



# **Heavy vehicle charges determination: consultation regulation impact statement June 2021**

## **Submission to the National Transport Commission**

18 August 2021

---

## Introduction

The National Heavy Vehicle Regulator (NHVR) welcomes the opportunity to provide a submission to the heavy vehicle charges determination: consultation regulation impact statement June 2021 (C-RIS).

We commend the National Transport Commission (NTC) for undertaking this consultation process, which provides a critical opportunity for governments and industry to work together to find a sustainable revenue generation and funding model for future road maintenance and investment.

The NHVR notes that cost recovery over time in an efficient and equitable manner remains the goal of the determination. We support any funding commitment derived from the determination that will help improve heavy vehicle safety and productivity outcomes through focussed government investments.

Of particular importance for the NHVR is ensuring that the determination and the resultant registration fees has a positive impact on the uptake of safer and more productive heavy vehicles, and continuing to ensure the NHVR has the necessary funding to undertake its critical role in ensuring heavy vehicle safety outcomes are achieved.

We know matching of revenue to expense is difficult and determining heavy vehicle charges is a complex problem for governments and industry.

The NHVR supports the continued use of the PAYGO model to determine heavy vehicle charges until a more effective model can be properly tested. We note that while the Survey of Motor Vehicle Usage (SMVU) data ceased in 2020, likely affecting the PAYGO model's longer-term accuracy in calculating costs, a viable alternative model has yet to be tested and endorsed. Until such time, while the PAYGO model is used, the NTC should work with ABS to find an alternative and reliable supplier of usage data.

Moving forward, the NHVR supports the pricing principles originating from the Australian Transport Council (ATC) (now called the Infrastructure and Transport Ministers' Meeting, ITMM) and the National Cabinet (formerly the Council of Australian Governments). These principles provide guidance on how road use prices should promote optimal use of infrastructure, vehicle, and transport modes.

In adopting these principles, the NHVR notes key considerations need to be explored including the ongoing impacts of COVID-19 on the Australian economy as well as the implementation of the Heavy Vehicle Road Reform on future determinations.

For further information, please contact Peter Caprioli, Executive Director, Freight and Supply Chain Productivity on 07 3309 8600 or [peter.caprioli@nhvr.gov.au](mailto:peter.caprioli@nhvr.gov.au).

## About this Submission

The NHVR is Australia’s dedicated statutory regulator for all heavy vehicles over 4.5 tonnes gross vehicle mass. Our submission is unique in the sense that we are a regulator with strong relationships and daily interactions with both road managers and the heavy vehicle industry.

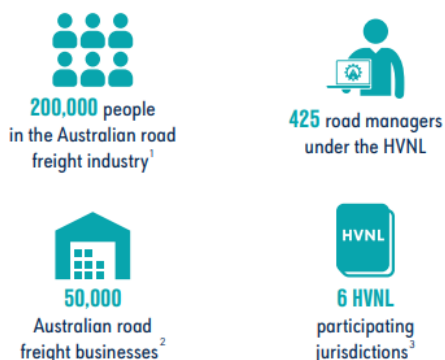
Through our engagement and service delivery, we are very aware of how the availability and quality of road infrastructure, among other things, impacts on heavy vehicle access decisions and, by extension, safety, productivity, and sustainability.

The quality of road infrastructure depends heavily on funding provided by governments. The heavy vehicle charges determination will provide governments with funding to support maintenance and investment in road infrastructure and thus sustain and enable safe and productive heavy vehicle access.

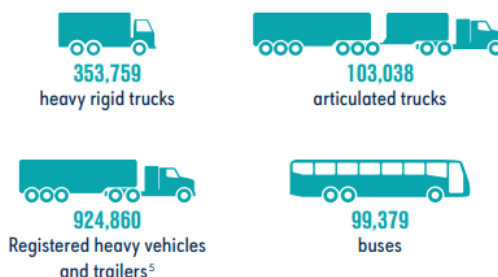
The NHVR encourages the use of safer and more productive heavy vehicles, particularly Performance Based Standards (PBS) vehicles—this includes through the access approval process. Ensuring a positive outcome for this determination could improve road operators’ perception of heavy vehicle charges relating to, and therefore their uptake of, safer heavy vehicles.

