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Re: Transport for NSW response to the NHVR's Discussion Paper, *Review of Livestock Mass, Dimension and Loading Arrangements*

20 September 2022

**Dear Mr Del Beato,**

Thank you for the opportunity to respond to the Review of Livestock Mass, Dimension and Loading Arrangements (the Review).

TfNSW works collaboratively with the National Heavy Vehicle Regulator (NHVR) in its role as the NSW road authority and road manager under the Heavy Vehicle National Law (HVNL). TfNSW has direct interest in the Review, managing the policy and state road access for the *NSW and Victoria Class 3 Long Livestock Semitrailer Deck Length Exemption Notice 2019*, *NSW Class 3 Heavy Vehicle Livestock Tri-Axle Grouping Mass Limit Exemption Notice 2019* and the *NSW Class 3 Livestock Transportation Exemption Notice 2021* which includes conditions that facilitate the Livestock Loading Scheme (LLS) in NSW.

TfNSW discussed our response at **Attachment A Table 1** *TfNSW response to the five NHVR Review's recommended options* with the Livestock Bulk and Rural Carriers Association (LBRCA) and they support this response.

The NSW LLS was established in 2011 in partnership with industry. Established as a volumetric-based loading scheme capped at higher mass limits (HML), the NSW LLS allows operators to satisfy animal welfare standards with increased productivity, while also limiting infrastructure damage and vehicle rollover risk. Increased likelihood of vehicle rollover was recognised in the development of the NSW LLS as a key safety risk of livestock transportation. To mitigate this risk axle mass limits and driver education and assessment were included as a condition of the NSW LLS.

In 2021 new driver education and assessment was delivered in collaboration with the LBRCA. The free online education is available to all parties in the Chain of Responsibility for livestock loading and is leading livestock loading education that supports industry to safely load and drive livestock vehicles known to have a higher risk of vehicle rollover. TfNSW does not support the removal of livestock loading education from the LLS.

TfNSW is supportive of the Review's overarching opportunities for standardisation, cross-border simplification and improved last-mile access, and improving safety, productivity and efficiency for the livestock transportation industry. As such we support a number of options in the Review such as a national uniform livestock definition, uniform listing of vehicles and removal of requirement to enrol the operator and livestock vehicle.

TfNSW acknowledges the NHVR's intention to review PBS vehicles at a later date and the inclusion of PBS livestock vehicles in that review, however TfNSW recommends the inclusion of PBS vehicles

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to this Review due to their safety, productivity and efficiency outcomes, and the benefit to industry in providing PBS vehicles with the same access under Notice as other eligible livestock vehicles.

In addition, TfNSW does not support the Review's proposed volumetric loading due to increased pavement wear, compliance limitations and decreased vehicle stability.

TfNSW acknowledges the NHVR has undertaken assessment of pavement wear at volumetric loads in response to industry favouring volumetric loading over numerical mass limits, however does not agree with the assumption of 50% utilisation as a sound basis to compare pavement wear. TfNSW also notes the value of axle mass limits is greatly underestimated in the assessment of the options as integral to network access and local council's ability to make decisions and grant access. The assessment also underestimates the increased risks and difficulty with volumetric loading in determining on road compliance, infrastructure impacts and vehicle stability impact, as well as the facilitating role axle mass limits play in compliance assurance.

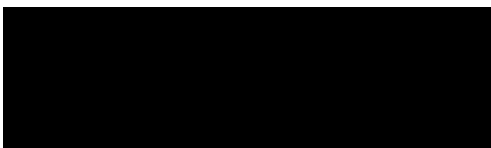

TfNSW supports further investigation and collaboration with the NHVR and other States in developing options for livestock vehicle access with axle mass limits, similar to the NHVR's proposed option 3. TfNSW also proposes, for further investigation and consideration to support industry with the difficulty of loading at feedlot and saleyard sites where weighbridge facilities are not available, a floating mass limit of 1.5t over the tri-axle grouping of a semitrailer combination with Farm Gate access requirements.

In considering our response TfNSW reviewed a proposal put forward by the Livestock & Rural Transporters Association of Victoria (LRTAV) – **Attachment B**. A number of the LRTAV's recommendations focused on enrolment, accreditation and record keeping, highlighting the need for greater Chain of Responsibility (CoR) enforcement of livestock loading and transportation. Greater CoR enforcement supports the Review's recommended option to remove enrolment as a condition, it provides confidence to local councils in their role as local road managers in providing road access, and supports industry in the safe operation of livestock transportation removing the pressure to overload. TfNSW recommends greater CoR enforcement of livestock loads with greater visibility of compliance activities undertaken by the NHVR.

The LRTAV has also proposed a remote livestock loading scheme. TfNSW supports investigating the provision of more suitable livestock vehicle access in remote areas.

