Consultation Regulation Impact Statement: HVRR Phase 2: Independent price regulation of heavy vehicle charges

Transurban's response

August 2018

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ABOUT TRANSURBAN

Transurban manages and develops urban toll road networks in Australia and North America and our vision is 'to strengthen communities through transport'.

At the heart of our business strategy is the desire to be a partner of choice for our government clients and an organisation that meets the needs of our customers. To do this, we aim to provide effective transportation solutions to support the growth and wellbeing of our cities.

We do this through the ongoing management of our existing road networks, our active involvement in the transport policy debate, and by applying our unique skills to the infrastructure challenges in our markets.

We have 13 roads in our Australian portfolio, two in the US state of Virginia and one in Montreal Canada.

We are a Top 20 company on the Australian Securities Exchange and have been in business since 1996.

Supporting road funding reform

Transurban welcomes the opportunity to respond to the Consultation Regulation Impact Statement: HVRR Phase 2 and to provide input into this vital micro-economic reform journey.

Transurban is one of a number of vocal advocates for road-funding reform. We believe that Australia's current system of opaque fees and charges and diminishing fuel excise should be replaced with a transparent and sustainable charging system built on the principle that those who benefit, pay, while ensuring fairness across the community. With the current Heavy Vehicle Road Reform (HVRR) program, Australia has the opportunity to establish a foundation for an all-inclusive and fair direct user-pays road-charging framework that generates a sustainable demand driven road-funding stream to cater for our future road infrastructure and transportation needs. In the longer term, the framework might also include mechanisms to improve overall travel times and road utilisation further contributing to providing high standard road services at the lowest overall economic cost.

In 2016, Transurban completed Australia's first practical study to examine drivers' preferences and awareness when it comes to road funding in Australia. While the study focused on light vehicles and consumers rather than commercial and heavy vehicle operators it did provide a number of useful insights on the application of user pays principles and systems to roads. For more information on the Road Usage Study, please visit **changedconditionsahead.com**.

Feedback Relating to the Consultation Paper

Transurban applauds the release of the Consultative Regulation Impact Statement and progress on the Heavy Vehicle Road Reform program (HVRR). The call for road charging and funding reform, and the HVRR in particular, has been growing for many years and can be traced as far back as the 1980s.

There is almost universal support for HVRR across stakeholders, with over 95 percent of responses to the 2017 Independent Price Regulation Discussion paper supporting HVRR. The remaining five percent of respondents did not express an opinion regarding the desirability of HVRR. Increasingly stakeholders are calling for more progress in the HVRR program as awareness grows of the significant resulting economic and social benefits. Amidst this growing momentum for change and while heavy vehicle stakeholders have an appetite for material reform, it would be a missed opportunity to adopt a minimalist approach to HVRR.

In common with many other stakeholders, Transurban supports the HVRR program and believes it is the best starting point for the overall road reform journey. Starting with significant HV reform will establish a tested knowledge led foundation and baseline for broader all-inclusive road user charging reform.

Transurban believes that working with the HVRR stakeholders is a practical, manageable and efficient approach as:

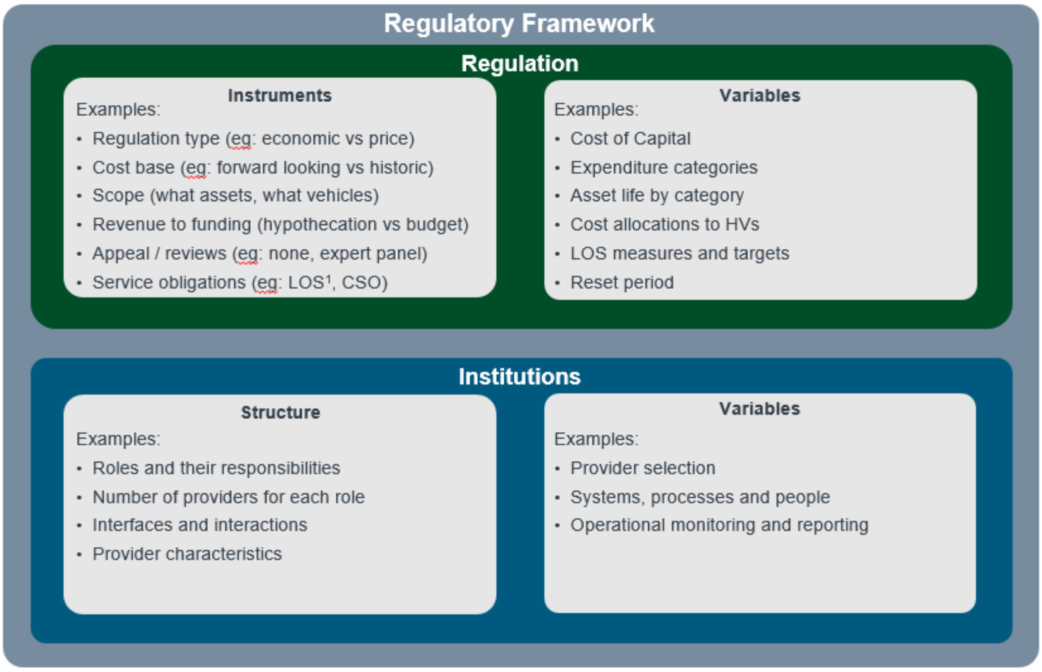
- Heavy vehicles and operators represent a very small proportion of the overall road user population (~3 percent of vehicles), while driving a majority of road expenditure (both investment and maintenance);
- The benefits from HVRR are economic in nature and will flow through to the whole economy in terms of improved transportation (services and / or efficiency); and
- Heavy vehicle operators are highly knowledgeable about the current Australian road charging framework and its shortcomings.

