



PETER HART

Change over ten years

noticeable improvement. The reasons for the road safety improvement are 1) better fatigue management, 2) more effective enforcement of driving standards, 3) gradual road infrastructure improvements on main routes, 4) better multi-combination trucks and 5) Chain of Responsibility (COR) obligations. It is sobering to report that driving a truck is still the most dangerous occupation in Australia.

Occupational Safety

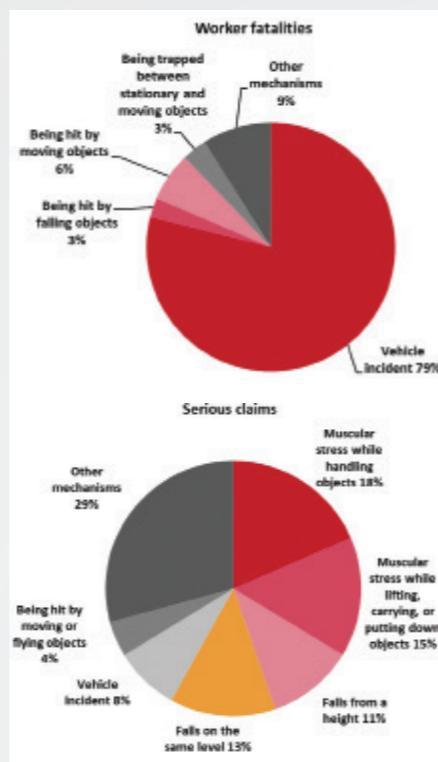
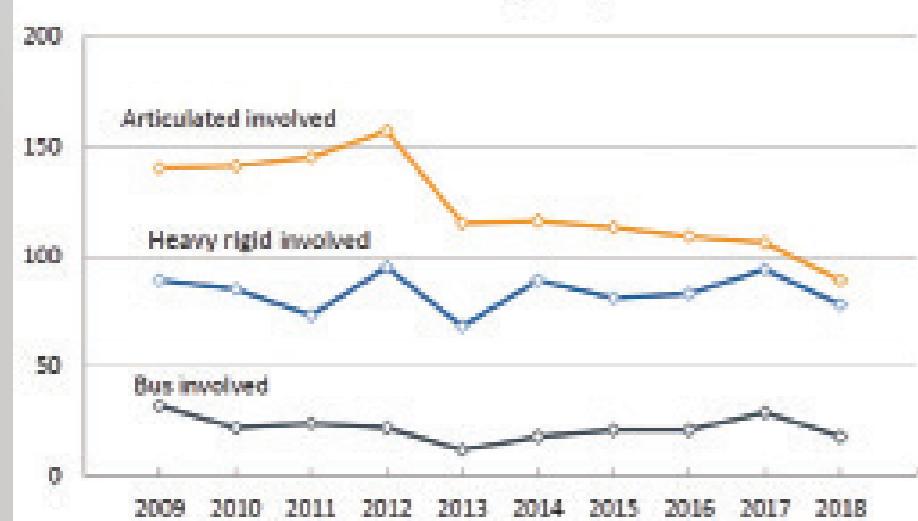
Ten years ago, in April 2011, I published my first article in *Prime Mover* magazine. That was 110 articles ago. This anniversary prompted me to consider what has changed in our industry over the past ten years. I cannot do justice to this subject on two pages, so I will consider just a few performance indicators. Next month I will look ahead over the next ten years and try to predict where we will be in 2031.

Road Safety

The safety performance is slightly better now than ten years ago. Mainly, this is because articulated truck safety has significantly improved. Over the same time, the size of the fleet has increased by about seven per cent, so the safety performance represents a

Freight Rates have increased at no more than CPI over the past ten years. This

Annual counts of fatalities in crashes involving heavy vehicles, 2009–2018



has not adequately compensated the road transport sector for the increasing demands from customers, COR, training, etc. Consequently, operators must focus on productivity improvements to stay in business. One consequence is the median age of vehicles continues to increase.

