# INQUIRY INTO HEAVY VEHICLE SAFETY AND USE OF TECHNOLOGY TO IMPROVE ROAD SAFETY

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# LBRCA SUBMISSION | INQUIRY INTO HEAVY VEHICLE SAFETY AND USE OF TECHNOLOGY TO IMPROVE ROAD SAFETY

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Mr Greg Aplin MP Chair Staysafe (Joint Standing Committee on Road Safety) staysafe@parliament.nsw.gov.au

Dear Mr Aplin,

The LBRCA welcome the opportunity to provide a submission to the Staysafe Inquiry into Heavy Vehicle Safety and the Use of Technology to Improve Road Safety (the 'Inquiry').

## About the LBRCA

By way of background, the Livestock, Bulk and Rural Carriers Association (LBRCA) is a NSW regional based industry association that strives to improve productivity and safety for regional businesses and industries. Our membership comprises over 220 regional road freight operators, predominantly carrying out their businesses in the livestock and bulk sectors, in rural and/or regional communities.

Since 1985, the LBRCA has been representing members and industry push for better conditions in their business and operating environment. We are part of a national federation with direct affiliation to the Australian Livestock and Rural Transporters Association (ALRTA).

#### Introduction

Technology is a core component of modern day life, with new technologies emerging daily. The LBRCA consider that the embrace of certain technologies can innovate the heavy vehicle transport industry, improve regional and rural communities and boost overall economic performance, though we cannot impost industry with technologies without evidence-based justification nor the necessary platforms to support such innovation.

Industry and government alike must fully understand the causal factors to safety on the NSW road network to be able to make the right informed decisions.

The LBRCA highlight the importance of the NSW government to acknowledge that many issues, including improving safety, simply cannot be 'fixed' through greater adoption of technology alone.

We cannot be complacent and rely solely on technology to achieve enhanced safety outcomes.

Our industry is ageing and a considered succession plan that does not disadvantage those who have invested their livelihood and money to the NSW road freight industry should be a key consideration for the NSW Government.

Further, it is important to consider all aspects of technology and their use in how they relate to safety. All the safety technology in the world will not be of any aid if it is not understood, accepted or put in place for non-safety related purposes.

This can be seen in technology such as the Intelligent Access Program (IAP) that appears to provide a revenue stream rather than providing tangible safety outcomes for industry and public road assets. Likewise, a system designed to monitor and aid in managing driver fatigue will be of no benefit if a driver has no parking bays to be able to pull over and rest.

Our submission includes our responses in three core areas of interest including:

- 1. STABLE PLATFORMS
- 2. EXISTING TECHNOLOGY
- 3. DATA COLLECTION
- 4. EDUCATION AND LICENSING

We provide our commitment to the NSW Government to assist to transform and achieve positive, meaningful and viable change for NSW. Thank you for considering our views. The LBRCA is willing to participate in further collaboration including consequent hearings if necessary.

Please contact the LBRCA Secretariat on or <u>office@lbrca.orq.au</u> should further information be required.

Yours sincerely,

Lynley Miners LBRCA President

# 1. Stable Platforms

Existing platforms that impose significant costs to transport operators and government currently limit industry succession, productivity and importantly safety.

The heavy vehicle road access framework requires an overhaul. 4.6m and B-double access should be as-of-right published through gazette notices. These notices should list routes that have genuine access constraints (such as wooden bridges) and are therefore inaccessible or have been deemed accessible but with conditions (such as speed limits, or flashing lights due to a school bus route etc). The timeframes to approve permits in some cases are far too long and inhibit safety.

#### 1.1 Road Access

Historical issues relating to our sector require resolution, many of which we consider process-related or require minimal amendment to seek an equitable outcome – often without the need for legislative change. For example; nationally, 4.6m livestock trailers are the most widely-used transportation method to cart livestock and have been manufactured to this height for over 20 years. However, constraints for these trailers remain with access sporadic across NSW jurisdictions, 20 years after these vehicle types were introduced.

The ageing NSW road network and its inability to support these vehicles is also a key factor to maximizing safety on NSW roads. The introduction of High Productivity Vehicles (HPV) provides opportunity for larger vehicles to transport larger loads, increase safety, reduce road wear and tear, reduce truck movements and significantly increase productivity however, existing road access constraints inhibit these benefits.