Transurban understands the challenges in designing and implementing the substantial change that HVRR represents. We encourage all stakeholders (decision makers, policy advisors, road users, road providers, regulators etc) to work together to take advantage of the existing solid foundation for change and adopt a progressive outlook and position regarding the timing and settings for HVRR. We also believe that the HVRR program affords decision makers and stakeholders the opportunity to consider the HVRR options and decisions against the backdrop of the broader transport market. The objective of taking this broader perspective is to avoid introducing any structural inter modal inequities and, where practical, reduce any existing inequities.

Undertaking micro economic reform, as illustrated in the diagram below, involves changes in the four major components of the regulatory framework, namely:

- Regulatory Instruments;
- Regulatory Variables;
- Institutional Structure; and
- Institutional Variables.

Figure 1: [1]The Four Major Components of a Regulatory Framework



In our view, reform success is highly dependent on getting all four components right. While there is a natural sequence for dealing with the four components, there are inter-dependencies and benefits from progressing across all four fronts rather than exclusively focusing on each area in sequential isolation. It is important that early stage decisions regarding regulatory instruments do not impede progress towards or the ability to achieve the desired end-state environment. Progressing across all four components with an eye on the desired end-state will result in a better overall solution. By adopting this approach, we believe, will lead to greater support from stakeholders as it gives them greater visibility of the journey, time to consider options and opportunities to input into the complete solution.

In terms of the end-state options analysed in the Deloitte Access Economics (DAE) 2017 report on potential end-states for HVRR[2], we encourage the adoption of Option 3 State-based Mass Distance Charging. In our view, of the options presented by DAE, Option 3 will achieve the greatest overall advance across the reform aims as it:

- Fully hypothecates HV road revenue establishing a direct link between road charges and the delivered road services – for Accountability and Transparency;
- Adopts full economic regulation bringing external monitoring and economic control to maximise the return on funds – for Accountability and Efficiency;
- Increases the proportion of variable road charges recognising that the more vehicles use the roads the more they should pay – for Fairness and Transparency;
- Introduces a Forward Looking Cost Base (FLCB) to reduce fluctuations and bring greater certainty in road charges – for Fairness;
- Charges on the basis of Mass, Distance and Level Of Service (LOS); recognising the relationship between vehicle / axle weight and road wear and the differences in delivered service quality (LOS) – for Fairness

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[1] Abbreviations used in the diagram: CSO: Community Service Obligation; HV: Heavy Vehicle; LOS: Level Of Service.

[2] Economic analysis of potential end-states for the heavy vehicle road reform, Deloitte Access Economics 2017

For HVRR, we advocate a framework that provides a secure, direct, transparent road-funding stream that maximises the economic benefits to the heavy vehicle transport industry. In this regard, we strongly support the aims as expressed in the HVRR Background Paper[3] that the HVRR be accountable, transparent, fair and efficient. To which we recommend adding:

- Sustainable – The basis and structure of future road revenue and funding needs to be sustainable. In particular the framework needs to avoid dependencies on revenue being linked to elements of the transportation value chain likely to be subjected to technological or other forms of disruption; and
- Adaptable – Road transport and the overall transport ecosystem, are going through major and rapidly technology driven changes, which we believe will only increase in the future. Experiences from other regulated industries, particularly electricity[4], demonstrate the consequences of not having a regulatory framework that can quickly and efficiently adapt to rapid and major industry changes.