The Road Freight Task

The Federal Bureau of Transport and Regional Economics reports on the scale of the freight task (Research Report 152, 2019). The total road freight volume has been increasing approximately linearly between 2008 and 2018. Over the decade 2008–2018 the growth in 'general road freight' (light blue and beige together) was about 15 per cent over the decade. On average, ~ 1.5 per cent a year. On a tonne-kilometre basis the growth was about 22 per cent over the decade. Impressive!

Fleet Size

The size of the market for new vehicles is monitored by ARTSA-I based upon our analysis of the NEVDIS (registration) data. The market in 2021 was down, as expected because of the COVID-19 induced uncertainty. The peak sales year was 2019, when the market was about 10 per cent

larger than a decade earlier. The median age of heavy vehicles in the fleet is still going up. It is about 14 years for a truck and slightly older for a trailer. The overwhelming trend is that the long-haul fleet has changed to high productivity vehicles (B-doubles, A-doubles, long dog-trailers, super Bs). The additional freight task has been met by productivity improvements. In

October 2020 there were about 46,000 multi-combination prime movers registered in Australia. The number of single trailer prime movers was about 64,000. The multi-combination prime mover segment has been growing at about five per cent pa over the decade, whereas the single trailer prime movers crept up at about one per cent.

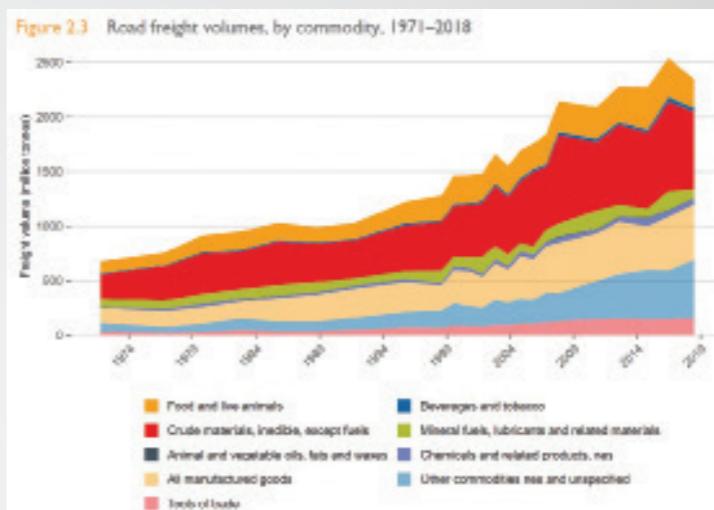
Fuels

Diesel fuel has been king over the past decade. Ten years ago, there were high hopes for Compressed Natural Gas (CNG) as a heavy vehicle fuel. Whilst there are still many route service buses running on CNG, most truck operators have, or are in the process of getting out of CNG on freight trucks. The reason for this is the complexity of supply, storage, and maintenance of CNG when compared to diesel. LPG top-up into the air intake was also trailed and rejected because the engines ran too hot.

The cost of diesel fuel has been flat over the past decade. In 2010 the Australia-wide average diesel price at the pump was \$130.10. In 2020 this price was \$126.90, although the COVID-19 disturbance is a factor. The average annual fuel price range was \$118.50-\$156.80. Diesel fuel price has been static.

Vehicle Types and PBS

The Performance-Based Standards (PBS) scheme has opened-up new vehicle types and new routes. The PBS scheme was interesting but insignificant in 2010. In 2021 PBS is mainstream and changing



the high-capacity vehicle market. PBS underpins the common use of 4-, 5- and 6-axle dog trailers, and the introduction of high-productivity combinations in Victoria and elsewhere. In 2011, 25m long B-doubles were the workhorse-high-productivity combinations. In 2021, 26m B-doubles are still the workhorses, but there are new kids on the high-productivity routes. They are A-doubles (36.5m) and super B-doubles (30m).

Axle weight limits have not changed over the past ten years. What has changed is the length and configuration of the high productivity fleet. PBS is relevant to about 20 per cent of the heavy-end market. In the past ten years, state road agencies have embraced high-productivity vehicles rather than fighting against them. It is now local government that is sceptical.