Our submission focusses on addressing questions identified in the C-RIS. In formulating this response, we have considered feedback from our stakeholders regarding road infrastructure condition and the impacts of heavy vehicle charges.

### The NHVR’s stakeholder profile



### Australia’s heavy vehicle profile<sup>4</sup>



<sup>1</sup> Australian Bureau of Statistics, 2018, 6291.0.55.003 - Labour Force, Australia, Detailed, Quarterly, November 2018  
<sup>2</sup> Australian Bureau of Statistics, 2018, 8165.0 Counts of Australian Businesses, including Entries and Exits, June 2013 to June 2017  
<sup>3</sup> The Australian Capital Territory, New South Wales, Queensland, South Australia, Tasmania and Victoria.  
<sup>4</sup> Australian Bureau of Statistics, 2018, 9309.0 - Motor Vehicle Census, Australia, 31 January 2019  
<sup>5</sup> NHVR, 2020, Registration demographics as at January 2020

## Response to C-RIS questions

### 1. Do you agree with the NTC's recommendation to continue using the existing PAYGO expenditure categories? Why or why not?

The current expenditure categories provide a known qualification of data that enables the NTC to recommend a determination using the current PAYGO model. While we suggest that introducing further categories nominated under a Forward Looking Cost Base (FLCB) model could reduce some administrative costs, it remains unclear how many benefits could be realised. Until the NTC can rigorously test and evaluate the FLCB model, the PAYGO model should be used as the basis for calculating and recommending the determination.

### 2. Do you agree that option 5 in Table 6 is the best option for treating innovative funding and financing under PAYGO? Please provide reasons to support your views.

Option 5 in Table 6 presents a strong narrative justifying the benefits of changing the guidelines to properly account for tolled roads and any other types of innovative funding or finance models used by governments that change the timing or nature of expenditure incurred or revenues received by government. Net road related costs incurred by government would be identified in this option and could be included in the PAYGO cost recovery system. This option represents greater accuracy as a treatment approach for known innovative funding and finance; however, we note that none of the options presented can address all types of innovative funding and financing. As new innovative funding and financing approaches are identified, the NHVR recommends that the approaches are reviewed and considered for inclusion.

### 3. Are there any other options for treating innovative funding and financing not presented in Table 6 that the NTC should consider?

The NHVR is not in a position to offer any further views on treatment of innovative funding and finance.

### 4. Should the PAYGO expenditure guidelines be modified to specify that expenditure should not be reported where it occurs on roads that heavy vehicles cannot use (e.g. Pennant Hills Road in New South Wales)?

The NHVR supports in principle the notion to amend the guidelines in cases where roads have been identified that heavy vehicles cannot use. However, it is critical that, before expenditure guidelines are amended to remove a particular road, the said road is in fact a road that excludes heavy vehicle usage.

For example, the C-RIS suggests Pennant Hills Road (a 15-kilometre section of the Cumberland Highway) should not be reported for reasons stated in Question 4. However, one article suggests Pennant Hills Road supports a significant number (approximately 5,000) heavy vehicle movements per day. Further, Pennant Hills Road is designated for up to 25/26m B-Double Route (see Figure 1 for details).



