28 October 2020

Land Transport Market Reform Steering Committee Secretariat

HVRR Consultation Paper

INTRODUCTION

1. Thank you for the opportunity to comment.

2. EROAD is a technology company specialising in regulatory vehicle telematics, providing services in Australia, New Zealand, and North America. We appreciate the opportunity to provide this submission. Representatives of EROAD are available to speak on the submission at your convenience.

3. EROAD believes every community deserves safer and more productive roads that are sustainably funded. This is why EROAD develops technology solutions that enable the better management of vehicle fleets, support regulatory compliance, improve driver safety, and reduce the costs associated with driving. We work with governments to draw out and share insights into how roads are being used, to ensure better informed investment and policy decisions. EROAD (ERD) is listed on the NZX and ASX, and employs almost 300 staff located across Australia, New Zealand, and North America. If you would like to know more about EROAD, you can visit https://www.eroad.com.au/

GENERAL COMMENTS

4. This package of reforms all relate to the 'supply side'. The demand side is considered only in very blunt terms ('heavy vehicles' and 'light vehicles') and revenue instruments not at all. We recognise the practicality of segmenting the discussion to break it into more manageable component parts.

5. We note that there are equity benefits that the supply side reforms will move the system closer towards but cannot capture without supporting changes elsewhere in the system. In particular, the two principal revenue instruments available – fuel taxes and registration fees – both depend heavily on averaging and significant cross-subsidisation between different user groups. Neither instrument levies users in real proportion to their road use. As such, the principled cost attribution and allocation sought through the changes discussed in this paper can only be achieved at the highest level of aggregation.

6. Nevertheless, we see significant value – both for the reform process and for the road funding system as a whole – in the increased objectivity and transparency that these supply side reforms will foster.

RESPONSES TO CONSULTATION QUESTIONS

Service level standards

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

7. The principal advantage of setting service level standards is that it establishes a reference point for a funding (revenue raising and investment) conversation. A consequent risk is that it may create unreasonable expectations about the actual level of service that will be delivered in the near term.

8. Any service level standard will probably:

   a. Be broadly defined; and

   b. Express a general intent that will, in many cases, need to be realised over time through progressive, 'least regrets' investment.

9. The conversation needs to clearly communicate both what having such standards will change and the period over which change might be expected to be visible.

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

10. Critical considerations are:

    a. the actual or expected user types by mode, task, volume and availability of alternative routes

    b. location, amenity offered, and activities served by the road

    c. operating expectations, especially speed and intended network function.

11. The consultation paper notes that the levels of service relate to the functions different roads perform (e.g. strategic freight corridor vs. suburban access road). However, the discussion in the paper gives more emphasis to user preferences and willingness to pay. There should be a point where demonstrated function (revealed preference) supersedes stated preference. As such, the service level standards need to capture:

    a. Objective parameters to determine when a road's actual use places it more into one functional category than another; and

    b. The absolute minimum standards that should apply to a road in a given functional class. For example, should any highway really have less than a 3-star AusRAP rating? If so, under what functional circumstances is the risk more acceptable (e.g. extremely low volume routes)?

12. We appreciate that the proposal wishes to avoid setting minimum standards to the extent that these might be used to force investment. However, the absence of at least a minimum reference standard undermines the transparency and integrity of the classification as a meter for assessing investment needs and decisions.

13. Thought ought to be given to how much weight to attach to 'push' and 'pull' factors that affect a road's functional classification. This could consider what an appropriate service level standard should be, in different situations. For example, if:

    a. A planner or road manager intends to push a road into a functional class, then perhaps the expectation might be that they invest to bring it towards the higher end of the standard to induce users to follow the desired change?

    b. A road is evolving, being 'pulled', into a new classification by changes in user behaviour, then the expectation might be that its condition will be aligned to the new standard only incrementally, thus noting/exploiting user acceptance of the current lower standard on offer?

Question 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?

14. 'Willingness to pay' is a highly problematic idea to work with and may need to be treated with caution. Most road users want assurance that they are not being over-charged and singled out, and are receiving value for money. More problematically, a large number of road users:

    a. **Don't know how roads are paid for**, what the costs involved are, and how those costs arrive over time. Light passenger vehicle users in particular have, effectively, been encouraged to externalise the bulk of their personal costs and consider subsidised public road use as an entitlement.

    b. **Are unresponsive to fluctuations in cost recovery level road taxes** in terms of the nature and scale of their road use. While heavy commercial vehicles can behave in a more responsive manner, that is market driven; and an equitable lift in road taxes will tend to be passed through to their customers.

    c. **Are unaware of plausible counter-factuals** – e.g. that sometimes paying more for roads is still paying less overall due to reduced vehicle damage, operating costs, or time in traffic.

    d. **Are often confused by the numbers involved**, either or both:

        i. Being overwhelmed by the very large total financial sums involved, not appreciating how low individual user contributions can be (e.g. for light passenger vehicles), or how modest the costs are as a share of total economic activity once the pivotal role of road transport is considered.

        ii. Over-estimating the significance of their individual contribution, not knowing how much even the simplest maintenance or construction job costs.

