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Land Transport Market Reform Steering Committee Secretariat  
The Department of Infrastructure, Transport, Regional Development and Communications  
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### **Submission on the Heavy Vehicle Road Reform**


The Roads & Transport Directorate, a collaboration between IPWEA NSW and LGNSW, has prepared this submission to the Department of Infrastructure, Transport, Regional Development and Communications.

The submission provides our response to the 19 questions included in the Heavy Vehicle Road Reform Consultation Paper (September 2020).

We would welcome the opportunity to provide further detail on the issues raised within this submission.

Please do not hesitate to contact Arjan Rensen on 04 2053 1500 or email [arjan.rensen@ipweansw.org](mailto:arjan.rensen@ipweansw.org) in relation to this submission.

Yours faithfully,



Mr Garry Hemsworth  
Director IPWEA NSW



Mr Arjan Rensen  
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## **Heavy Vehicle Road Reform**

**Submission by**

**Road and Transport Directorate**  
**A collaboration between IPWEA NSW and LGNSW**

**27 October 2020**

## Contents

I. Executive Summary.....	5
II. Introduction .....	7
III. Background .....	8
IV. Response to the Consultation Questions.....	9
1. What do you see as the pros and cons of establishing service level standards? .....	9
2. What are the most important things for the service level standards to capture? .....	9
3. What mechanism/s should be established to make sure the service level standards reasonably reflect the views of users, including their willingness to pay? For example, how can a wide range of stakeholders be represented in the process? .....	10
4. What mechanisms could be used to review the service level standards periodically? For example, should there be a standing body, or consultation periodically when the service level standards are reviewed. ....	10
5. Which model for independently determining what expenditure is recoverable from heavy vehicle users would you prefer and why? .....	10
6. If some or all of the independent determination of what is recoverable from heavy vehicle users will take place at the state level, what checks could be put in place to ensure national consistency of expenditure recovery? .....	11
7. How important is the independence of the body/ies assessing expenditure? .....	11
8. What benefits to users do you think particular expenditure review mechanisms might offer compared to the administrative costs associated with that mechanism? .....	11
9. How important is the aim of reducing volatility of heavy vehicle charges? .....	11
10. Does a forward-looking cost base seem to be a better way of assigning charges over time? .....	12
11. What, if any, additional information would you like to have about the proposed forward-looking cost base? .....	12
12. How important is the element of independence in assessing expenditure and charge-setting? .....	12
13. What advantages and disadvantages are there to establishing independent pricing regulation? .....	12
14. What are the advantages and disadvantages of the independent price regulator functions being held by a separate body to the body/ies with the expenditure review function? .....	12
15. Are there any other functions or responsibilities the independent price regulator should have under the proposed new system? .....	13
16. What pricing principles should apply to the independent price regulator/s with the above work? .....	13
17. Under the proposed new system, should heavy vehicle registration fees be nationally consistent and based on nationally agreed service level standards like the Commonwealth Road User Charge would be? .....	13

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18. Do you have any comments about how charges are proposed to be dedicated to road infrastructure? ..... 13

19. What publicly available reporting from either regulatory bodies or states and territory governments would be useful? ..... 14

## I. Executive Summary

The Road and Transport Directorate supports the principle that better data will lead to better informed investment decisions. More telematics data collected from heavy vehicles will provide road operators with a great source of data on how the road network is actually being used.

Although the concept of setting a Service Level Standards (SLS) for each road category is supported, the following issues need to be considered:

- Funding as part of the reform is only provided for States and Territories. The vast majority, around 85%, of the road network is operated by Local Government. The reform is not sustainable without including funding for Local Government.
- Setting minimum SLS introduces the risk for litigation if the agreed levels are not met, even when the SLS is not mandatory.
- Due to the vast size of the road network that is controlled by Local Government it is suggested to identify a SLS range, to cater for the differences in the network and the varying traffic volumes.
- The Directorate has identified a shortage in skills and capacity to manage public assets in regional and rural Local Government organisations. It is recommended to include funding and other mechanisms to increase asset management capacity in regional and rural areas.