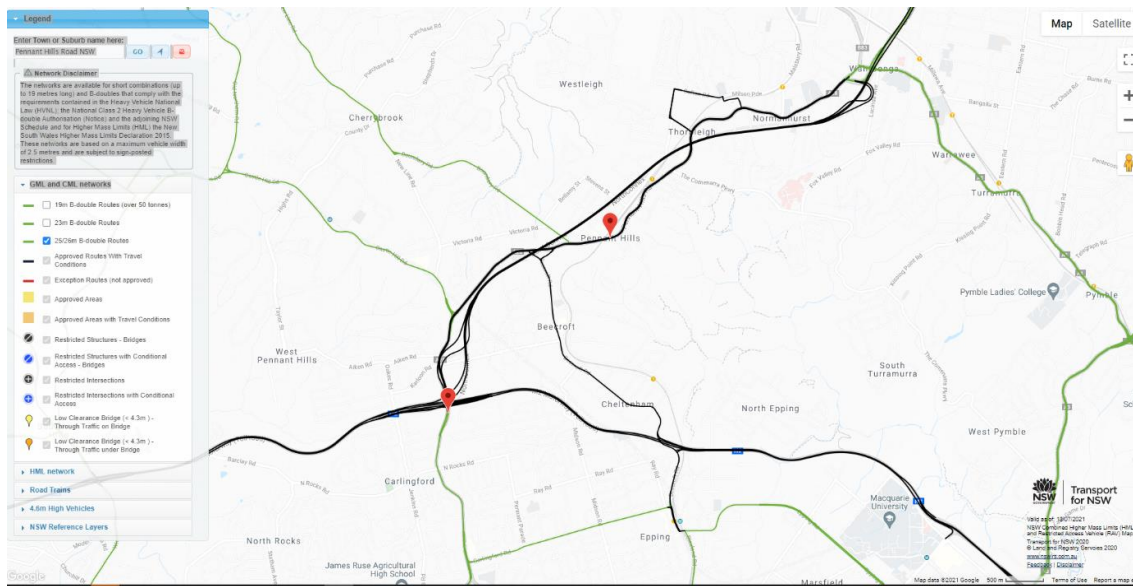


Figure 1: Source <https://roads-waterways.transport.nsw.gov.au/business-industry/heavy-vehicles/maps/restricted-access-vehicles-map/map/index.html>



Pennant Hills Road (Source: [https://en.wikipedia.org/wiki/Pennant\\_Hills\\_Road](https://en.wikipedia.org/wiki/Pennant_Hills_Road))

**5. Do you agree the NTC needs to take action now to ensure the ongoing availability of usage data? Why or why not?**

The PAYGO model relies on SMVU usage data to calculate costs. It is essential that usage data remains available to access. The NHVR encourages the NTC to work with the ABS to find an alternative and reliable supplier of usage data.

In doing so, the NHVR would strongly recommend that whatever solution to accessing related data is agreed upon, that the cost to capture this information is not passed on to industry (and if it is, at a very minimal cost).

**6. Are there any options relating to potential alternative sources of usage data that the NTC has not considered? If so, what are they?**

The NHVR is aware that Automated Number Plate Recognition (ANPR) cameras are used to record vehicle data in metro and non-metro locations. The NHVR receives heavy vehicle sighting data for key freight routes, typically in non-metro areas. Using the GPS location of the camera, and the registration plate reading, the NHVR can calculate:

- a. Vehicle classifications using the NTC charge code and PAYGO classification by matching with the registration record for the sighted vehicle
- b. Distance travelled by a registered vehicle based on multiple sightings of that vehicle through the national camera network e.g. distance from Camera A to Camera B to Camera C and so on.
- c. Vehicle classes average distance travelled in a 12-month period through the camera network (calculated using the above data)

Methods to extrapolate the known distance travelled to the likely distance travelled by vehicles would need to be investigated. Garage postcode of the registered vehicle, or ASIC industry code for example, may be useful attributes to apply an extrapolation.

The NHVR receives over 4.5 million vehicle sightings a month across 106 cameras. If we received additional sightings feeds, particularly in metro areas, the survey could be quite comprehensive, with rolling data available at any time, not just as a result of a defined survey. It would also leverage existing investment already made by road agencies in ANPR technology.

The NHVR believes there could be an opportunity for the NTC to work with our technology team to explore opportunities to use this data which may, to some extent, compensate for the loss of SMVU data.