15. Objective data is critical to understanding whether a road is performing the function anticipated. Thought should be given to having the draft, current and/or proposed amendments to standards, with associated metrics and data, easily accessible in an easy to follow online and sharable format.

16. Active, targeted information gathering from diverse user groups will be necessary to cultivate broad involvement in any process. Thought should be given to gathering this regularly as part of general monitoring of the health of the roading system.

    a. A focus on costs and/or on road design is unlikely to generate reliable feedback due to the technical nature of both topics. These require quite a high degree of explanation and can distract from the more critical question, which is what people want from their roads (i.e. the outcomes they want roads to support or deliver).

    b. Thought should be given to providing qualitative descriptions of the experience each different service level standards could be expected to offer (i.e. scenarios).

    c. Examples could use 'personas' tailored for different user groups to help them locate themselves and their goals within the scenarios.

    d. The purpose would be to help people resolve on what they want out of roads so that this knowledge can be used to anchor a further discussion of the trade-offs involved (including acceptable costs/investment levels).

Question 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.

17. A new road takes a long time to create. Once built, roads are long-lived assets: the pavement alone can go years before needing meaningful maintenance, while major structures should be expected to have 50 or more years of life at their designed level of load. As such:

    a. Evolving actual levels of service can take similarly long periods of time

    b. Periodic review of the level of service *standards* on any shorter cycle is potentially meaningless except under two conditions:

        i. When the character of demand shifts sufficiently radically to render old assumptions invalid

        ii. When the scale of funding rises sufficiently above or falls sufficiently below what the status quo needs that higher standards can now be tolerated or lower standards must now be accepted across the board.

18. In these cases, it seems more likely that a review of the standards need only occur when triggered by an external event. However, it would be valuable to have an informed body in place to initiate, receive and act on any such review. Noting that the states and territories would each come to national standards from different starting positions, there is also value in having a standing body to facilitate the development and sharing of good practices in the realisation of the various standards. Such a body would then capture and retain the experience needed come review time.

19. Austroads seems the appropriate body to house any such mechanism given that these sorts of activities already largely fall within its purview.

Expenditure planning and determining what costs can be recovered from heavy vehicles

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

20. A hybrid model seems unavoidable.

    a. Each state and territory will have a network that reflects its particular needs, its wider access to resources, and the sum of its past choices.

    b. Its roading programme will reflect to some degree the particular needs and preferences of the electorate.

    c. Budget setting is an iterative and reflexive practice, requiring close and ongoing discussions to build a common understanding of what funding is needed, from whom, and when.

    d. A local presence and a reasonable degree of knowledge of local market conditions and cost apportionment/accounting methods is useful, if not necessary, to monitor for mistakes or attempts to game the numbers, even if only on a random sampling basis.

Question 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?

21. Two things would be needed to support any model:

    a. A clearly defined 'basket of goods' that national level funding will be allocated in support of (e.g. road maintenance could be 'in', but public transport operating subsidies might be 'out'), and recognition that states and territories may choose to self-fund further goods from their own resources (e.g. registration fees, local taxes, tolling and other revenues).

    b. A common framework for determining the heavy vehicle share of the costs associated with each good (or service), both those in the national basket, as well as those that might be added by states and territories.

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

22. See the response to question 12.

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

23. The level of the review effort/size of the review mechanisms can be scaled to fit costs to some agreed 'acceptable' scale. In general, however, any such review should be leveraging data that is already being gathered for network and asset management and planning purposes. Conversely, where new data sources are needed for expenditure review, that data should also add value to these other purposes.

24. Therefore, the true cost of expenditure reviewing is the marginal cost of doing the reviewing.

25. The act of reviewing adds benefit at the system level (process integrity and fairness), from which level these benefits flow down to projects (cost efficiency and fit-for-purpose), and through to users (infrastructure that is both genuinely useful relative to the needs of demand and actually used in consequence).

26. Over time there should be a narrowing of the gap between projected investment returns and realised benefits. However, this outcome will be mediated by the quality or otherwise of the investment appraisal, procurement, and project delivery processes/behaviours.