Current funding through fuel is declining as vehicles become more fuel efficient and alternative fuels are being introduced. An alternative system, based on user charges, is supported as a mechanism to build and maintain road transport infrastructure.

Hypothecation of current taxes and charges could be implemented in the short term to support the provision of better road and transport infrastructure to support the, ever increasing, freight task.

The implementation of a system only for State and Territory roads is not supported. Local roads are an integral part of the freight network and the costs to the community of running freight on local roads is significantly higher per km than on state roads:

- A feasibility study was commissioned by Austroads in 2011, on heavy vehicle charging in Australia<sup>1</sup>. The study showed that policy development and system design can be separated, as long as the key assumptions hold true, namely an Australian-wide scope of the charge with coverage of all, or at least most roads and basic liability to the charge of all vehicles above 4.5 tonnes.
- Another Austroads report<sup>2</sup>, commissioned in 2012, estimated the marginal road wear cost. The actual marginal cost per kilometre on local roads is significantly higher than on state and territory roads, as per the figure below from the Austroads report.

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<sup>1</sup> Feasibility Study: Heavy Vehicle Charging in Australia ISBN 978-1-921709-76-0, Austroads Project No. FS1409, Austroads Publication No. AP-R384/11

<sup>2</sup> Preliminary Methodology for Estimating Cost Implications of Incremental Loads on Road Pavements, ISBN 978-1-921991-20-2, Austroads Project No. AT1394, Austroads Publication No. AP-R402-12

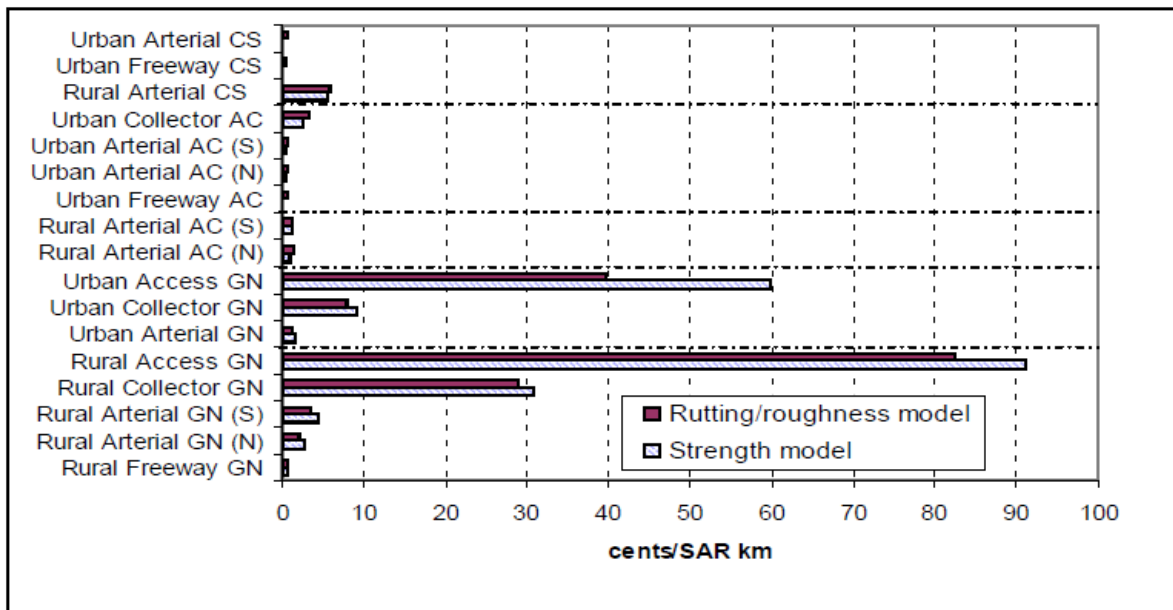


Figure 1: LRMC per SAR km estimates for rutting/roughness and strength/roughness models (all axle groups combined)

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## II. Introduction

The Institute of Public Works Engineering Australasia NSW Division (IPWEA NSW) is the leading professional association representing Engineers and Public Works Officers engaged in public works and engineering, with the majority of members working in, or providing services to, Local Government (and the NSW Government).

