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Development

Title: Inquiry into National Freight and Supply Chain
Priorities

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1. About the Australian Trucking Association

The ATA is the peak body representing the Australian trucking industry. Its members include state and sector-based trucking associations, some of the nation's largest transport companies, and businesses with leading expertise in truck technology.

2. Summary of recommendations

Recommendation 1

The National Freight and Supply Chain Strategy should commit to fair and competitive supply chain costs, and include a commitment to implement independent price regulation of heavy vehicle charges, ensuring that the new system does not continue the present overcharging of trucking operators and Australia's supply chains.

Recommendation 2

Toll road and landside port charges for heavy vehicles should be regulated under a future heavy vehicle economic regulator, and this reform objective should be reflected in the National Freight and Supply Chain Strategy.

Recommendation 3

The National Freight and Supply Chain Strategy should continue and accelerate the road investment reform agenda, including:

- Introduction of independent management of road networks and selection of road investment and maintenance projects (such as by a road fund).
- Long term and stable road funding, based on hypothecated revenue of road related charges.
- Government setting of priorities for road network outcomes, to be achieved by independent road management.

Recommendation 4

Road managers should improve the maintenance of the existing network and protection of current and future corridors to reduce the overall life cycle costs of the road network.

Recommendation 5

The Australian Government policy to require infrastructure investments of more than \$100 million to be positively assessed by Infrastructure Australia should be made a legislated requirement. Commitments made in advance of this assessment should be contingent on receiving a positive assessment from Infrastructure Australia.

Recommendation 6

As part of the National Freight and Supply Chain Strategy, the Government should address regional and remote issues by:

- Addressing road infrastructure gaps identified in the Northern Australia Infrastructure Audit, including a focus on providing year round and high productivity freight vehicle road and bridge access.
- Allocating additional specific funding for regional and remote road projects in the short to medium term future.
- Developing and adopting an economic analysis framework for the assessment of regional and remote road projects by independent road funds.

Recommendation 7

The road investment reform agenda needs to include setting service levels for roads. This should incorporate:

- Setting road access service standards for significant freight and supply chain corridors, which allow the use of modern, high productivity freight vehicles operating at higher mass limits.
- Setting significant 'last mile' higher mass limit connections, connecting our supply chain corridors with industrial, port, agricultural and other economic businesses, both in regional and urban areas.
- Setting road access service levels for other freight routes, and include the provision of rest areas and, where appropriate, livestock effluent dumping facilities.
- Specifying roads that are ready for vehicles with higher levels of automation.
- Mandating communication and mobile data access standards.
- Road service standards that restrict the imposition of caps, curfews, and restrictions on identified routes, including in urban areas.

3. Introduction

The Australian Government has launched a number of freight, infrastructure, and transport initiatives. These include:

- Development of a National Freight and Supply Chain Strategy.
- Consultation on options for an independent price regulator for heavy vehicle charges.
- Development of the Data Collection and Dissemination Plan project, with the aim of having better vehicle data mapping to plan for future transport investments.
- \$75 billion infrastructure investment program.

As the peak body representing the Australian trucking industry, the ATA welcomes this focus on developing and upgrading the nation's transport and freight infrastructure and networks. **Australia competes in a global marketplace and needs to ensure its end-to-end supply chains are competitive and low cost.** Due to its geographic location at the end of global supply chains, this is critical.

Road freight is an important sector of the Australian economy and community, with more than 75% of non-bulk domestic freight carried on roads. This demand is expected to increase with a predicted doubling of freight demands from 2010 to 2030.¹

Delivering this critical role in Australian supply chains, trucking is an Australian success story. Between 1971 and 2007, trucking industry productivity increased six-fold due to the uptake of high productivity vehicles like B-doubles. It has been estimated that in the absence of productivity improvements over this period that nearly 150,000 articulated trucks, in addition to the 70,000 registered for use in 2007, would have been required to undertake the 2007 articulated truck freight task.²

Australian trucking operators have pioneered modern, safer, and more productive vehicle designs. Road trains and high productivity vehicle combinations are delivering improved productivity for our supply chains. An Austroads research report found that high productivity vehicles were safer, used less fuel, and offered significant economic benefits to a range of industries.³

Hardworking Australians in our local communities are driving our supply chains, with the trucking industry consisting almost entirely of small businesses, and is characterised by tight margins.