The NHVR also recognises the advancement of heavy vehicle data derived from telematics, which potentially could be used as a replacement source for usage data. The NHVR is aware that a significant number of road operators use telematics to manage their fleets. The use of telematics is growing in Australia and worldwide. According to a study, “the number of fleet management systems in active use in Australia and New Zealand is forecasted to grow at a CAGR of 16.4 per cent from almost 0.8 million units at the end of 2017 to nearly 1.7 million by 2022.”<sup>1</sup>

However, the willingness for road operators to provide this information to government or statutory organisations remains unclear. Governments would need to work with industry and road managers to understand how to leverage industry data and the incentives that would be provided to industry in return.

**7. Do you agree that the PAYGO model should use new, updated ESA values for this determination? Why or why not?**

The NHVR supports the use of updated ESA values to improve the accuracy of the PAYGO model.

---

<sup>1</sup> [https://www.researchandmarkets.com/research/3h5bl4/australia\\_and\\_new?w=12](https://www.researchandmarkets.com/research/3h5bl4/australia_and_new?w=12)

**8. Do you agree that the options for this determination should centre on the three alternative cost allocation approaches identified above?**

The NHVR understands that the bridge stock in Victoria is, on average, older in years; that the average span length of the bridges is longer; and that there is a higher proportion of simply supported bridges than bridge structures across most of Australia. Consequently, it could be assumed that the cost to maintain, rehabilitate or improve bridge structures in Victoria is likely to be greater.

Bridge costs would contribute to the overall engineering pavement costs estimated in the VIC DTF/DOT model. This may explain why the VIC DTF/DOT cost allocators reflect a higher cost base, by up to more than 10 per cent, than either the current or modified current heavy vehicle cost base. The NHVR is uncertain if pavement design standards in Victoria are different from other jurisdictions, and the characteristics of bridge stock in Victoria as outlined above could be a potential reason for cost differences compared to the other cost case approaches.

The NHVR supports this determination being centred on the 'current' or 'modified current' heavy vehicle cost base approach. For reasons stated, the NHVR would have some concerns if the VIC DTF/DOT cost allocators approach was considered in this determination.

**9. Do you agree with the NTC's proposal to remove MaxMan from the PAYGO model? Why or why not?**

Agreed. The uptake of road trains has significantly increased over recent years, with greater access being approved for the use of A-Doubles for containerised transport to and from ports. MaxMan offers no material value in differentiating cost in the broader context of the PAYGO model.

**10. Do you agree that the NTC should adjust the estimated fuel consumption used to set the RUC rate to take into account RUC exemptions for auxiliary fuel use based on the ATO's 'fair and reasonable' fuel tax exemption rates (approach 2 in Table 16)? Why or why not?**

Based on the argument presented in this section, it appears approach two offers the methodology to improve the accuracy of calculating fuel consumption for heavy vehicle transport. However, noting that this approach relies in part on an estimation of fuel consumption derived in part from SMVU data to recalculate the RUC, it presents a problem in terms of accuracy over the longer period given the ABS has stopped conducting the SMVU. The model will be less accurate the older the SMVU data gets.

**11. Do you agree that the NTC needs to update the percentages used for unsealed road travel discounts in the PAYGO model? Why or why not?**

Since the last unsealed travel discount has not been reviewed since 2005, the NHVR supports the NTC undertaking a new survey of industry in time for application to the final RIS. The survey results will inform the appropriate percentages to (or if it should) be applied for unsealed road travel discounts in the PAYGO model.

**12. Do you agree that the CSO discount should be discontinued in the PAYGO model? Why or why not?**

While the NTC estimates that the combined impact of the unsealed road travel discount and the CSO discount will lower the heavy vehicle cost base by about 2 per cent, it is worth noting that this is based on information that was last reviewed in 2005. The NHVR recommends that the NTC liaise with road authorities to identify current road expenditure that meets CSO criteria to update the PAYGO model, and then determine if the CSO discount will make a material difference to the cost base.

**13. Do you agree that this determination should not consider heavy vehicle concessions?**

Agreed.