In further response to the Review TfNSW provides a response to each of the Review's options and Appendix 9 questions, detailed in **Attachment A**.

Yours Sincerely,

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Executive Director Freight  
Transport for NSW

## Attachment A: TfNSW response to the NHVR’s Review of Livestock Mass, Dimension and Loading Arrangements Discussion Paper’s options and questions

This response is an attachment to the TfNSW letter of response to the NHVR, and is to be read in conjunction with that letter.

**Table 1: TfNSW response to the five NHVR Review’s recommended options**

NHVR Review’s Option	TfNSW Response
Section 6: Defining Livestock	TfNSW is supportive of a national uniform livestock definition. Existing animal welfare laws may already provide support to a livestock definition. Once developed the definition should be checked as to how it impacts the number of decks by animal type.
Section 7: The regulation of conditions within a HVNL Notice	<p>TfNSW acknowledges the role enrolment of operators and vehicles, including enrolled vehicle stickers, plays in supporting industry to comply with the requirements under the NSW LLS and all parties in the Chain of Responsibility (CoR). Consideration to CoR enforcement for livestock loading and transportation must be given if the condition of enrolment is removed from the Notice.</p> <p>TfNSW does not support the removal of the requirement for driver education due to the known increased risk of vehicle rollover for livestock vehicles. Based on load type livestock vehicles represent around 10% of all heavy trucks involved in rollover crashes in NSW, year on year. TfNSW is however supportive of investigation into best practice education of livestock drivers and a harmonised approach to driver education that focuses on rollover prevention.</p> <p>The NSW Livestock Loading Scheme (LLS) Driver Learning and Assessment was updated in 2021, delivering best practice online learning that is free and accessible to all parties in the livestock CoR. TfNSW recommends this learning for use in other State’s livestock schemes.</p> <p>Any changes the NHVR make to remove driver education from the NSW LLS will have impact on NSW LLS Assessors and newly enrolled drivers under the NSW LLS Driver Learning and Assessment.</p>

<p><b>Section 8: Mass limits</b></p>	<p>TfNSW does not support the NHVR’s proposed volumetric loading option. The inclusion of axle mass limits to livestock loading supports local councils in access decisions, reduces the risk of livestock vehicle rollover (livestock vehicles are known to have less stability due to the nature of the load), supports compliance assurance, and minimises infrastructure impact. TfNSW recommends axle mass limits to any considered harmonised access approach.</p> <p>While mechanisms to support vehicle stability such as Electronic Stability Control (ESC) and Anti-lock Braking System (ABS) are now part of the Australian Design Rules, they are not yet a key feature of the existing livestock vehicle fleet. As such, TfNSW does not support the NHVR’s proposed volumetric loading option due to increased livestock vehicle instability at higher masses.</p> <p>TfNSW is supportive of further collaboration with industry, the NHVR and other States on livestock vehicle mass limits in developing a harmonised access approach, similar to the NHVR proposed option 3.</p>
<p><b>Section 9: Eligible vehicles</b></p>	<p>TfNSW is supportive of a national uniform set of eligible vehicles, however not at the expense of limiting the current access in NSW. TfNSW would also like the inclusion of PBS vehicles that comply with current NSW LLS deck length to the set of eligible vehicles to the set of eligible vehicles.</p> <p>A PBS vehicle has improved static rollover performance</p>
<p><b>Section 10: Road networks</b></p>	<p>TfNSW advocates for conditional area approved access under Farm Gate for LLS vehicles with Road Infrastructure Management (RIM) telematics as the condition.</p> <p>TfNSW supports investigation into uniform remote access for livestock vehicles.</p> <p>TfNSW supports access under Notice that supports the reduction in permits.</p>

**Table 2: TfNSW Response to the NHVR Review’s Appendix 9 questions**

NHVR Review’s Appendix 9 questions	TfNSW Response
<p><b>Section 6: Defining livestock Q1.</b> Have the notices/information bulletins covered all types of livestock farmed in Australia, where transport efficiency would rely on heavy vehicles to operate at a mass or dimensions above regulated limits? If not, which other livestock breeds should be considered?</p>	<p>TfNSW supports a national uniform livestock definition that could possibly be found in animal welfare and transportation legislation.</p>
<p><b>Section 6: Defining livestock Q2.</b> Are there any potential issues with Option 2 about which the NHVR should be made aware?</p>	<p>It should be kept in mind that any new definition may have impact on the number of decks required by animal type.</p>
<p><b>Section 6: Defining livestock Q3.</b> Does Table 1 list all types of livestock that would benefit from being included in livestock notices and livestock loading schemes, or are any missing?</p>	<p>TfNSW supports a national uniform livestock definition.</p>
<p><b>Section 7: The regulation of conditions within a HVNL Notice Q4.</b> Considering the respective roles of the HVNL/NHVR, and those other laws (e.g. for animal welfare protection) and their state and territory regulators (transport agencies or otherwise) - which of the two options would be best?</p>	<p>If animal welfare is covered in legislation than it is not required as a condition in the Notice.</p> <p>TfNSW acknowledges the role enrolment of operators and vehicles, including enrolled vehicle stickers, plays in supporting industry comply with the requirements under the NSW LLS and all parties in the Chain of Responsibility (CoR). Consideration to CoR enforcement for livestock loading and transportation must be given if the condition of enrolment is removed from the Notice.</p> <p>TfNSW does not support the removal of driver education due to the known risk of livestock vehicle rollover. Driver education should remain as a condition of the Notice.</p>