The lack of data to understand current and expected future regional travel patterns compared to that available in metropolitan Sydney (*Draft NSW Freight and Ports Plan*) is acknowledged. Regional and rural NSW has long been an area of significant underinvestment with funding predominately redirected to metropolitan areas. We strongly recommend that the NSW government prioritise the mapping and urgent understanding of the current NSW road network, including freight routes and incorporating all roads regardless of whether they are state or local owned infrastructure.

Adequate and capable road infrastructure is fundamental to improving safety and as such consideration of third-party innovative tools, such as the CSIRO TranSit tool, could be investigated to provide missing data quickly and accurately.

The LBRCA considers that the NSW Government should consider a heavy vehicle access system for NSW to provide indication of where you can't go as opposed to where you can go inclusive of any conditions of road entry (flashing lights, speed restrictions etc). Immediate safety, productivity and economic gains for the entire state could be achieved through the implementation of a gazetted road network system.

Currently heavy vehicle maps provided for route assurance by the National Heavy Vehicle Regulator (NHVR) and NSW Roads and Maritime Services (RMS) are contained in digital formats designed to be viewed on a computer monitor. It would be beneficial for all government heavy route maps to be available for viewing on all common hardware including mobile phones, tablets, lpads and computers to enable a driver to proactively plan for the trip including possible delays (roadworks, accidents etc).

Current light vehicle GPS navigational aids provide the driver options to choose the fastest travel time, shortest distance et and commonly provide the ability to obtain real-time traffic updates. This allows the driver an opportunity to avoid (and navigate from) areas of concern. This technology is not widely available to the heavy vehicle industry and currently limits heavy vehicle drivers from diverting to the safest route.

The difference between a long-term and short-term heavy vehicle driver speaks volumes with route assessment. An experienced driver will know which way to go and the best areas that suits them where to pull over and take their rest breaks. An inexperienced driver will seek guidance on these areas such as reading a map beforehand and will therefore take extra attention to road signs and land marks when

searching for this location. This additional attention to the road signs and land marks could possibly reduce the on-road driving concentration for the heavy vehicle driver under these circumstances.

The development of a purpose built heavy vehicle route navigation system could allow a truck driver to see their route, rest areas along the route including their service level (i.e., 1 = Gold 2 = Standard 3 = Basic) to provide real-time safety benefits to the heavy vehicle driver as well as assist the driver to comply to fatigue regulations.

With a limited number of truck rest stops available, any tool to help drivers better plan their rest breaks and better manage their fatigue requirements is a positive safety initiative. Experienced drivers would also benefit from this technology as often new roads may be opened that may be far superior for a heavy vehicle to operate on however the benefits of the options may not be discoverable on a static hardcopy map.

The LBRCA suggests that the NSW government ensure that any upgrade, or construction of a new, road consider what facilities are required to support any freight task on the route (i.e., heavy vehicle rest stops, safety checking bays, on-road effluent disposal sites, electronic sign posting as necessary).

#### 1.2 Road Access Decisions

With freight volumes estimated to double in the Greater Sydney area and grow by a quarter in regional NSW by 2056, local access constraints must be removed. Key and critical access decisions affecting key freight networks being delegated into an inconsistent decision-making process involving multiple road owners from local and state government, the railways, and other authorities. This multi-layered road ownership structure allows each to remove the onus.

The insistence on adopting a one-size-fits-all approach to all NSW road freight regulatory challenges is impacting both urban and regional situations does not work. For example, the route assessment for an arterial road is the same route assessment carried out for a low volume road or where a vehicle needs only to access a small section of road (i.e., farm gate).

The LBRCA considers that a tiered approach for assessing road access (for example, ability to apply different criteria for 'low volume' or 'farm gate') - supported by clear guidelines and education – is an innovative yet viable method to streamline the existing process, improve transparency and consistency of process and ultimately remove many first and last mile access issues in regional and rural NSW.

Heavy vehicle access across local jurisdictions is dislocated. With a greater percentage of the freight task (for both safety and efficiency reasons) being undertaken by B-doubles, the provision of a road network that accommodates High Productivity Vehicles (HPVs) can deliver significant benefits to the community through less road wear, better safety, and better environmental outcomes. They are also more efficient, which is better for local production or consumption businesses.

Local Councils need to be encouraged and should be held more accountable for delivering better infrastructure and allowing access to existing facilities for truck drivers in key towns on major freight networks as recommended. This includes informal rest areas (or safety bays to check livestock welfare) via long stay parking opportunities.