¹ Australian Government, 2014, *Trends: Infrastructure and Transport to 2030*, as quoted by Volvo Group Australia, 2016, *Professional Truck Shortage*

² Bureau of Infrastructure, Transport, and Regional Economics, 2011, *Truck productivity*, pxiv

³ Austroads, 2014, *Quantifying the Benefits of High Productivity Vehicles*, pi

Trucking is critical to moving Australia's freight task. The Productivity Commission has found that only 10 to 15 per cent of the freight task is considered to be contestable across both rail and road.⁴ In short, imposing unfair costs or failing to build and maintain our road network will not deliver freight to another transport mode – it would just leave Australian goods uncompetitive and unconnected from the global marketplace. Without trucks – there is no supply chain.

The National Freight and Supply Chain Strategy must include the trucking industry as a critical component. The strategy should:

- deliver fair and integrated supply chain costs – including ending the overcharging on the trucking industry, and
- recognise that Australian supply chains cannot operate without our road network, and implement a road investment reform agenda, including:
 - more effective targeting and stable funding of roads investment,
 - focusing on upgrading northern and regional roads, and
 - setting service levels for roads.

4. Fair and integrated supply chain costs

Australia's global competitiveness will be restricted as long as trucking – as a major component of our supply chains – is overcharged. At present there is clear overcharging of heavy vehicle road user and registration charges, and increasing trends to overcharge heavy vehicles on toll roads and for the landside charges set by ports and stevedores.

Fair road user and registration charges

Truck and bus operators pay for their use of the roads through a fuel based road user charge, administered as a reduction in their fuel tax credits, and very high registration charges. The National Transport Commission found that this system overcharged truck and bus operators. Instead of reducing charges, governments decided to freeze heavy vehicle charges at 2015-16 levels until 1 July 2018. Based on NTC figures, the decision will overcharge truck and bus operators \$250.2 million in 2016-17 and \$264.8 million in 2017-18 – \$515 million in total.

The overcharging will continue beyond 2017-18 with the meter ticking up by more than \$725,000 per day. Governments have not yet agreed on how to deal with this problem. **As a down payment on future reform, governments must address and resolve the overcharging.**

On 25 May 2017, the Australian Government released a discussion paper on options for an independent price regulator for heavy vehicle charges. The ATA welcomes this commitment to transition to independent pricing and notes that the Government's own discussion paper acknowledges that the current charging system is not working.

In the ATA's view, an independent pricing system would need to have the following characteristics:

- Governments would agree on the pricing rules to be used. During the initial price determination period, it would be appropriate to establish a pragmatic +/- band for charge movements using the October 2015 NTC direct implementation option as a starting point.
- Once the rules were established, the regulator would make and apply its pricing decisions. Its decisions would not be subject to ministerial approval or parliamentary disallowance.
- There could be a limited merits review process, particularly if the legislation included a defined transition to full economic regulation. Any merits review process would need to draw on the lessons of electricity regulation.

Additionally, the only acceptable starting point for a new independent pricing regime would be to start by eliminating the existing overcharging – any other starting point would carry over the deficiencies of the existing pricing model into the new system.

⁴ Productivity Commission, [Road and Rail Freight Infrastructure Pricing](#), 22 December 2006, XXIX.

More detailed comments on the framework for independent pricing are available in the ATA submission on independent price regulation of heavy vehicle charges.

Recommendation 1

The National Freight and Supply Chain Strategy should commit to fair and competitive supply chain costs, and include a commitment to implement independent price regulation of heavy vehicle charges, ensuring that the new system does not continue the present overcharging of trucking operators and Australia's supply chains.

Fair toll road and landside port charges

Whilst trucking operators already overpay for their use of the roads, private toll road owners, state governments and stevedores have been increasing the unfair charges burden through toll and landside port charge increases, whilst avoiding a fair distribution of increases with light vehicles and other freight modes.