IPWEA (NSW) is a charity with the purpose of advancing the public works excellence in Australia, particularly in NSW by:

- conducting and publishing research into improvements to the processes used in public works and services to enhance NSW Communities
- working with government at all levels to ensure that the interests of the community are represented in regard to the public decision-making process relating to public works and services, and
- providing a forum for all people engaged in the public works to discuss best practice and enhancing the future of NSW Communities

IPWEA (NSW) has adopted a mission to enhance the quality of life of NSW communities through excellence in public works and services. This is achieved through our professional association that effectively informs, connects, represents and leads public works professionals for NSW.

The Roads and Transport Directorate is a joint initiative between IPWEA NSW (IPWEA) and Local Government NSW (LGNSW) to optimise roads and transport outcomes.

The purpose of the Directorate is to support our member Councils to deliver an improved local road and transport network.

A network that meets the future needs of the community, industry and economy. A network is that is safer for all users and provides vital and reliable connections to place and people. A network that uses resources wisely and is mindful of its impact on the environment.

Member Councils are collectively responsible for the management of over 165,000 kilometres of roads valued at more than \$70 billion representing the single largest community asset in New South Wales.

To succeed in this task, we undertake leading-edge road and transport research which underpins our input to policy development and published guidance on the design, construction and management of the road network and its associated infrastructure.

This submission has been prepared by the NSW Roads & Transport Directorate on behalf of its members.



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### III. Background<sup>3</sup>

The Commonwealth, state and territory governments and the Australian Local Government Association are looking at a new and better national system for setting heavy vehicle charges and investing the funds raised in roads. The new system aims to boost productivity, and deliver better government investment in roads by giving users more of a say.

Governments have agreed in principle a new system will have four broad elements:

1. Service level standards
2. Expenditure planning and determining what costs are recoverable from heavy vehicles
3. Independent setting of heavy vehicle charges
4. Dedicated road funding (hypothecation)

This submission intends to answer the questions proposed in the consultation paper from an NSW Local Government Road Manager point of view.

The consultation paper: <https://www.infrastructure.gov.au/roads/heavy/files/hvrr-consultation-paper-20200904.pdf>.

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<sup>3</sup> Heavy Vehicle Road Reform Consultation Paper, Proposed changes to the way heavy vehicle charges are set and invested, September 2020

## IV. Response to the Consultation Questions

### 1. What do you see as the pros and cons of establishing service level standards?

Service Level Standards (SLS) or Level of Service (LoS) is commonly used in asset management and is a well-established tool to communicate with asset users what they can expect from an asset. It sets the community expectations.

The development of SLS is complex as it needs to take into account many, often competing, interests. Factors to contemplate include: willingness to pay, balancing available budgets, economic prosperity, environmental issues, age of assets, actual usage of the asset and many other factors.

We support the principle that better data will lead to better informed investment decisions. More telematics data collected from heavy vehicles will provide road operators with a great source of data on how the road network is actually being used.

Although the concept of setting an SLS for each road category is supported, the following issues need to be considered:

- Funding as part of the reform is only provided for States and Territories. The vast majority, around 85%, of the road network is operated by Local Government. The reform is not sustainable without including funding for Local Government.
- Setting minimum SLS introduces the risk for litigation if the agreed levels are not met, even when the SLS is not mandatory.
- Due to the vast size of the road network that is controlled by Local Government it is suggested to identify a SLS range, to cater for the differences in the network and the varying traffic volumes.
- The Directorate has identified a shortage in skills and capacity to manage public assets in regional and rural Local Government organisations. It is recommended to include funding and other mechanisms to increase asset management capacity in regional and rural areas.

### 2. What are the most important things for the service level standards to capture?

It is most important that the Service Level Standards (SLS) are realistic and that there is sufficient budget available to deliver the SLS, whilst balancing competing interests.

SLS for roads normally includes requirements for maintenance levels (texture, roughness, rutting, cracking, etc), but the SLS for this purpose could also include accessibility requirements and amenities (rest areas, etc.). Funding should be made available to Local Government as well to assist to meet the SLS for the freight routes as almost all freight routes will include local roads.