Therefore, with Option 3 of the DAE 2017 report being our preferred end-state and within the scope of the Regulation Impact Statement (RIS), we advocate for adopting:

- Option B for independent price regulation as it includes some aspects of economic reform, where Option A does not; and
- An initial regulatory reset period of two years as this allows for smaller and more frequent adjustments; which is likely to provide fleet operators with smoother pricing during the transition period.

In considering FLCB transitional arrangements we believe the overarching principles need to be (a) short to medium term stability of both prices and funding; and (b) being applicable for a future Light Vehicle road reform. The options and comparisons presented in the RIS and the Farrier Swier (FS) 2017 report[5] do not indicate a preferred option from a price and funding stability perspective. However, the FS 2017 report shows that the 'Line in the Sand' approach has the comparative advantage of having being used a number of times in Australia. Based on having an Australian track record and the familiarity that comes with that, we support the 'Line in the Sand' option.

Beyond the regulation instruments dealt within the RIS, Transurban believes the range of metrics included in the service level measure[6] need to be sufficiently adaptable to ultimately cover all conditions having a material impact on HV operators' road usage experience. Widening the scope of the Heavy Vehicle Infrastructure Rating (HVIR) will enable road pricing to better support turning the provision of HV road infrastructure into an economic service.

Institutional structures and variables are the other two components of the HVRR landscape and both have a direct impact on: (a) the cost of operating the framework and (b) road user convenience and cost.

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[3] Heavy Vehicle Road Reform: Changes to Heavy Vehicle road delivery Background Paper July 2018

[4] For example, see Independent Review into the Future Security of the National Electricity Market 2017, Section 7.3 Responding to changes in the market

[5] Financial policy elements of developing a forward looking cost base for heavy vehicle charging - Farrier Swier Consulting2017

[6] Currently the potential service level measure discussed in the RIS - Heavy Vehicle Infrastructure Rating (HVIR) includes simple time consistent metrics for road access, safety, and condition; it does not include time consistent or dynamic metrics for road throughput / travel speed.

Overseas experience[7, 8] has demonstrated that operating costs for Road Usage Charging frameworks vary significantly from around five percent of collected revenue to as high as 30 percent[9]. Beyond ensuring the regulatory instruments and variables deliver a cost effective and adaptable RUC framework, the institutional structure and variables also have an important role in cost effectiveness and road user convenience. To minimise the costs and maximise road user convenience, the implementation needs to:

- Take advantage of the available economies of scale by leveraging existing technology and process capabilities in the road services market place;
- Encourage innovation in: the delivery of services and in the longer term, market operations;
- Look for ways to provide road uses with increased convenience through a high quality user experience and a combination of streamlining, automation and service integration.

We note that the scope of the roads in the RIS specifically excludes private and toll roads; we support these exclusions, as private industry and individuals have built and funded these roads rather than government.

The remainder of this submission provides our responses to the nine questions raised in the RIS.

[7] HVCI Project - International review of road funding and heavy vehicle charging mechanisms July 2012

[8] Congressional Research Service Mileage Based Road Usage Charges, 2016

[9] International review of road funding and heavy vehicle charging mechanisms; NTC for the the Heavy Vehicle Charging and Investment Reform 2012

Responses to the Questions raised in the Regulation Impact Statement

We have provided specific answers to the questions posed in the HVRR IPR and FLCB Consultative Regulation Impact Statement in the table below.