In April 2017, the toll for heavy vehicles using CityLink in Melbourne increased by up to 125 per cent to fund the CityLink-Tullamarine widening project.⁵

Meanwhile, in Sydney, the truck toll multiplier on the M2, Lane Cove Tunnel, M5 and M7 has increased to 3 times the car toll. And in Brisbane, the truck toll multiplier on the Logan and Gateway motorways will progressively increase to 3.46 times the car toll once the Logan Enhancement Project is completed in mid-2019.⁶

These state government approved toll increases apply only to trucks, even though all road users will benefit from the projects they fund. The arrangements for approving truck tolls are ad hoc and can lead to state-by-state ratcheting. International evidence suggests that the contracts are unlikely to be sustainable in the long term without external regulation.⁷

The ATA and its members have similar concerns about landside port charges.

Earlier in 2017, DP World unilaterally increased the infrastructure surcharge at its Melbourne terminal from \$3.20 to \$32.50 per container and imposed a new surcharge of \$21.16 per container at its Port Botany terminal. The Port Botany surcharge could cost carriers up to \$150,000 per year. Trucking operators are charged through 1-Stop and payment is required within seven days, even though they cannot recover their costs for 30 days or longer.⁸

Separately, Patrick increased its existing surcharges at Fisherman Islands and East Swanson Dock from 10 July 2017. It introduced a \$4.76 surcharge per container at its Fremantle terminal and a \$25.45 surcharge per container at its Port Botany terminal, even though its total rent per square metre of occupied land area at Port Botany declined between 2013 and 2017. To its credit, Patrick extended its 1-Stop payment terms from seven to 30 days.^{9 10}

These charge increases cannot be avoided by trucking operators; they have not been subject to detailed regulatory scrutiny; they simply build additional costs into Australia's supply chains.

As a result, the ATA considers that heavy vehicle tolls and landside port charges should be regulated by the heavy vehicle economic regulator, once established under the heavy vehicle charging reform agenda.

⁵ Carey, A. "Big rise in CityLink truck tolls tipped to push heavy vehicles onto local roads," *The Age*, 29 January 2017. [Link](#).

⁶ Transurban, [Results for six months to 31 December 2016](#). ASX release, 7 February 2017, 8.

⁷ Stern, J. "The relationship between regulation and contracts in infrastructure industries: regulation as ordered renegotiation," *Regulation & Governance* (2012) 6, 474-498.

⁸ O'Hara, S. [The true cost of DP World's crippling port tax](#), RFNSW media release, 5 April 2017.

⁹ Patrick, [Patrick Terminals – Infrastructure Surcharge and Ancillary Charges: effective 10 July 2017](#).

¹⁰ NSW Ports, [NSW Ports statement re Port Botany stevedore rents](#). NSW Ports media release, 21 June 2017.

Recommendation 2

Toll road and landside port charges for heavy vehicles should be regulated under a future heavy vehicle economic regulator, and this reform objective should be reflected in the National Freight and Supply Chain Strategy.

5. Road investment reform agenda

The National Freight and Supply Chain Strategy should continue and accelerate the Australian Government-led road investment reform agenda. Whilst the ATA welcomes the Governments focus on reforming heavy vehicle charges, assuming this leads to a fairer system, and the focus on building new infrastructure, there is a clear and pressing need to reform the way we fund, build, and maintain our road network.

The case for road investment reform is clear. The Productivity Commission has reported that the current governance, taxation and institutional arrangements for the provision and funding of roads are ultimately unsustainable. The Commission also reported that road funding decisions are often based on inadequate information, inadequate assessment of the costs and benefits of projects, and are subject to budgetary and electoral pressures.¹¹

Austrroads reported that despite Australia spending approximately \$19 billion maintaining, expanding and operating our extensive road network in 2013-14, and despite steady growth in expenditure, parts of the road network are poorly maintained, accessibility in remote and regional areas continues to be a concern, the road network continued to be congested, and heavy vehicle productivity has plateaued impacting on freight transport costs and leading to an anticipated growth in the number of heavy vehicles on the network.¹²

A recent audit from the Victorian Auditor-General also demonstrates the need for reform. The audit highlighted the need for good quality roads:

Road networks in poor condition increase costs to the community, through increased fuel usage, vehicle maintenance costs and travel times. When road surfaces – referred to as road pavements – are in poor condition, they are also more expensive to maintain and repair.

