselling and support,</td>
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<td>Evaluate</td>
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<td>Training improvements</td>
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Key challenges in Driving for Work

The goals of safer driving for work can be split into behaviour and system approaches:

**System**
- Improve data collection to identify work-related crashes
- Better evidence of intervention effectiveness
- Improve employer understanding of obligations
- Risk management
- Fleet procurement and maintenance
- Technology, including telemetrics
- Identify and highlight best practice
- Government as an employer and fleet purchaser

**Incentives**

**Behaviour**
- Driving when tired
- Speed
- Impairment
- Overloading
- Worker engagement and participation
- Under-reporting
What might change from 2020-30?

**Trends in freight**
- Larger loads on heavier vehicles
- Oil prices increasing

**Employment trends**
- Increased casualisation – gig economy
- Workforce changes – driver shortages, ageing drivers
- Increased mobility of workers across jurisdictions
- Employment standards and relations issues
- Exploitation of vulnerable workers, including migrants

**Technology**
- Integration of telematics with vehicle control and navigation systems
- Autonomous vehicles
- Safety technology initiatives
  - For example, Monash University Accident Research Centre’s Advanced Driving Simulator monitors drivers in rested and fatigued states to see how drowsiness impacts driver safety. The Advanced Safe Truck Concept links in-cab driver monitoring technology with the external traffic and roadway in real time.