An issue not well addressed in the consultation paper is the variable gap between existing standards and the proposed Service Level Standard across Council roads. The criteria that impacts heavy vehicles most is the geometry of the road particularly width, grade and horizontal curves. To obtain a certain uniform standard varies significantly depending on climate, soil type, topography and availability of suitable materials can hugely impact the cost of upgrade to the proposed Service Level Standard.

It is suggested to include a SLS range to cater for the different requirements and circumstances throughout Australia. For Local Government the setting of SLS for the road network need to take into consideration that Local Government also provides other assets for use by the community

(swimming pools, libraries, etc) and as a result there are many competing interests for the limited funding available.

### 3. What mechanism/s should be established to make sure the service level standards reasonably reflect the views of users, including their willingness to pay? For example, how can a wide range of stakeholders be represented in the process?

Using SLS for National Highways and State Roads based on road user requirements seems possible, as these roads predominantly have the function to move people and freight. For local roads, many other users of the public space need to be considered and setting SLS based on one specific category of road user (heavy vehicles) disregards the needs of other users.

Excluding Local Government at this stage will introduce the risk that pinch points and not meeting SLS requirements on the local network will compromise the overall SLS and as a result willingness to pay.

The reform should include dedicated additional funding for Local Government to meet SLS requirements and resolve pinch points. It is not realistic to expect Local Government to redirect more funding to support freight as Local Government is under-funded and have to balance the available funding to maintain many different community assets.

### 4. What mechanisms could be used to review the service level standards periodically? For example, should there be a standing body, or consultation periodically when the service level standards are reviewed.

The Road and Transport Directorate has been collecting asset performance data for NSW Local Government since 2006 (<https://www.roadsdirectorate.org.au/road-asset-benchmarking-project>). The latest report shows that the current funding arrangements in NSW are inadequate to deliver safe, efficient and resilient road and bridge infrastructure to the community on an on-going basis into the future and are not sufficient to boost heavy vehicle access and thus economic productivity. The deteriorating condition of timber bridges on local roads poses a significant risk with the potential to isolate local communities. The current funding gap in NSW is estimated to be \$350M annually.

A similar method, based on actual data, could be applied to review SLS and funding requirements annually. Based on the example of the NSW benchmarking report a recommendation could be made to increase funding and the contribution from the freight industry or to review and adjust SLS.

### 5. Which model for independently determining what expenditure is recoverable from heavy vehicle users would you prefer and why?

The Directorate would support the hybrid model, with an independent state nominated body while a national body ensures consistency and rigour.

The assessment of expenditure plans by an independent body introduces the risk of additional administration burden on State and Local Government and delays in delivering infrastructure projects to the community.

Additional capacity and skills will need to be made available for Local Government to support an independent body to determine what expenditure is recoverable from heavy vehicle users.

## 6. If some or all of the independent determination of what is recoverable from heavy vehicle users will take place at the state level, what checks could be put in place to ensure national consistency of expenditure recovery?

Checks to ensure national consistency could include:

- Consistency in SLS for each road category
- Consistency in construction standards
- Consistency in heavy vehicle charges
- Making sure that heavy vehicle charges are at a level consistent with the costs of using road infrastructure, while supporting economic prosperity for local communities.

## 7. How important is the independence of the body/ies assessing expenditure?

The Directorate would support a process that is transparent, auditable and free from subjective assessments. An independent body will only be able to make recommendations, the 'independent' assessment could be part of the current investment determination processes to avoid additional administrative processes.

## 8. What benefits to users do you think particular expenditure review mechanisms might offer compared to the administrative costs associated with that mechanism?

A mechanism that determines expenditure on better data is supported. The Directorate would support a further introduction of telematics in heavy vehicles to better inform road operators on the actual use of the road network in relation to the freight task.

The proposed expenditure review mechanism seems to deliver a data driven model. It is important that the administrative cost and burden to all levels of Government is kept to a minimum.

Local Government should be included from the start, especially where major freight routes include local roads.

## 9. How important is the aim of reducing volatility of heavy vehicle charges?

Forward planning and predictability are important for all levels of government, industry and for the community. Good planning and realistic budget setting for all levels of government will significantly reduce the potential for volatility of any charges.