Independent setting of heavy vehicle charges

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

27. The first question to resolve is what kind of outcome is the mechanism of heavy vehicle charges meant to achieve? Volatility will increase as these charges become more targeted in their application, so:

    a. A charge designed to recover a specific vehicle's fair share of the economic cost of a specific road or route will set highly variable rates from one road to the next, and highly volatile rates for a road over time as the size and composition of each road's demand evolves and costs need to be recalculated and reapportioned

    b. A charge designed to recover a whole class of vehicle's collective share of a network's costs, in contrast, will benefit from the effects of scale and averaging and be far more stable.

28. In either case, low volatility in charges is desirable for business management, both for budgeting and for price-setting. However, any restrictions or restraints on rate volatility need to be mindful of the underlying tendency imposed by the overall outcome. Tight restrictions despite a fundamentally volatile system will be more likely to cause revenue to fall out of alignment with expenditure and certainly generate financial inefficiencies.

29. Smoothing the change in rates may add complexity to the story behind any given rate at a point in time. However, given the significant role estimates and averaging will inevitably play in rate setting, any 'inaccuracy' from smoothing should be able to be kept to a marginal or even insignificant degree.

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

30. Yes.

31. The asset base is what it is, in the condition it is in. These facts define a realistic range of maintenance and improvement scenarios that road managers can choose from, but it is the road manager's intentions that ultimately define what will be spent and, therefore, what needs to be recovered.

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

32. There is a philosophical debate to be had about who owns the roads and, therefore, what that really means for which costs should or need to be recognised in the forward-looking cost base.

33. The design and evolution of a road network is not something that occurs – or even really can occur – within an orthodox market supply and demand dynamic. Road networks must be planned because of the huge information and coordination challenges involved and the need to force compromises across the vast array of competing interests that are inevitably engaged in these decisions.

    a. As such, renewal and new investment are not logical extrapolations from the current asset base, but something that is consciously accepted and added to the forward programme.

    b. Even maintenance costs are subject to some judgement and choice, which might have the goal of cost optimisation, but also might be working around cashflow constraints or in response to some lead or lag in need due to unexpected demand/use changes.

34. The presumption in the paper is a move to treating roads as a regulated utility operated on largely commercial principles, with a presumption of some facsimile, or actual, private ownership of the assets, all within an orthodox market concept.

35. Yet these are *public* roads. Assuming user pays is the dominant funding philosophy, at the most basic level of operation – pay-as-you-go – there is no meaningful cost of capital (it is worn by the road user) and the return on capital is enjoyed immediately by the road user through their road use.

    a. As intermediaries are injected into this relationship – private managers, project financiers and so forth – there cost of capital and desired return on capital are, for users, merely additional current costs that should be assessed on their merits case-by-case before the relationship is entered into.

    b. It is not clear, therefore, that such instances justify cost of capital and return on capital being built into the forward-looking cost base, as of right and as some universal component.

    c. Similarly, depreciation takes on the character of double-counting where maintenance (and renewal) costs are being collected for a portfolio of roads within the framework of a long-term network asset management plan.

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

36. Expenditure assessment and charge-setting both need to be principled, framework-based, objective (i.e. based on measurable material factors so far as possible), consistent and transparent. Independence is valuable insofar as it provides greater assurance of these criteria being met.

37. Both the expenditure assessor and the charge-setter will be heavily dependent on the same information being provided by the road manager. Independence from the road manager is, therefore, essential for avoiding conflicts of interest. However, a close relationship will still be needed, to ensure both the smooth flow of the necessary data and an appropriate shared understanding of meaning and context.

38. Independence is, therefore, less of a concern than avoiding either the expenditure assessor and/or rate-setter being captured by the road manager (or club of road managers). Greater

thought should be given to ensuring good governance and, especially, a high-level of visibility into the planning, expenditure assessment and rate-setting processes for the public (or, more practically, road user peak bodies and advocacy entities).

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

39. See the above response to question 12.

Question 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?

40. The expenditure reviewer and the price-regulator need to share a common understanding of how to interrogate costs in order to determine their reasonableness and how most fairly to attribute them. More important, therefore, than whether to house them in separate or common entity/entities (remembering also there could be a national/local split), is providing for the collaborative operation of the two.

41. On the face of it, having one entity perform both functions (overall or per jurisdiction) would:

    a. Support more effective collaboration by placing one responsible person over both functions charged with delivering the necessary collaboration

    b. Remove duplication of demand for critical skills

    c. More easily enable shared overheads and scale economies

    d. More likely create a body of professionals with similar skill and experience requirements that could more be supported and renewed more effectively and efficiently otherwise.