<p><b>Section 7: The regulation of conditions within a HVNL Notice Q5.</b> Is there evidence to support safer outcomes of mandating livestock loading driver training? Or are workplace health and safety laws, and the HVNL general safety duty adequate to ensure drivers are appropriately trained and skilled?</p>	<p>In NSW driver education and assessment is specific to the NSW Livestock Loading Scheme (LLS) which focuses on reducing the rollover risk of livestock vehicles. It is known that livestock vehicles are more prone to rollover and certain increased risks at points in the journey. It is appropriate that there is education and assessment on loading to mass limits and acknowledging the risk of rollover for livestock transportation. TfNSW is supportive of investigation into best practice for livestock driver education, but recommends that the driver education still occur with focus on rollover prevention. Any changes by the NHVR to remove driver education as a condition will impact NSW LLS Assessors and Drivers.</p> <p>Possibility to investigation that PBS drivers do not require driver training due to the stability of PBS vehicles.</p>
<p><b>Section 7: The regulation of conditions within a HVNL Notice Q6.</b> Are the livestock loading schemes still required to regulate conditions outside the powers of the NHVR? If so, what purpose would the livestock loading schemes serve and which organisation should administer them? What other options are there to manage scheme enrolment?</p>	<p>Currently the NSW LLS has the condition for driver education and assessment that sees both the regulation of driver enrolment and Assessor accreditation by TfNSW. Future driver education and enrolment could potentially be managed through the NHVR Portal.</p> <p>Scheme enrolment supports industry comply with CoR, suggest CoR enforcement of loading and livestock transportation with visibility of compliance enforcement to support industry.</p>
<p><b>Section 7: The regulation of conditions within a HVNL Notice Q7.</b> After enrolment in a scheme, when is unladen vehicle tare mass checked?</p>	<p>Verification of tare mass is not a condition of the NSW LLS.</p>
<p><b>Section 8: Mass limits Q8.</b> How well are operators managing compliance with prescriptive numerical mass limits? Are there any particular challenges?</p>	<p>Broadly, mass compliance within NSW LLS has been within acceptable limits. Challenges are that operators are pressured to overload vehicles, which means CoR is not being enforced.</p>
<p><b>Section 8: Mass limits Q9.</b> Are there regulatory requirements (other than the HVNL) affecting how operators manage livestock loading?</p>	<p>Potentially animal welfare requirements however not that TfNSW is aware of in relation to mass limits.</p>
<p><b>Section 8: Mass limits Q10.</b> Are there any issues associated with livestock transport mass limits not addressed in this paper?</p>	<p>While mentioned, there is limited acknowledgment by the Review in the increased risk of livestock vehicle rollover and the role mass limits play in supporting vehicle stability. Axle mass limits support local councils in making access decisions. Axle mass limits support compliance assurance.</p>

**Section 8: Mass limits Q11.** Do you agree with our assessments of volumetric loading and its effect on road infrastructure?

Disagree, a return journey when empty is irrelevant because there is no load. The implication of one-way loading is not a sound assumption and equally applies to LLS vehicles operating under axle mass limits.

Disagree with the low pavement wear for livestock volumetric loaded vehicles where they travel at low masses 50% of the time because the vehicle has not transported any stock in that trip. This implies that livestock vehicles only load in one direction which is not true and unless the livestock vehicles trailers are fitted with OBM these assumptions cannot be measured. What informs these assumptions and how would axle mass limited vehicles operate fully loaded both ways in comparison?

The NSW LLS complies with animal welfare laws while also not exceeding HML axle mass limits. If a vehicle can only be loaded to 50% of HML due to animal welfare the NSW LLS operator must also comply with animal welfare requirements. The difference between volumetric and axle mass limits is pavement wear never exceeds HML effects for NSW LLS axle mass limited vehicles while volumetric loading has significantly higher potential peaks of pavement wear. TfNSW does not support the proposed volumetric loading as it does not appear to promote compliance with animal welfare laws. Industry have indicated that volumetric loading can encourage denser packing of animals which can breach penning densities under law.