Current funding levels for Local Government, however, are insufficient to maintain local road and transport assets to a level expected by the community. This introduces future risks and the possibility for the need to significantly increase charges in the future to rectify a historically created situation.

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10. Does a forward-looking cost base seem to be a better way of assigning charges over time?

Yes, if combined with realistic budgets. See Question 9.

The proposed forward-looking cost base seems to be a model where heavy vehicles are required to pay for the wear and tear they cause on existing and new infrastructure. Instead of a system based on expenditure and allocation of costs a system based on 'consuming' the whole of life costs could be implemented.

The whole of life cost of each class of road (local, regional, state, sealed, unsealed, etc) is known or can be calculated based on standard loaded axles. A user charge for heavy vehicles could be based on the actual wear and tear caused, the distance travelled and the roads travelled. We believe this approach could be simpler and require less administrative efforts to set pricing levels

11. What, if any, additional information would you like to have about the proposed forward-looking cost base?

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12. How important is the element of independence in assessing expenditure and charge-setting?

The Directorate would support a process that is transparent, auditable and free from subjective assessments.

13. What advantages and disadvantages are there to establishing independent pricing regulation?

Independent pricing regulation is proven to be successful to make price setting transparent, auditable and accepted by the community.

The risk of establishing independent pricing regulation for road investments based on only one user group is significant. It could prioritise investments that are actually not the best outcome for the community. This is especially a challenge for Local Government were the available budget needs to used to maintain a range of community assets.

14. What are the advantages and disadvantages of the independent price regulator functions being held by a separate body to the body/ies with the expenditure review function?

Price setting by an independent body on a national level is supported to achieve national consistency.

### 15. Are there any other functions or responsibilities the independent price regulator should have under the proposed new system?

The proposed system seems to direct funding from heavy vehicle to main freight routes. These freight routes would attract additional funding for upgrades and maintenance to support, the ever increasing, freight task.

Unless there is additional funding, it will cause a reduction in funding for other roads. As the whole state network is likely to be included in the freight network, this will mainly affect the funding for local roads.

Local Government does not want to see a roll back of current funding streams such as Roads to Recovery and Financial Assistance Grants.

If funding for local roads is reduced in favour of channelling funding towards main freight routes the accessibility of the local network should be reviewed and some local roads could be closed off for heavy vehicles. A mandatory introduction of telematics in all heavy vehicle will provide reliable data on the actual use of the network.

### 16. What pricing principles should apply to the independent price regulator/s with the above work?

The Directorate would support a user charge model based on actual wear and tear caused by various user groups. The whole of life cost of each class of road (local, regional, state, sealed, unsealed, etc) is known or can be calculated based on standard loaded axles. A user charge for heavy vehicles could be based on the actual wear and tear caused, the distance travelled and the roads travelled. We believe this approach could be simpler and require less administrative efforts to set pricing levels.

### 17. Under the proposed new system, should heavy vehicle registration fees be nationally consistent and based on nationally agreed service level standards like the Commonwealth Road User Charge would be?

The Directorate supports a national consistent charging model.

### 18. Do you have any comments about how charges are proposed to be dedicated to road infrastructure?

It is understood that the current charging model will not change. The proposed charging model still includes a registration charge and a fuel-based user charge. Both charges will be dedicated to as revenue for road infrastructure.

The Directorate supports the hypothecation of funding to increase the budget available to provide high quality road and transport infrastructure to the community and the freight industry.

The proposed model only includes funding to State and Territory Governments. Freight networks include a significant number of local roads and funding for Local Government should be included in the proposed Heavy Vehicle Road Reform.

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A practical first step could be to hypothecate current revenue, without the proposed expenditure planning. This would give all levels of government the opportunity to deliver better road and transport infrastructure to the community and the freight industry. Such a change could address the ongoing budget gap to maintain local roads (\$350M in NSW alone).

## 19. What publicly available reporting from either regulatory bodies or states and territory governments would be useful?

To support the proposed reform the following data could be useful for the industry and road managers:

- Telematics data on the actual use of the road network
- The actual cost of wear and tear caused by heavy vehicles
- The volume and economic value of road freight
- The benefits (ROI) of upgrades to freight routes.