Industry Reform

The National Heavy Vehicle Regulator (NHVR) did not exist in 2011. It was established in 2013. After a shaky start, the NHVR is doing important work. The industry has confidence that uniform procedures have been developed and applied. The NHVR is a success! There is tension over delays in road-access permit applications being issued. High productivity vehicles need these permits to operate. Permits take longer to obtain in 2021 than in 2011; however, the difficulty and scale of road-access assessments has quadrupled. Because vehicles are longer than before, local road owners are taking more time to assess applications.

Dr. Peter Hart,
ARTSA

Vehicle Standards

There have been two significant changes in the design rules applicable to heavy vehicles over the past decade. Firstly, Vehicle Stability Control (VSC) was mandated effective from 2019 on most heavy vehicles. Most new trucks must have an intelligent braking system that provides ABS, rollover protection and directional stability. Trailers require an ABS and a rollover protection. I want to applaud NSW for mandating rollover protection on dangerous goods tankers starting with new tankers in 2014 and in-service

tankers in 2019. I do not understand why the other states have not done so, because the technology works.

The second significant design rule change is that the driver seat in a heavy vehicle must have an integral seatbelt. No more B-pillar anchors! The Emergency Locking Retractor (ELR) also must have a high locking threshold – called a type 4N. These changes are intended to make seatbelt wearing more comfortable for the heavy vehicle drivers. On bumpy roads there is still a likelihood that the ELR will lock-up. The solution is probably to fit a locking clip that prevents the belt feeding into the ELR once it is being worn.

Overall

In the last decade, the industry made significant progress with safety, productivity and regulatory reform. There was little progress with cartage rates, which are low for the risks and activity involved. We also made good progress with the health of the driver and ancillary workforce but starting from a low point. The shortage of experienced drivers, diesel mechanics and managers is a serious threat to the safe and efficient operation of the industry. The workforce became more diverse and less experienced over the past decade. The machines are getting better. Finding good participants and training them well is our important challenge.



SAL PETROCCITTO

The Australian economy is highly reliant on road freight compared with our international counterparts. This highlights the critical reliance our communities and industries have on a safe and efficient road transport sector. The Heavy Vehicle National Law (HVNL), the framework to regulate road transport, was created almost a decade ago and was a landmark moment for Australia's transport industry.

It was the crucial first step in moving from a state-based approach towards a national system of regulation, and it has delivered important gains in safety, innovation and productivity. But it was only the first step, and most parties today agree that the law relies too heavily on prescription and outdated controls and systems, rather than pursuing a modern and agile approach to delivering better safety and productivity outcomes.

The current review of the law, being led by the National Transport Commission, is a rare and potentially once in a lifetime opportunity to pursue an improved, strategic and responsive structure that will deliver benefits for the Australian community and the national economy.

The National Heavy Vehicle Regulator's (NHVR) response to the HVNL Consultation Regulatory Impact Statement (RIS) was released at the start of the year and lays out our vision for the future of national regulation. As a modern and intelligence-led

HVNL Review – a rare opportunity to deliver modern regulation

regulator, our key priority for the new legislative structure is ensuring effective partnership between industry, supply chain and governments to pursue improved and innovative outcomes. This is focused on the law encouraging and empowering industry to improve safety within their business (shared responsibility model with government) and ensuring the heavy vehicle task is viewed as a professional and credible employment option.

Improved consistent outcomes must be a shared priority. Importantly, a greater focus on how all levels of government work together in a modern, disciplined and consistent manner is critical to delivering better national outcomes. This includes improved recognition of the heavy vehicle industry's importance to business and communities, with heavy vehicle reform having significant flow-on effects on for national and local economies.

Throughout the review process, there has been a strong focus on the negative impact of state-based derogations and the creation of confusing approval processes which restrict the economic benefits of national regulation.

Collective agreement and a clearer delineation of the responsibilities of ministers and the regulator in delivering an effective and adaptable regulatory environment should be an essential part of the review process and, ultimately, the new law.

Modern regulation requires a principle-based approach.

We believe a principle-based legislative approach will deliver the most successful and responsive regulatory regime. That regime must be simplified, forward-looking and future-proofed – with simple primary law that outlines desired

outcomes (requiring minimal change) and provides the controls and procedures to achieve it in regulations and a one-stop shop set of standards.