Delivering on existing opportunities, particularly Higher Mass Limits (HML) access in NSW to significantly improve regional road freight (and indeed state wide and national) productivity should be a high priority in for the NSW Government.

### 1.3 Funding Models

Road investment is paramount in the provision of a safe road network in NSW and the LBRCA is concerned that the current funding constraints are affecting priorities for road investment.

The livestock industry currently carries the burden for livestock effluent during transport. The bi-product is often captured by livestock carriers in purpose-built effluent tanks beneath their livestock trailers and is disposed of at heavy vehicle truck wash facilities across NSW at the cost to the livestock transporter.

The LBRCA is aware of various businesses across Australia and the world who are capturing effluent and converting into biogas (a renewable energy source consisting mostly of methane and carbon dioxide). Biogas can be burnt to generate electricity and heat as well as upgraded into a transport fuel and can yield other useful products. This concept has many benefits including reducing the amount of waste that needs to be disposed of, recovers energy from waste, gives a use to waste that previously had little or no market or environmental value and generates income from waste therefore diversifying income sources.

Through the construction and development of such plants across NSW, the NSW government has an opportunity to innovate energy supply; reducing electricity overheads. The NSW government could consider distributing the savings made through electricity to road safety funding initiatives such as road upgrades, rest stops and bridge improvements.

A requirement of all heavy vehicle road funding must be to enforce higher productivity vehicle access following successful project completion.

One of the most important areas to the future viability of regional NSW is the establishment of productivity reforms that enable NSW to compete on a more even market level to State counterparts. Removing prescriptive regulatory impediments to productivity and instead replacing with non-prescriptive, outcome focussed standards are key to this initiative.

Providing a simple and convenient platform for users to do their business in NSW is important to enable greater focus to on-road safety by providing funding to improve existing infrastructure. Currently, processes are weighted down by red tape that only act to impede the viability of our State. Namely, the process required to transfer a vehicle from another state back to NSW is lengthy and often deters operators who legitimately carry out their business, or reside, in NSW from registering their vehicle in NSW. NSW infrastructure is being used to carry out the task, however the dollars are being collected and used in another State.

NSW is a key conduit in Australia, with the large proportion of goods imported or exported from the east coast of Australia, meaning NSW is used predominantly by vehicles registered in states other than NSW. Safety on NSW roads will rely on NSW receiving a fair share of funding under any Federal funding models. NSW cannot continue to accept the financial burden for road maintenance when other States collect the registration charges.

As such, the LBRCA suggests that the NSW Government consider providing incentives for operators to revert or register their heavy vehicles in NSW through a stamp duty exemption for new prime movers as well as requiring only an identification check for heavy vehicles that are currently registered out-of-state and enrolled in a HVNL approved heavy vehicle accreditation scheme.

The LBRCA considers that the current inefficiencies in the road network are due to poor coordination in planning in conjunction with lack of funding for heavy vehicle services and overtime some investments have not targeted where there are opportunities for productivity benefits. The LBRCA suggests the greater focus on the coordination/communication between local government and state government planning and investment to improve and enhance this area.

Assurance and accountability of where funding is being spent on NSW roads should be enhanced. The LBRCA would like to see the public availability of data relating to money allocated, the proportion spent and money remaining for road projects. We believe this may improve accountability and ensure that any funding is spent for the purpose it was intended

#### 1.4 Telematics and Communications

Broadly speaking, telematics technology can include:

- Vehicle tracking
- Navigation
- Fatigue management
- Driver performance management

- Vehicle performance management
- Driver communication and messaging
- Route planning and scheduling
- Fuel Tax Credit Calculations

The LBRCA recommends that the NSW government detach from rigid and prescriptive technology solutions and instead replace them with outcome-based performance requirements to enable innovation and adaption to new technology easily and cost-effectively.

The emphasis on instantaneous communication to enable greater management of compliance and safety is welcomed. Any future technology must aim to minimise notification or response times through the exchange of real-time data. This should include the ability for those in the Chain of Responsibility to better manage their requirements.

For example, owners of heavy vehicles should also be advised of any safety or compliance breach (i.e., a defect is issued to driver on-road, the defect notice should also be distributed to owner) for a vehicle that are responsible for, despite not being the operator in control of the heavy vehicle. The LBRCA considers that the introduction of technology will result in greater accountability and improved safety.

The further reliance on technology within the heavy vehicle industry can only be relied upon if the overarching telecommunications networks are sufficient. Rural and regional NSW already experiences telecommunications connectivity problems that affect their ability to compete with their regional and urban counterparts.