Good quality roads also requires effective targeting of roads funding:

Efficient and effective maintenance keeps Victoria's state roads safe and reliable. Sound investment decisions require a thorough understanding of the condition of these assets and the funding needed to maintain them to an acceptable standard. If road networks are not effectively maintained, road conditions will deteriorate, and future generations will be burdened with lower levels of service, higher maintenance costs, and increased risks to safety.¹³

Whilst road networks are largely owned and operated by state, territory and local governments, the Australian Government performs a critical role in funding the network and is uniquely placed to provide national leadership. The Australian Government has publically expressed a clear intention to no longer act as an ATM for funding infrastructure, making a road investment reform agenda a key future element of the Government's agenda. Likewise, such an agenda would build on the Government's existing policy reforms.

The road investment reform agenda must include more effective targeting of roads funding, upgrading northern and regional roads, and setting service levels for roads. These are further detailed below.

¹¹ Productivity Commission, [Public Infrastructure](#), May 2014, 303.

¹² Austrroads, [Reforming Remote and Regional Road Funding in Australia](#), August 2016, i.

¹³ Victorian Auditor-General, [Maintaining State-Controlled Roadways](#), June 2017, vii.

Case Study: United Kingdom

In recent years the United Kingdom has launched a major road funding and investment reform program. These reforms include:

- A stable and long-term roads plan, with the UK Government instigating a Road Investment Strategy (RIS). The first was introduced in 2015, and planning is already underway for the 2020 RIS.¹⁴
- Independent management of strategic highways. In 2015 the UK Government formed Highways England, a government company to manage the major highways in England. The RIS provides Highways England with funding certainty and an investment plan to implement. The agency is designed to operate at arm's-length, to operate and contract in its own right with a funding stream insulated from short term change, while leaving government responsible for the overall strategic direction.
- Roads Fund. The UK Government will direct revenue from the recently reformed vehicle excise duty in England into the fund from 2020, which will deliver a substantial increase in roads spending. The fund will be set up in legislation.¹⁵

According to the UK Government:

Our aim is to create world class national roads infrastructure, supporting economic growth, through maintaining and improving the asset, improving resilience and reliability, reducing congestion and supporting broader, sustainable development and safety goals. This requires a world-leading delivery and operations company that delivers efficiency savings, a step change in the scale and speed of investment, a better service to customers and value for money to taxpayers.¹⁶

6. More effective targeting and stable funding of roads investment

In its public infrastructure report, the Productivity Commission recommended the adoption of a well-designed road fund model, where independent road funds would make transparent funding decisions.¹⁷ The funds would receive hypothecated revenue from road users and government funding to cover community service obligations. The Harper Competition Review made a similar recommendation.

Establishing road funds with operational independence from governments would help separate long term infrastructure decisions from the budgetary and electoral cycles. The road funds would require stable, long-term funding to enable them to enter into contracts which can seek efficiency savings for road investments, including for maintenance. Road funds should also be required to utilise freight and traffic data to make investment decisions based on achieving improved network outcomes.

Better planning and provision of roads maintenance and construction would be a critical step towards providing the right roads that will be needed to handle the road freight task that is critical to Australia's economic performance. Government would play a critical role in road funds by setting the funding criteria and network objectives, and then allow the independent and transparent selection of projects. Road funds would serve to increase community confidence that charges collected for the maintenance and improvement of the road network will go to that purpose.

This reform would be consistent with the approach of the Australian Government to improve the quality of infrastructure investments by requiring projects of \$100 million or more to first be assessed by Infrastructure Australia. Likewise, the Australian Government has prioritised independent selection of infrastructure projects in the framework of the Northern Australia Infrastructure Facility (NAIF). Under the NAIF, an independent board makes investment decisions in line with the investment mandate set by the Australian Government.