The NHVR supports a model that separates regulations into two distinct categories:

- National regulations: covering those areas where responsible ministers want greater oversight, and
 - Heavy vehicle regulations: that cover matters the regulator is best placed to manage in order to provide certainty in relation to operational policy and service delivery matters (processes that lend themselves to changes in the environment). Note: this would still have appropriate oversight by responsible ministers.
- This approach is an effective means of providing for a simple, modern and agile scheme that also has the appropriate checks and balances in place.

Empower industry to invest in safety
The NHVR strongly supports supplementing the principle-based legislative approach with a risk-based assurance framework.

This multi-tiered model would provide increased flexibility for operators who demonstrate investment and innovation in improved safety outcomes (through performance and assurance tiers), as well as certainty for operators seeking it (through the prescriptive tier).

While some operators will choose to operate in a prescriptive regime, the model should encourage both small and large operators to progress to the performance and assurance tiers.

Real benefits need to consider reform of all heavy vehicle related processes. Guaranteeing the future effectiveness of road transport requires consideration of all related heavy vehicle systems and processes to ensure they are fit for purpose.

Improving the current systems will provide better safety outcomes while minimising duplication and additional administrative costs.

Safety will be improved by strengthening the current licensing system to better focus on practical safety skills, including fitness for duty and fatigue management. Ensuring registration systems recognise heavy vehicle businesses as professional entities will provide greater oversight of operations and relationships among drivers, companies and vehicles.

Fatigue and access must be priority
Prioritising fatigue and access reform will allow significant improvements in safety and productivity.

The review should focus on ensuring these critical areas are robustly addressed, which will require a commitment to deliver improved outcomes outside the HVNL.

The RIS's approach to improving fatigue management and ensuring it is focused on providing flexibility to better manage safety risks, rather than merely counting hours, is strongly supported by the NHVR.

Fundamental improvements to reduce reliance on access permits and to open networks to safer and more productive vehicles must also be fully considered. A 'more of the same' approach would be a missed opportunity to deliver a safer and more productive road freight task. The 2020 Productivity Commission Report into National Transport Regulatory Reform has already identified key areas of reform and provided a roadmap for improved productivity outcomes through (among others) expanding as of right access networks for Performance-Based Standards (PBS) vehicles, increasing data sharing and adopting a risk-based assessment of access permits.

Collectively ensure the concepts work on the road

Although the RIS highlights broad concepts for improving the HVNL, success will ultimately be determined by how they are applied practically on the road. Once clearer options are agreed in principle, the industry, the regulator and the police can provide practical insight into how the concepts will translate into effective outcomes.

I can assure you that the NHVR will continue to play a leading role in this process and in the implementation of the new law as it develops.

The NHVR, the states and industry can be proud of what we've achieved since 2012 and I know that together we can create an even stronger, safer and more productive heavy vehicle industry for the years ahead.

Sal Petroccitto,
CEO, NHVR





MARK MAZUREK

A problem shared is a problem halved

The global pandemic reaffirmed the importance of our national supply chains and the vital role our transport drivers play to connect our communities with essential goods.

However, our professional drivers face significant challenges based on the nature of this work. The long journeys, shift work, sedentary lifestyle and time away from family and friends can take its toll on safety, health and wellbeing. At Linfox, we understand that to lead the way to be safer, we must support the health and wellbeing of the people who keep our nations moving. We must take proactive steps to understand the challenges faced by our drivers and use this insight to take real action.

In 2017, Linfox teamed up with Monash University and the Transport Workers Union to undertake a landmark Driving Health study to develop evidence on the physical and mental health status of Australian transport workers. So far, the findings have provided deep insight into factors in the workplace, at home and the community that affect the health of professional drivers.

So how do we turn this insight into action?

Keeping Linfox people and our communities safe is already built into the fabric of our business through our Vision Zero strategy — to reduce, and ultimately eliminate fatalities, injuries, motor

vehicle incidents, unsafe behaviour and practices and net environmental emissions. This commitment inspires conversations about safety across our operations each day in the yard, the office, the workshop, the warehouse and on the road.