Questions	Response	Feedback
Background Questions		
Q1 Is the reform objective appropriate?	Yes	Australia's current road funding and road provision system has a number of major flaws, chief of which include opaque fees and charges, little or no link between road revenue and road expenditure and diminishing fuel excise revenues. In summary an inefficient, inequitable and unsustainable framework. The Changes to heavy vehicle road delivery Background paper (DIRD 2018) states the ultimate aim of HVRR being "to produce a more accountable, transparent, fair and efficient system for funding Australia's roads and charging heavy vehicle operators…" Section 2 of the RIS has the ultimate reform objective as "to turn the provision of heavy vehicle road infrastructure into an economic service, where feasible". Transurban believes these aims and objectives are both appropriate and necessary for the long-term sustainability of road funding and Australia's road network, however, in our view they are not sufficient. Road transport and more generally the overall road ecosystem are going through major changes driven by rapid technological advances, the pace of which will only increase in the future. Experiences from other regulated industries, particularly electricity[4], demonstrate the importance of having a regulatory framework that can efficiently keep pace with a rapidly changing industry. Transurban foresees major technology driven changes in: • how road services are provided, used and managed; • the nature of road assets and the associated expenditure; and • the collection, availability and value of data. In our view, this means that the new road revenue and funding framework needs to be outcome focused and principle driven rather than prescriptive, particularly when it comes to technology aspects. In other words, the framework needs to be technology agnostic[10]. There is a ground swell of support for HVRR, with 95% of respondents to the 2017 public discussion paper on Independent Price Regulation of Heavy Vehicles advocating for reform. Another reason that Transurban strongly supports HVRR are the expected economic benefits from such a framework. Micro economic reform across other utility industries in Australia has delivered significant economic benefits. For example, in the 10 years from 1989/90 to 1999/00 reforms across the Australian electricity, gas, water, transport and telecommunications markets delivered a real increase in GDP of 2.5% (an increase in the annual GDP of $27 B in 2018 dollars)[11]. In their 2017 report, Deloitte Access Economics (DAE) identified expected economic benefits ranging from $8.5B to $17.4 B over 20 years (2017 $s). Of these benefits between 54 and 66% flow to HV operators[12]. In our view it is important that road reform is executed in a way that maximises the delivered economic benefits and recognises that the source and nature of the benefits will changes over time[13].

[10] An example of the issues that can arise from being prescriptive comes from the electricity market and the advent of large scale storage batteries which are both generators and users of electricity.

[11] Review of National Competition Policy Reforms, Productivity Commission Inquiry Report #33, 2005

[12] Transurban analysis of data in Table 4.2 of the Deloitte Access Economics 2017 report

[13] An example is the Victorian water industries where reform has so far resulted in two waves of benefits. Firstly those delivered through economic regulation (through to ~2016) and secondly (2016 onwards) a new regime focused on service outcomes that customer truly value (ie, customer centricity)

Questions	Response	Feedback
		Starting the overall road reform task with HVs is the right approach as[14]: • HVs drive a disproportionate level of road expenditure; • The benefits from HV RR are economic and will feed through to the whole economy in terms of improved transportation (improved services and / or greater efficiency); and • The number of players involved in the reform is small and typically highly knowledgeable about the current arrangements compared to Light Vehicle road users.
Q2 In general, do you support the program of heavy vehicle road reform?	Yes	The four overlapping phases to the HVRR program, as shown in the RIS and HVRR background paper, are, in our view, logical and comprehensive and reflect the importance of making progress on multiple front simultaneously. In particular, we believe it is important to identify the desired HVRR end-state as soon as possible to enable current and future considerations and decisions to be made against the backdrop of a target end-state. A known end-state is key to ensuring that decisions made along the journey all contribute positively to reaching the desired destination and do not adversely affect the: • ability to achieve the desired outcomes; • time taken to reach the end-state; and • required stakeholder effort. In consideration of the high levels of stakeholder support for reform (see feedback on Q1 above) we believe it is important for decision makers to take bold steps and adopt an end-state that maximises the: • reform benefits; and • achievement of the reform aims and objectives (ie Accountability, Transparency, Fairness, Efficiency and Sustainability). Looking beyond the specifics of the RIS, of the five end-state options DAE considered in their 2017 report, Transurban advocates Option 3 (State Based Mass, Distance, LOS Charging with Economic Regulation and Hypothecation). Option 3 is the end-state that maximises the benefits and is most likely to achieve the reform aims and objectives as it: • Fully hypothecates HV road revenue establishing a direct link between road charges and the delivered road services – for Accountability and Transparency; • Adopts full economic regulation bringing external monitoring and economic control to maximise the return on funds – for Accountability and Efficiency; • Increases the proportion of variable road charges recognising that the more vehicles use the roads the more they should pay – for Fairness and Transparency; • Introduces a Forward Looking Cost Base (FLCB) to reduce fluctuations and bring greater certainty in road charges – for Fairness; • Charges on the basis of Mass, Distance and LOS; recognising the relationship between vehicle / axle weight and road wear and the differences in delivered service quality (LOS) – for Fairness

[14] A similar approach was used in reforming both the electricity and gas markets with contestability being progressively introduced starting with a few very large customers and working through to small consumers.