¹⁴ UK Department for Transport, [Road Investment Strategy post 2020: planning ahead](#), March 2016, 1.

¹⁵ UK HM Treasury, [Summer Budget 2015](#), July 2015, 56, 97.

¹⁶ UK Department for Transport, [Case for creation of a new public body in place of the Highways Agency](#), April 2014, 9.

¹⁷ Productivity Commission, [Public Infrastructure](#), May 2014, 303.

The policy for infrastructure investments over \$100 million to be positively assessed by Infrastructure Australia is required in the Statement of Expectations, issued by the Australian Government to provide Infrastructure Australia with guidance relating to the strategic direction, operation and performance of Infrastructure Australia. The current Statement of Expectations was for the period which commenced on 1 November 2015 and concluded on 30 June 2017.¹⁸ Whilst the ATA supports this policy, it should be strengthened to become a legislated requirement. For commitments made before being assessed, they should be required to follow the practice of the recent Australian Government commitment to rail investments in Western Australia, where the commitment is contingent on the project being positively assessed by Infrastructure Australia.¹⁹

More effective targeting is necessary not just for new investments, with maintenance of the existing network also critical. Austroads has reported that the current system of road funding delivers relatively constant amounts for maintenance with increases or decreases in budget allocations depending on new road projects. These are set in competition with other government spending priorities, creating uncertainty about funding levels and its allocation.

The practical effect, according to Austroads, is less than optimal expenditure on road maintenance compared to new road projects. This lack of focus on maintenance is likely leading to higher overall life cycle costs for the road network, as proper maintenance of existing roads is often a cost effective way of reducing future road replacement costs.²⁰

Similarly the Victorian Auditor-General made a number of concerning findings about maintenance of Victorian roads, including:

- Funding allocations to regions being made based on past allocations, and not current needs.
- VicRoads being unable to demonstrate that it is making the best use of existing maintenance funds.
- Targeted early intervention to prevent roads from needing more costly and extensive maintenance has been limited.

The audit also found that VicRoads has limited central oversight of the delivery of its road pavement maintenance program, with regions only reporting on coverage rates, not on cost, time or quality of outcomes. As a result, VicRoads is unable to drive continuous improvements in the development and delivery of its maintenance program.²¹

There is a clear and demonstrable need to maximise the effectiveness of road funding. This requires certainty in road funding levels and independence in the selection of individual projects. This can be delivered in a framework that still enshrines a government's ability to set the priorities for the road network, as demonstrated in New Zealand.

¹⁸ Infrastructure Australia, [Infrastructure Australia Statement of Intent 2015-2017](#), 2015, 3 & 5.

¹⁹ Joint announcement by the Prime Minister and WA Premier, [\\$2.3 billion jobs and infrastructure boost for Western Australia](#), 7 May 2017.

²⁰ Austroads, [Reforming Remote and Regional Road Funding in Australia](#), August 2016, 48.

²¹ Victorian Auditor-General, [Maintaining State-Controlled Roadways](#), June 2017.

Case Study: New Zealand

New Zealand already operates an example of a road fund, the National Land Transport Fund (NLTF). Revenue from fuel excise duty, road user charges, and motor vehicle registration and licensing fees are paid into the NLTF. Funding is then distributed through the National Land Transport Program (NLTP), which consists of the funds in the NLTF, local government rates for local transport provision, and specific government funding programs, such as for the accelerated delivery of regional highway projects or for natural disaster recovery.²²

The NZ Government publishes the Government Policy Statement (GPS) on land transport, which sets what is to be achieved in land transport, how funding will be allocated between different activities, how much funding will be provided, and how the funding will be raised. The GPS does not however fund individual projects. The NZ Transport Agency then independently develops the NLTP, which must give effect to the GPS. Project level funding decisions are made independently as part of the NLTP, within the parameters set by the GPS.