For nearly a decade, Linfox has built meaningful strategies and tools to support physical and mental health and wellbeing through our Healthy Fox program. Four pillars including mental health, general health, nutrition and fitness and strength inspire a yearly calendar of events, resources and activities that connect people with the education, support and inspiration they need to make healthy lifestyle choices.

Our approach to safety, health and wellbeing is underpinned by a free confidential Employee Assistance Program that is available 24/7 to team members and their immediate families.

But to motivate real change, we must extend our focus to all transport and warehouse workers across the sector. Linfox is a key founding partner in the Healthy Heads in Trucks & Sheds (HHTS) Foundation, formed during 2020 in partnership with Woolworths, Coles, Toll, Ron Finemore Transport, Qube and Australia Post. This represents our shared commitment to promote the prevention and understanding of mental health issues across the entire Australian supply chain industry. Like all HHTS member

organisations, Linfox will be able to undertake a self-certification process based on a best practice model, and draw on resources and support services to support healthier options around diet, exercise and individual wellbeing for our team members.

In my personal life, I have had friends who work in our industry who have taken their own lives. I hope in future that I can do a better job of seeing the signs and helping those who need it most, and I know this starts with listening and making time and space for a conversation.

For me, participation in HHTS is a great step toward a united industry approach to this problem and will allow us to make sure that support is available for our frontline people regardless of who they work for.

The transport and logistics industry has moved in leaps and bounds over the past two decades to address safety. Now it's time we talk about mental health and wellbeing.

Mark Mazurek,
CEO Linfox Logistics Australia & New Zealand



KIRK CONINGHAM

ALC members have long-argued that the Heavy Vehicle National Law (HVNL) should require operators to advise the National Heavy Vehicle Regulator (NHVR) where vehicles are garaged to limit the incident of 'phoenixing' in the industry and to prove that a nominated amount of capital is available to the business. They also believe that operators use equipment compatible with standards made to the National Telematics Framework to collect identified information and that safety management systems (SMS), scalable to the size of the business, meeting standards made by the NHVR are maintained and followed by relevant businesses.

The primary duty contained in the HVNL requires each party in the chain of responsibility to ensure as far as is reasonably practicable the safety of transport activities relating to a heavy vehicle. This implies, that at the very least, an SMS should be maintained by businesses.

Requirements of the National Operating Standard will go some way towards: ensuring that the primary duty has been satisfied; as well ensuring that where enforcement action is taken, the right supply chain participant – be it driver, consignor, loading manager, packer or anyone else – that was actually in the position to influence safety outcomes (but didn't) is held to account.

These requirements are not unusual. For example in NSW, registered:

- prime movers and articulated vehicles with a GVM or GCM of more than 13.9

A National operating standard supports the HVNL to enhance safety and productivity outcomes

tonnes and manufactured on or after 1 January 1991.

- trucks with a GVM or GCM (if travelling in combination) of more than 13.9 tonnes carrying dangerous goods and required to display signs; and
- coaches used in the course of trade or business or for hire or reward must have monitors recording:
- lengths of time the vehicle is moving and stationary during a journey;
- speeds at which the vehicle is driven;
- distance the vehicle travels between stops; and
- the time, date and place of starting and finishing a journey, drivers' details and vehicle identification.

Accredited operators of NSW buses must also maintain a safety management system and be able to prove that capital is available to ensure the maintenance of vehicles. NSW bus industry sources tell ALC that these measures have led to improvements in the management of bus safety relative to other classes of heavy vehicles, which appears to be supported by outcomes: This would suggest that the ALC concept of a national operating standard, requiring operators to:

	Regular Passenger Services	Heavy Vehicles
Quarter 1	83.4%	80.1%
Quarter 2	90.3%	81.1%
Quarter 3	90.6%	79.6%
Quarter 4	87.5%	79.6%

- identify the entity operating a heavy vehicle(s) and the place(s) heavy vehicles are garaged with the National Heavy Vehicle Regulator (NHVR);
- maintain a safety management system (SMS), meeting standards made by the NHVR;
- prove to the satisfaction of the NHVR that a nominated amount of capital is available

to the business; and

• require the mandatory collection of data, through the use of equipment compatible with standards made under the National Telematics Framework would be an appropriate inclusion into the HVNL. Some have tried to argue that this constitutes operator licensing. It doesn't. The Australian Government Guide to Regulation describes licensing as a 'pre-market assessment scheme'. As the following table shows, the national operating standard is no such scheme:

National Operating Standard	Operator Licensing
Can immediately commence to operate, so long as compliance with the NOS can be demonstrated, if called on.	Must prove to a regulator that all licensing conditions are satisfied before being allowed to operate.
No 'fit and proper person' requirement.	Usually a requirement that an operator is a 'fit and proper person.'
No registration fees	Usually an annual registration fee

What the National Operating Standard does do is to make clear to operators what is necessary to ensure the safe operation of vehicles in much the same way as an operator must comply with regulations prescribing the standards that vehicles must comply with for use on a road or driving hours limits. The creation of a National Operating Standard offers the opportunity to enhance the safety and productivity outcomes of heavy vehicle operators — key objectives of the HVNL. ALC believes these comparatively simple and affordable amendments to the national law, scaled appropriately to the size of the businesses, will set benchmark standards that lift safety and compliance.

Kirk Coningham
CEO, ALC



TONY MCMULLAN

The term 'Net Zero Emission' has been getting a lot of coverage in recent times and it is a term that will undoubtedly gain even more airplay as we move to the next federal election, whenever that might be. But what exactly does the phrase mean and what effect will it have on the road freight industry in Australia? 'Net Zero Emissions' refers to achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere. If you think of it like a set of balance scales, on one side you have all the greenhouse gas producing sources, including: burning fossil fuels such as coal, oil and gas in power generation, transport, etc, cement production, methane generated from animals and landfill, and many, many more. On the other side of the scales there are processes that remove greenhouse gas emissions from the atmosphere, these include: forests, plants, crops, etc. At the moment those scales globally and in Australia, are very much weighted to greenhouse gas production and scientists tell us, that we need to get those scales back into balance. Importantly, moving to Net Zero means we can still produce some emissions, as long as they are offset by means that reduce, or remove, excess greenhouse gases already in the atmosphere.

Net Zero

Five countries have a Net Zero target in place by law: Sweden, the United Kingdom, France, Denmark and New Zealand. And there are already two countries that have achieved 'Net Zero Emissions', they are Suriname, in South America and Bhutan, in Asia. In fact, both these countries are carbon negative, on a yearly basis they actually remove more greenhouse gases from the atmosphere than they generate, and both countries still have cars and trucks, though a high percentage of the former are electric.

Much closer to home, there is a little island that you may have heard of, that has reached Net Zero in at least two individual years. In 2014 and 2018, Tasmania's emissions dropped below Net Zero. Tasmania was able to achieve this because it has huge hydroelectric dams, and they are blessed with massive carbon 'eating' forests. With the state's electricity supply already nearing 100 per cent renewable, the remaining emissions from the state, across transport, manufacturing, agriculture, etc, were offset by the greenhouse gases sucked out of the atmosphere by their forests. Though the numbers are not yet in for 2020, it is highly likely that the Apple Isle will again reach carbon neutrality, due to positive impacts that COVID-19 had on the state's road and aviation transport emissions. While Tasmania has work to do to make Net Zero a permanent occurrence, it is well placed to achieve this and could move beyond Net Zero to provide an overall benefit to the world. To do this, Tasmania will likely need to reduce its fossil fuel consumption in the transport sector. Mainland Australia faces a much bigger challenge, whilst Federal and State government's push on with plans to decarbonise our electrical power industry, standards for commercial and domestic

buildings are significantly improving the energy efficiency in that sector and continuing advances in farming are reducing emissions from agriculture, is quickly leaving transport as the elephant in the room. Road, rail and air transport, is fast becoming Australia's largest greenhouse emitter and there is little, or no, action from government to address emissions in this sector. The problem is significantly compounded by the age of our vehicle fleet. The average age of the Australian truck fleet is 15 years and given our slow heavy vehicle retirement rate each year, it will take $2 \times 15 = 30$ years for new trucks to completely replace those in the fleet today. If 100 per cent of new trucks sold today were Zero Emission, it would take 30 years from now for road freight to reach no emissions, that is 2051, a year longer than the 2050 target date being suggested by many currently. A sobering thought. About the only zero in the equation at the moment, is the number of Zero Emission trucks being purchased in Australia.