A foolproof telecommunications network is required to be adequately in place to enable the springboard of future technologies. The roll out of the NBN may require to be accelerated so that all NSW communities regardless of their size or location, are afforded the same access to services to meet their needs.

Prescriptive heavy vehicle fatigue regulations dictate individual sleep patterns – placing all individuals in the same sleep behavior patterns. However, the existing road network lacks adequate HV rest stop infrastructure to support this requirement.

The underlying fatigue regulations, as they currently stand, do not cater to realistic tolerances nor provide sufficient flexibility to enable a heavy vehicle operator to safely carry out their tasks. This combined with the insufficient heavy vehicle road network is not conducive to overall road safety.

The LBRCA strongly believes that the current voluntary electronic work diary (EWD) as proposed is too prescriptive and concentrates on enforcement more so than their purpose, that is safety. With technologies emerging daily it is imperative that the outcome can be achieved safely, regardless of the technology or system used.

It is also important to ensure that the root cause of the issue (in this case fatigue) is adequately understood to ensure the right solutions are implemented.

The true solution may be the use of other available technology such as fatigue-eye-detection software that removes the need for a work diary altogether.

### 1.5 National Unity

All states and territories must comply with a single set of rules and regulations. Some states such as Victoria do not require a standard heavy vehicle to undergo annual inspections unlike NSW that requires this activity annually to maintain currency of registration.

#### 1.6 Safer Vehicles

We embrace the introduction of safer vehicles that are fitted with safety features including Electronic Braking Stability (EBS), Automatic Braking Stability (ABS) and anti-roll over stability. The LBRCA would like to see incentives provided to operators who invest in safer vehicles such as a reduction in stamp duty or outright exemption.

# 2. Data Collection

Data collection methods, analysing trends and opportunities to enhance the evidence base as well as creating new knowledge and solutions to guide intelligent safety outcomes must be a key priority of the NSW Government.

The lack of national uniformity in the heavy vehicle industry provides for a significant gap in data to increase decision making capacity.

#### 2.1 Data Collection and Dissemination

Data collection practices must be made a priority with information gathered used for road funding and regulatory decisions.

The lack of data to understand current and expected future regional travel patterns compared to that available in metropolitan Sydney (*Draft NSW Freight and Ports Plan*) is acknowledged. Regional and rural NSW has long been an area of significant underinvestment with funding predominately redirected to metropolitan areas. We strongly recommend that the NSW government prioritise the mapping and urgent understanding of the current NSW road network, including freight routes and incorporating all roads regardless of whether they are state or local owned infrastructure.

Adequate and capable road infrastructure is fundamental to the success of the Strategy and as such consideration of third-party innovative tools, such as the CSIRO TranSit tool, could be investigated to provide missing data quickly and accurately.

The LBRCA is adamant that any data collection must be collected for road funding and regulatory decisions only. No collection of data should result in regulatory enforcement and be voluntary.

Historically, data collection and dissemination practices have been, in some cases, a hindrance to productivity in NSW, for example the Intelligent Access Program (IAP) that mandates Higher Mass Limits (HML) access.

The LBRCA notes that whilst some operators who have high frequency and regular routes have an interest in gaining access to Higher Mass Limits (HML), the reality is that the high cost associated with the only route assurance mechanism (IAP) sees most operators put it in the "too hard" basket.

This is also evident in the low uptake of B-Triples given the link to IAP – we are missing opportunities for safer and more efficient vehicles operating in western regions, not to mention inhibiting the growth of our sector – and NSW - through the creation of too many roadblocks.

Additionally, the IAP has proven ineffective in its ability to provide consistent and reliable data due in some part to the self-declaration function. The growth in the take up of the IAP in NSW has deteriorated since its introduction.

According to Transport Certification Australia, there are over 30,000 heavy vehicles in Australia fitted with telematic in-vehicle unit hardware however total vehicles registered in the IAP is approximately 4,160 effective 30 June 2017.

Importantly, this figure is inclusive of mobile cranes and special purpose vehicles therefore it appears that the system has not achieved the outcomes it was originally intended for.

The LBRCA supports the Australian Trucking Association (ATA) in their call for the set-up of a no-blame independent heavy vehicle crash investigation by the Australian Safety Transport Bureau to complement existing police investigations and provide evidentiary recommendations to improve safety.