**14. Do you agree with the NTC's recommendation to disregard electric heavy vehicles for the purposes of this determination? Why or why not?**

Agreed. The current volume of electrical or hybrid-powered heavy vehicles, at 0.03 per cent of the national heavy vehicle fleet, is insignificant.

Moving forward, governments will need to determine the charge for these vehicles line with their strategic approach to encouraging the uptake of modern and greener vehicles. Noting electric vehicles are heavier than the standard fleet.

**15. Do you agree that the NTC should collect data on alternative fuel vehicles to monitor whether their number becomes sufficiently large to warrant further action?**

The NHVR supports the recommendation that all jurisdictions in future provide regular reports on electric, hydrogen and combustion heavy vehicles by type to the NTC to evaluate the impact of the vehicles for post-2021 Heavy Vehicle Road Reform.

**16. Do you agree with the NTC's recommendation to recalculate the regulatory component of registration charges using the existing methodology and updated data? Why or why not?**

The NHVR agrees with the recommendation to continue with the existing methodology, which has to date been successful in calculating actual regulatory fees within a small variance of the NHVR budget.

The NHVR would strongly recommend that the data used to calculate the charges be updated with current information to ensure the correct regulations fee is captured.

**17. Do you agree that the regulatory component of registration charges should be adjusted from year to year to reflect the approved NHVR budget using an automatic adjustment provision in the Heavy Vehicle Charges Model Law?**

Agreed. The current additional ministerial approval required before resetting the regulatory charges is an unnecessary extra step that creates additional administrative effort. Approval of the NHVR budget by ministers should be the automatic trigger to make any adjustment required.



- 18. Do you agree that the three options outlined should be considered as the options to be assessed for this determination?**
- 19. If not, what other option(s) should be considered?**

For reasons stated in the answer to Question 8, the NHVR recommends that the current and modified current options (Option A and Option B) are considered in this determination. It should not be assumed that Victoria's road infrastructure is representative of all road infrastructure condition across the rest of Australia.

- 20. Which cost allocation option is the best option to calculate the heavy vehicle cost base for this determination? What are the reasons for your preference?**

Option B, which identifies the cost allocation matrix to allocate 70 per cent of costs in expenditure using ESA-km as proposed in the Houston Kemp report – 'modified current', while noting the report suffers from a range of data and methodological issues, attempts to redress some of the imbalances of cost allocation under the other options. Option B perhaps best reflects the cost associated with road wear and tear, consequential with heavy vehicle movement and therefore the cost bases for consideration in calculating the determination.

- 21. Has the NTC identified the right implementation options? If not, what other options should be considered?**

The NTC has offered a comprehensive review of various implementation options. The adoption of any of the implementation options will depend on the risk appetite of ITMM in managing industry expectations in a COVID-19 environment. Each implementation option offers its own risks and benefits in pursuing the principles and methods that ensure the delivery of full cost recovery in aggregate. The NTC has presented several indexation adjustment arrangements to ensure the ongoing delivery of full expenditure recovery, and recognises the transition to any new arrangement may require a phased approach.

- 22. Do you agree with the NTC's initial assessment of the implementation options and examples against the combined pricing principles? If not, how would your assessment differ?**

The NTC has canvassed a range of implementation options identifying cost impact to industry. Finding the right balance in managing this complex issue is challenging given all the variabilities that need to be considered.

- 23. Do you have any views or comments on the likely implications of each of the implementation options and examples on industry or governments?**

The three-year fixed path specifying fixed percentage increases in overall heavy vehicle charges is likely to be the most preferred method with industry.

- 24. Which implementation option do you prefer? Why do you believe it strikes the best balance in furthering the pricing principles?**

Given the estimated range of under recovery as suggested in Table 22 (i.e. the cost bases for all options exceed revenue from current heavy vehicle charges by a range of between 8.2 per cent and 27.7 per cent), the NHVR suggests that a multi-year implementation model is likely to attract more support from industry and governments than any direct implementation initiative that attempts to redress the estimated heavy vehicle revenue shortfall.