Of course, we do not need to completely eliminate fossil fuels from transport to achieve Net Zero emissions, Suriname, Bhutan and Tasmania have shown that is not completely necessary, however we do need to significantly reduce the sector's reliance on these greenhouse gas emitting energy sources. It is not too late to take action, however Australian government's need to develop an all-encompassing Net Zero greenhouse gas strategy, one that outlines an effective structural adjustment package for the transport sector, backed by ongoing financial incentives and deployment of that strategy needs to start soon, very soon.

Tony McMullan
CEO, Truck Industry Council



PETER ANDERSON

At the time of writing this column, Australia is at a seminal moment in its battle against the coronavirus pandemic. The rollout of the national vaccination programme is underway and headlines are awash with euphoria that the end of COVID-19 is beginning. It is indeed a tremendous achievement and a credit to the scientific and medical community that an effective vaccine has been developed in record time. Without wanting to dampen enthusiasm over this great milestone, it is, however important to remember that COVID isn't going away in the short-medium term, and that we will be living with the virus strains for at least 24-36 months as the community is vaccinated and herd immunity established. This means that we will have to remain in a state of preparedness for new community outbreaks like we saw recently in Victoria and Western Australia, which will mean further lockdowns of regions or entire states, and associated restrictions on travel and border crossings.

With this being the case, it is high time our state and federal representatives stood up to the challenge of doing something much more permanent about managing disciplines that have been enacted in response to COVID, especially when it comes to the movement of freight. Many have stumbled and bumbled in their response to isolated community

Jurisdictions must get on board Freight Movement Protocol

outbreaks, showing ineptitude by closing borders with little to no notice given to industry and the community, and ambivalence by shirking commitments they made to keep state and national supply chains functional. Each of these jurisdictions has established their own form of communication and reactions when it comes to interstate and intrastate travel restrictions, regrettably to the detriment of the road freight transport industry. Logistics operators have demonstrated they can adhere to new disciplines to keep freight moving, with many adjusting their business activities so they exceed standards required by government. The industry should be applauded for being able to move freight through the community during a pandemic, without moving the virus around, which shows that by being committed, responsible and diligent, freight workers have refrained from transmitting infection.

Unfortunately, the industry continues to be ignored by some sections of the bureaucracy, despite the results produced and the increase in community demand for freight services. Last April, the Commonwealth called all state transport ministers together to formulate and sign off on a Protocol for Domestic Border Controls – Freight Movements. This Freight Movement Protocol was ratified in August, and clearly defined minimum standards jurisdictions would need to meet when borders were necessarily closed.

As an essential service, the freight industry has been consistently let down by state authorities when it comes to application of these minimum standards whenever a border is closed. Our worst fears were realised on February 11 when a B-double truck

driver travelling at 100 km/h around a bend on the Western Highway at 2.20am, ran into the back of the last vehicle in a seven-kilometre line of traffic. The vehicles were stopped because of a border closure that did not meet the minimum standards of border crossing protocols. The driver, Steven Lawrie, died tragically at the scene and our condolences and heartfelt sorrow go out to his family and friends. Two others were hospitalised and are recovering from their injuries. The accident that claimed Mr Lawrie's life did not need to occur. By providing a diversion and wave-through lane for essential travellers, as per the national protocol, the location and operation of this particular border lockdown would not have resulted in a fatality, which begs the question: what's the point of having a protocol if the bureaucracy isn't prepared to follow it? The protocol was implemented for the protection of all drivers, not just freight transport workers, and it is disappointing and a great tragedy that lessons must be learned through road accidents and fatalities that were preventable.

The transport industry does not begrudge jurisdictions for taking steps to defend their citizens against COVID-19 and unwanted community transmission. But we do begrudge the lack of application of disciplines that are intended to keep freight moving efficiently, productively, and safely. Throughout the pandemic the freight industry has protected the community and provided their needs and our drivers are deserving of the same protections to keep them safe.

Peter Anderson
CEO, VTA