Questions	Response	Feedback
Overview Questions		
Q3 Of the reforms considered in this Consultation RIS, which reform option(s) do you support? What are your reasons/concerns?	Option B	Transurban supports Option B on the basis that: • In comparison to Option A, it makes a start on the supply side reform where the majority of the road reform benefits lie; • Four of the five potential end states of HVRR analysed by DAE in 2017[15], use economic regulation, only the minimalist change end-state of Option 1 uses price regulation. Therefore implementing Option B, which adopts some small but important aspects of economic regulation, will be a positive and progressive step. In Transurban's view, Option B will better enable and support the delivery of the economic benefits flowing from Funding and Supply side reforms. In reforming markets, we believe it is important to maintain a focus on both the demand and supply side. There is a risk, in adopting Option A that moving to Independent Economic Regulation (IER) is delayed pushing back the considerable benefits it facilitates[16]. If Option A were to be adopted there would be no ability to review or challenge the expenditure programs put forward by road providers and hence moderate the resulting prices.
Q4 Do you think that the preliminary analysis presented in this RIS understates or overstates the costs of any of the options? If so, by how much and in what ways?	See comments. Insufficient information to assess for further reform scenario.	As Transurban has little experience in determining the costs for regulators and governments associated with establishing and operating an independent regulatory framework, we have no general view on the appropriateness of the RIS estimates. We do note that it is not practical, based on the information provided, to determine the adequacy of the cost estimates for either option where further regulatory reform is undertaken.
Q5 Do you think that the preliminary analysis understates or overstates the benefits of any of the options? If so, by how much and in what ways?	See comments. Threshold approach makes quantitative assessment impractical	The threshold benefits analysis adopted in the RIS makes it impractical to assess whether the benefits attributable to Options A and B are over or understated in quantitate terms. There is no quantitative information provided on the contributions the options make to each of the end-state benefits. As mentioned in many papers, submissions and reports from a wide cross section of stakeholders, HVRR is a journey. Hence, Transurban believes that benefits of the regulatory reform, even as narrowly defined in the RIS, need to be viewed through a long-term lens. With this in mind we believe that using the scaled down benefits of DAE Option 1 as the reference understates the likely benefits as this option has significantly less benefits than Options 2, 2A and 3. We agree with the approach in the RIS of looking first at whether to reject both Option A and Option B (ie, do nothing); as demonstrated in the RIS the case for doing something is clearly overwhelming. It then becomes a question of whether Option A or Option B is better overall. In our view, one of the key differences between Option A and Option B is the timeframe it will take to reach the preferred end-state. Transurban's assessment is that of the end-state options in the DAE 2017 report, the majority of stakeholders support an end-state close to Option 3[17]. We believe that Option B will enable reaching an end-state with economic regulation faster than Option A. The average 20 year net benefits of the end-states with economic regulation (2, 2A and 3) are 61% higher than those with price regulation (1 and 1A); ie, \$15.6 B vs \$9.7 B. While the cost for establishing Option B is \$82.9 M more than for Option A. In our view, spending an additional \$82.9 M to bring forward the additional \$5.9 B of benefits makes a clear case for selecting Option B.

[15] As set out in Economic Analysis of potential end states for the heavy vehicle road reform - Deloitte Access Economics (DAE) 2017

[16] Price Regulation is more applicable to markets with a number providers, where Economic regulation is more applicable to capital intensive industries with single providers.

[17] From an analysis of 22 business, government and industry association responses to the 2017 IPR Discussion paper