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

42. No (noting our response to question 14, above).

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

43. Although characterised as 'charges', this is a discussion about taxes, and rate setting/pricing should be subject to the principles of good taxation.

Question 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?

44. Logically, the rates of registration fees cannot be nationally consistent. Investment priorities and expenditure programmes must of necessity, and input costs will through market forces, vary between the states and territories.

45. National consistency should be sought in the underlying standards and methodologies that states and territories draw on to determine their transport budgets.

Dedicating heavy vehicle revenue to roads (hypothecation)

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

46. Managing road funding is an exercise in balancing revenue in-flows and expenditure out-flows. Both flows are subject to their own rhythms and cycles, which are almost certainly never fully aligned. Care is needed to ensure that the model for passing funds on to road managers does not create perverse consequences or incentives, for example through arbitrary and rigid adherence to annual budgeting cycles.

47. Some things to consider in the detailed design:

    a. **Will the funds be hypothecated into a memorandum account of each state or territory's consolidated fund, or into an actual separate investment fund?** The latter provides greater transparency. But it adds financial management risk to the transport agency that holds the funds and may impose unnecessary cash-flow costs on the government in question, including the holding of a cash buffer that might otherwise be put to work. The former approach addresses these risks but can be seen as just a variation on money disappearing into general funds if not reported on clearly.

    b. **Virtually all projects will require co-funding, so how will this be treated to enable the efficient use of hypothecated heavy vehicle charges?** About the only expense that is purely heavy vehicle in nature would be remedial asset strengthening to enable heavy vehicle access. Even pavement maintenance has a light vehicle component, especially along commuter arterials, and there is a 'common cost' component for weathering of low volume roads. A fair cost allocation methodology will recognise this, essentially demanding co-funding from or on behalf of the other road users. If the co-funding does not arrive, would the heavy vehicle charges be expected to cover the whole cost, or would that revenue be withheld until the co-funding was presented?

    c. **Over what period to deliver a 'zero balance', and how literally to interpret this?** Road work can be season and weather dependent. Claiming behaviours by suppliers and road managers can run on an off-set cycle to higher government processes (e.g. if higher government co-funding commitments need to be known in advance). Co-funding may arrive late or in penny packets due to other factors. It will often be unreasonable to expect annual expenditure to closely match the annual revenue share, but also quite plausible for a portfolio to balance over some number of years, or a project to balance by its completion date.

48. The first two considerations will presumably depend on how each state and territory chooses to organise its own affairs. However, the approach to the last consideration will structure the incentives that act back through the system.

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

49. Reporting should be directly derived from the agreed service level standards and the cost attribution and allocation model. Ideally the reporting requirements will be centrally set, prescriptive, and stable over time to allow meaningful analysis of performance change over time.

50. Regardless of how many separate bodies are involved, there should be a common standard and, ideally, an easy way to take an integrated view of the whole picture.

51. The questions the public should be able to find answers to are:

    a. What attributes are relevant to understanding how costs are apportioned and translated into rates?

    b. What was to be invested in and, therefore, how do the costs of these investments fall across the relevant attributes? How is this expected to change in the next investment period?

    c. How well did the actual incidence of taxation match the projected incidence; how well did net revenues match forecast revenues? How well did the incidence and cadence of expenditure match projections? What are the variances, the reasons for these, and the expected response?

    d. How has the network's condition (asset state) and performance (demand served relative to service level standard) changed over the last investment period; how is it expected to change over the next?

    e. How is investment performing, both in terms of expected returns at the point of investment and benefit realisation over the life of the assets or services funded?

52. The temptation is to use index values to represent some performance results – e.g. proportion of the network's road operating at some variance from expected level of service and/or demand. These are often practical ways of bringing complex data into a manageable story. However, they can also be used to obscure uncomfortable facts. Where used, indices should be accompanied by a clear methodological description and the base data.

CONTACT

Peter Carr
Director Regulatory Market Development
Australia New Zealand
peter.carr@eroad.com

About Peter: From 2012 to 2017 Peter was the Manager Funding and Infrastructure in the New Zealand Ministry of Transport. In that role, Peter led the implementation, evaluation and modification of the 2012 Road User Charges reforms. This included revising and restoring stakeholder confidence in the cost allocation and revenue forecasting models and processes, and rationalising the policy structure of the debt and tolling portfolios. Peter also led the evaluation of the High Productivity Motor Vehicle policy and the consequent policy review leading to modernisation of vehicle dimensions and mass limits.