The GPS and NLTP are both traditionally set for a period of at least three years, providing certainty. The latest GPS is for a ten year period.²³

It is also important that the scope of road funds includes the protection of current and future transport corridors. A recent report from Infrastructure Australia, *Corridor Protection*, modelled that the protection and early acquisition of just seven identified transport corridors could save \$10.8 billion in land purchase and construction costs (measured in discounted 2016 dollars). It also identified that corridor protection in the mid-twentieth century was essential to building the infrastructure that is critical to the present day functioning of our largest cities.²⁴

Recommendation 3

The National Freight and Supply Chain Strategy should continue and accelerate the road investment reform agenda, including:

- Introduction of independent management of road networks and selection of road investment and maintenance projects (such as by a road fund).
- Long term and stable road funding, based on hypothecated revenue of road related charges.
- Government setting of priorities for road network outcomes, to be achieved by independent road management.

Recommendation 4

Road managers should improve the maintenance of the existing network and protection of current and future corridors to reduce the overall life cycle costs of the road network.

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The Australian Government policy to require infrastructure investments of more than \$100 million to be positively assessed by Infrastructure Australia should be made a legislated requirement. Commitments made in advance of this assessment should be contingent on receiving a positive assessment from Infrastructure Australia.

7. Upgrading northern and regional roads

A million people live in northern Australia – but the region accounts for more than half of Australia's exports by sea. Its growth prospects are bright, but there are critical infrastructure gaps.

Presently the freight and supply chain priorities discussion paper does not cover regional issues, even though the ATA, in conjunction with WARTA and NTRTA, called on the Government to specifically include rural and remote issues in the review. This omission should be rectified.

²² NZ Transport Agency, [National Land Transport Programme 2015-18](#), 3.

²³ NZ Ministry of Transport, [Government Policy Statement on land transport 2018 Questions and Answers](#), February 2017.

²⁴ Infrastructure Australia, [Corridor Protection: Planning and investing for the long term](#), July 2017, 2-3.

The Northern Australia Infrastructure Audit found that the road network in Northern Australia is essential for connecting people and freight with places of residence and economic activity.

Critically, the audit identified road infrastructure gaps, including:

- North – south access, as linking northern Australia to southern jurisdictions was found to be essential for the region’s economic development.
- Road links between major northern urban centres to their hinterlands.
- Regional links for the resources industry.
- Agricultural industry road links.
- Bridge condition and strength, which can limit road route access for heavy vehicles and if improved, can also improve flood resilience.
- Urban road and public transport links, which impacts the overall performance of the road network and is critical for the economic and social needs of urban centres.²⁵

The Government’s Developing Northern Australia white paper and related investment programs have made a welcome investment to improving northern Australia’s road network, but these critical road infrastructure gaps remain.

At the ATA’s national conference *Trucking Australia*, held in Darwin in June 2017, delegates identified a clear need for the upgrading of roads and bridges in northern Australia to allow year round use of the national highway network.

These outcomes from *Trucking Australia* reinforce the findings of the Northern Australia Infrastructure Audit and the need for them to be addressed. With northern Australia’s proximity to growth markets throughout Asia road access is critical to realising the economic potential and opportunities flowing through the north.

Delegates also identified the need for fair and independent heavy vehicle charges, more strategic and better planned decisions on road upgrades, and mobile phone and data connectivity on more transport routes. These priorities are addressed elsewhere in this submission.

Addressing road infrastructure gaps in northern Australia requires ongoing bipartisan commitment to investing in remote and regional roads. The 2016 report by Austroads, *Reforming Remote and Regional Road Funding in Australia*, found that a traditional road project cost benefit analysis that focuses on travel time savings is likely to significantly underestimate the benefits of road projects in remote and regional areas.

Wider benefits from investment in regional and remote roads were reported by Austroads to include:

- Improved accessibility and connectivity to a community (such as providing year round road access, rather than access limited to six months of the dry season).
- Benefits associated with the avoided costs of having a better road (such as reduced storage costs for fuel and avoided delivery costs by other transport modes, such as air freight).
- Wider social benefits such as health and educational benefits.
- Ability for new trips to be made, which improve access to health, education, work, and shopping, delivering increased earnings, improved health, social involvement, and additional spending in local communities.
- Avoidance of relocation costs to larger communities, both for individuals involved and for the local smaller communities.²⁶

²⁵ Infrastructure Australia, [Northern Australia Audit](#), January 2015, 111-114.