Questions	Response	Feedback
a. What impact will Reform option A or B have on road maintenance costs?	Option B is more likely to improve efficiency	As Option A does not introduce any material improvements in accountability and road funding remains a budgetary process, Transurban believes that Option A will have little or no impact on road maintenance costs. In our view, Option B with its improved accountability and the user input through the expert panel is likely to have some positive impact. The extent of the improvement will depend on the transparency and availability of data on road conditions, maintenance programs, HV traffic demand and the effectiveness of the existing budget allocation processes within each jurisdiction. With road condition data being available for most of the National Freight Network, we believe prioritising road maintenance activities will be practical albeit somewhat constrained due to the constraints of HV traffic data across the road network.
b What impact will Reform option A or B have on road capacity expansion costs?	Option B is more likely to improve efficiency	As above. In addition, Transurban assumes that the road providers have access to best of class overall traffic congestion information which will allow them to prioritise overall capacity expansion projects based on current and projected overall congestion levels. A piece of the puzzle that is likely to be missing is extensive high quality HV demand by road segment. In the context of HVRR, expansion prioritisation should be driven by greatest congestion impact on the freight task rather than just the greatest congestion levels. HVRR, depending on how it is implemented, provides an opportunity to improve the extensiveness and granularity of HV demand information.
c. What impact will Reform option A or B have on road quality and levels of service?	Option B is more likely to improve quality where it matters most	As above. Note, the proposed HVIR measure does not include metrics for road throughput or travel speed. As travel time is important to road users, particularly HV operators, we believe it is desirable to at least have the ability to include these metrics into the HVIR measure.
Q6 Do you believe that any of the reform options will result in other impacts (such as regulatory burden, competition impacts or increased risks) compared to the current arrangements?	Yes	Transurban believes the regulatory burden for customers in providing (a) input to pricing determinations and (b) setting up and participating in the customer charter should be compared with the existing PAYGO framework. There is a potential impact particularly with Option B of changes to HV demand through changing the ratio of RUC (variable) to Registration (fixed) charges. This could see some high use HVs pay more and low use HVs pay less. While this is an equitable outcome overall it could see some demand shifting (eg, from road to rail or from high utilisation fleets to low utilisation fleets). Some road operators with high utilisation fleets might feel they are being unfairly penalised as their vehicles would pay more. Therefore, it will be important for the IPR in Option B to look at the impact of any RUC vs Registration rebalancing across the national fleet. This has the possibility of being a complex and tricky area to get right. There are likely to be differing views of what 'right' is.
Q7 Thinking of your preferred reform option, are there particular elements that you feel strongly about and either support or oppose?	Yes	Of our preferred Option (B) Transurban in particular supports the customer charter, the expert panel / formal industry consultation, and expenditure review process. These in combination, are likely to deliver a portion of the supply side benefits as well as bringing HVRR closer to the desired end-state The Industry consultation if done in good faith is likely to improve transparency and acceptance of the process and new framework. Any transitional pricing arrangements need to be (a) short to medium term stability of both prices and funding and (b) being applicable for Light Vehicle road reform. Therefore, from a Transurban perspective, it is less about the approach ('Line in the sand' or 'Zero RAB with revenue brought forward') and more about (a) the amount of short-term change in charges and funding; and (b) supporting the desired end-state.

Questions	Response	Feedback
		The options for the alternative FLCB transition arrangements presented in the RIS and the Farrier Swier (FS) 2017 report[18] do not indicate a preferred option from a price and funding stability perspective. However, the FS 2017 report shows that the 'Line in the Sand' approach has the comparative advantage of having being used a number of times in Australia. Based on having an Australian track record and the familiarity that comes with that, we support the 'Line in the Sand' option.
Q8 What other matters should decision-makers take into account when considering whether to implement an IPR and FLCB?	See comments	Transurban believes it is important to make sure that whatever is decided and implemented that it enables further reform and a move to an end-state of full HVRR that can be leveraged in the Light Vehicle sector. In Transurban's view, it is important to mitigate the risk of different frameworks for HV and LV; having different frameworks will introduce unwanted boundary issues and inefficiencies. As mentioned in earlier parts of this response, making sure the new road charging framework is sufficiently flexible, adaptable and technology agnostic to deal with the inevitable unforeseen industry 'disruptions' and changes without having to re-write the 'rule book'. Transurban encourages decision makers and stakeholders, as much as possible to take a whole of industry perspective when making HVRR decisions to avoid introducing any structural inter modal inequities and, where practical, reduce any existing inequities.
Transitional Arrangements		
Q9 Can you identify particular changes for which a different transitional arrangement would provide a benefit?	No specific changes	We believe the overarching principles for transition pricing need to be (a) short to medium term stability of both prices and funding and (b) applicable for Light Vehicle road reform. In other words, establishing a transition approach that: • progressively addresses any structural issues with charging and funding in HV road services in a way that provides stakeholders (both road users and providers) with adequate time and incentive to adjust; • results in an regulated asset base and pricing mechanism, that in an environment of rapid technologically driven change, full hypothecation and economic regulation, works efficiently with clarity and minimal or no need for special case adjustments; • is suitable for use if and when road user charging is extended to cover light vehicles; and • does not preclude the introduction of other charging elements; eg congestion charging.

[18] Financial policy elements of developing a forward looking cost base for heavy vehicle charging - Farrier Swier Consulting2017