ESA comparison calculations are needed for the two configurations allowing 18.5t on the tandem axle and 23t on the tri-axle group against the NSW HML capped 17t on a tandem axle and 22.5t on the tri-axle. Understanding that these vehicle configurations still need to meet HML and Animal Welfare requirements.

TfNSW supports the inclusion of axle mass limits in the Notice and any increases in mass limits are to be considered together with analysis on pavement wear, infrastructure impacts and vehicle performance specifically increased rollover risks. TfNSW does not support uncapped volumetric loading.

	<p>From an enforcement perspective volumetric loading will be difficult to enforce. Will Inspectors need to measure internal deck lengths/calculate floor spacing and/or count heads of stock? Requiring all vehicles in Australia to undergo Livestock Loading S10 certification and plating is an additional burden on operators. Having measurable mass limits with additional flexibility granted through floating tri axle mass concessions, which are calculable in Truckscan is straightforward for compliance officers. Any data gathered from volumetric loads that have been weighed in the past could feed into determining if more generous road friendly suspension measurable mass and floating axle measurable mass limit concessions are needed in any new national notice.</p>
<p><b>Response to Section 8.5 Road infrastructure effects analysis</b></p>	<ol style="list-style-type: none"> <li>1. SAR is used instead of ESA. Is load damage exponent of 4 used in SAR? Austroads latest pavement design guide (Part 2) uses ESA.</li> <li>2. Austroads pavement wear assessment method (AP-R372-11) also uses ESA.</li> <li>3. Pavement wear due to a load greater than the standard load is not linear, rather power of 4. Studies have shown that marginal increase in axle/tyre load can cause significant damage to pavements.</li> <li>4. Type 1 road trains typically travel on rural sealed granular roads – many of them are in poor conditions. These roads are sensitive to moistures – prolong rainfall or flood can cause these roads in a very weak state. Pavements in weak state can suffer severe damage in terms of wheel path rutting when excess axle/tyre loads are applied.</li> <li>5. Table 9 of Appendix 8 shows ‘<i>high range estimate</i>’ will have 1 tonne more on tandem axle and 0.5 tone more on tri-axle group compared to HML. For comparison, reference load should be standard axle load relevant for the axle group (Table 7.6 of Austroads Guide Part 2), not HML. However when comparing with the General Mass Limits (GML), ‘<i>high range estimate</i>’ will have 2 and 3 tonnes more for tandem axle and triaxle group respectively. It is likely that these extra axle/tyre load will cause irreversible damage to pavements.</li> </ol>



	<p>6. Because damage to pavement wheel path is of concern, instead of pavement wear per vehicle trip as shown in Figure 2 and Figure 3, pavement wear calculations per axle/tyre should be considered. This can be used to estimate wear per vehicle or comparing pavement wear for a given freight task (by various vehicle/loading combinations).</p>
<p><b>Section 9: Eligible vehicles Q12.</b> Is Option 2 suitable to harmonise eligible vehicle types across borders? What other options are there?</p>	<p>PBS vehicles must be listed under the same access as for other livestock vehicles under livestock loading schemes. Any combination featuring a pig trailer is not to be included due to instability of the vehicle.</p>
<p><b>Section 9: Eligible vehicles Q13.</b> Have we excluded any factors that should be used to assess vehicle eligibility for livestock transport?</p>	<p>Not that can be seen.</p>
<p><b>Section 9: Eligible vehicles Q14.</b> How have jurisdictions assessed which vehicles to make eligible under their state notices?</p>	<p>TfNSW made the NSW LLS available for all vehicles with the exception of any combination including a pig trailer due to instability of the vehicle.</p>
<p><b>Section 9: Eligible vehicles Q15.</b> Are there options to better utilise PBS vehicles in livestock transport and overcome the identified barriers?</p>	<p>Yes. PBS vehicles should be part of the eligible vehicle list.</p>
<p><b>Section 10: Road networks Q16.</b> Are there options for the livestock industry, state, and territory transport agencies and the NHVR to better support road managers in improving livestock transport access, such as by helping them with gazetting more roads under notice?</p>	<p>Yes, promoting the use of Farm Gate. Supporting network wide bridge assessments for local councils. Local councils' confidence in access decision making is increased by the assurance of compliance of the conditions of access. CoR provides the mechanism for compliance assurance. Visibility of compliance provides confidence to local councils/road managers.</p> <p>Propose NHVR create a national restricted access vehicle map (combine all state versions) with type of vehicle/load/notice selectable in menu so operators/drives can check the whole of route in one location</p>
<p><b>Section 10: Road networks Q17.</b> Is Transport for New South Wales' Farm Gate initiative an approach that could be adopted in other states and territories, as an initiative to improve livestock transport access</p>	<p>Yes, TfNSW is supportive of the Farm Gate initiative being extended across borders.</p>