Industry and government alike must work more cohesively to share data to identify the factors that lead to incidents and accidents on NSW roads. This is imperative to a safe road network in NSW and without it, industry will continue to

# 3. Education and Licencing

Education, communication, and confidence will be key to improving heavy vehicle access constraints in NSW, particularly in local government areas. These regions that invest in educating their teams on the benefits of HPVs, and who encourage seamless access to realise efficiencies and enhance safety, should be applauded for their forward-thinking approach to a productive NSW in the future.

The LBRCA considers that the NSW government should use technology and online platforms to better inform and educate stakeholders of benefits to embracing innovation.

For personnel involved in the heavy vehicle road access arena, for example a delegated Road Manager, the LBRCA recommends that the NSW government consider introducing ongoing professional education programs that require such personnel to undertake annual or bi-yearly professional training to encourage currency, accuracy, and consistency of service delivery.

Road users should be provided free education and guidance about road safety through innovative applications that can be distributed widely through social media platforms.

All light vehicle learner licencing programs should incorporate sharing the road with heavy vehicles. A separate module or video simulations displaying correct/incorrect interactions with heavy vehicles would be beneficial.

Current in-school Police led road safety programs should be expanded to include interacting with all modes of transport including rail (i.e., level crossings) and road (i.e., heavy vehicles, motorbikes, caravans) to concentrate on increasing awareness at an early age.

The media in general, in the majority of cases, imply an incident between a passenger car and heavy vehicle as the fault of the heavy vehicle, when 9/10 the car is found to be at fault.

This persistent negative image of heavy vehicles creates a rift between the public and the heavy vehicle industry. Having such a negative view in the public perception can add to the stress of being on the road and can be attributed to the current driver shortage that is continually growing. Continued stress is known to increase fatigue.

Authorities need to start taking ownership of facts and not let the media continue to run with misleading headlines or articles. Where a car has been at fault for an accident it must be made public. All road users need to be robustly educated about using the road with all users, and we must focus on removing the blame from one demographic.

We need to provide opportunities for younger people to skill earlier, potentially through school-based vocational programs, as well as improve the quality of entry training requirements for the heavy vehicle industry.

To minimize administrative burden, it would be advantageous for heavy vehicle licencing credentials obtained such as currency in the NSWLLS to be included as a condition of the reverse of an individual's legal Drivers Licence, rather than issued separately.

## 4. Summary

The LBRCA provides the following summary of our responses for consideration by the Staysafe Committee:

- Industry and government alike must fully understand the causal factors to safety on the NSW road network to be able to make the right informed decisions
- Adequate and capable road infrastructure is fundamental to a safe road network in NSW and urgent mapping and understanding of the NSW road network is paramount.
- Heavy vehicle route assurance systems should be re-engineered to advise where you can't go opposed to where you can go
- All digital maps must be available in common hardware formats including mobile phone and ipad
- GPS navigational aids should provide heavy vehicle driver options based on real-time traffic updates and information (including roadworks, accidents, heavy vehicle rest areas)
- All new road upgrade projects must consider facilities required to support any heavy vehicle freight task (i.e., rest stops, effluent disposal sites etc)
- Overhaul the heavy vehicle road access application and decision-making process to reduce processing timeframes
- Investigate the use of biogas (produced from livestock effluent) as a source of renewable energy and as a means of generating funding for road safety initiatives (i.e., road upgrades, rest stops, electronic signage etc)
- Increase accountability of funding recipients to ensure that project outcomes meet or exceed road safety expectations
- Detach from rigid and prescriptive technology solutions and instead replace with outcome-based performance requirements to enable innovation and adaption to new technology easily and costeffectively
- Improve telecommunications network in rural and regional areas of NSW
- Encourage national unity and consistency in heavy vehicle maintenance
- Incentivise the adoption of safer heavy vehicles through reducing or exempting stamp duty for these types
- Prioritise the collection, analyzation and dissemination of heavy vehicle related data to assist in road funding and regulatory based decisions
- Endorse the creation of a no-blame independent heavy vehicle crash investigation process, led by the Australian Safety Transport Bureau (ATSB) to provide evidentiary recommendations to improve safety
- Educate and guide all road users on how to share the road with heavy vehicles through innovative social media applications, primary and high school Police led road safety programs, as well as a dedicated module incorporated into the light vehicle learner licensing programs
- Authorities must work with the media to reduce misleading headlines or articles relating to heavy vehicle incidents to reduce inaccurate perceptions of the industry