²⁶ Austroads, [Reforming Remote and Regional Road Funding in Australia](#), August 2016, 45-75.

Case Study: Tanami Road

At *Trucking Australia*, the Northern Territory Government and the Northern Territory Road Transport Association spoke about the current poor condition of the Tanami Road and the game changing impact an upgrade would facilitate for local communities in both the NT and WA as well as the wider northern Australia economy.

The Austroads report, identified approximately 78 per cent of the road (790km) as unsealed and either fully closed or restricted for lengthy periods of up to 60 days during seasonal weather events. During these periods access to mines, stations and communities along the road is limited, with safety risks due to poor road geometry, excessive corrugations, and poor visibility.

Upgrading the Tanami Road is reported to deliver key benefits, including:

- Lower living and business costs for communities along the corridor.
- Improve access to areas of economic activity, including mining, agricultural and tourism.
- Improve access for products from the region to south eastern states and cities.
- Create opportunities, assist meeting closing the gap targets, and enhance connectivity for remote communities.
- Enhance economic opportunities for Alice Springs, Halls Creek, Kununurra and Wyndham.
- Improve road safety.

Despite these benefits, Austroads report that the cost benefit analysis for the proposed upgrade of the Tanami Road focused on traditional benefits such as vehicle operating cost savings, travel time savings, crash cost savings, environment externalities and residual value of assets, which resulted in a benefit cost ratio of 1.1.

Austroads also reported that if a more detailed analysis, including the wider economic benefits had been used, that larger benefits for the project would have been likely to have been quantified.²⁷

In its report on Public Infrastructure, the Productivity Commission discussed concerns with the use of wider economic benefits in cost-benefit analysis. Due to the framework for estimating these benefits being in its infancy, the Commission reported that their inclusion has the potential to show one project to be superior to another purely because of differences in the way such benefits are defined and estimated. The Productivity Commission also reported that where project selection runs contrary to a cost-benefit analysis, that the reasons should be clearly explained.²⁸

But with clear infrastructure gaps in regional and remote regions, the current funding framework for regional roads is not sufficient. The establishment of independent road funds will need to include an assessment framework that includes some of the wider economic and social benefits of regional road projects.

Recommendation 6

As part of the National Freight and Supply Chain Strategy, the Government should address regional and remote issues by:

- Addressing road infrastructure gaps identified in the Northern Australia Infrastructure Audit, including a focus on providing year round and high productivity freight vehicle road and bridge access.
- Allocating additional specific funding for regional and remote road projects in the short to medium term future.
- Developing and adopting an economic analysis framework for the assessment of regional and remote road projects by independent road funds.

²⁷ Ibid, 59-60.

²⁸ Productivity Commission, [Public Infrastructure](#). 27 May 2014, 94, 103.

8. Setting service levels for roads

The Australian Government's discussion paper on independent price regulation of heavy vehicle charges identified the implementation of service levels for the road network as a component of establishing economic regulation of heavy vehicle charges.

Similarly, a PwC report commissioned by the ATA, *A future strategy for road supply and charging in Australia*, recommended back in 2013 for the establishment of a three tiered freight network, with defined road access service levels for each standard.

The road investment reform agenda needs to include setting service levels for the road network. These service levels need to be broader than the existing, proof of concept Heavy Vehicle Infrastructure Ratings (HVIRs). The service levels should be set to encourage high productivity freight vehicle access and help direct funding to optimal investments, such as bridges which need upgrading to allow a route to be opened up.

They should set significant 'last mile' higher mass limit connections, connecting our supply corridors with major economic businesses and ports. The service levels need to specify roads that are ready for vehicles with higher levels of automation. Bridge loadings may need to be reviewed to support heavy vehicle platooning, more consistent road marking and machine readable signage may be required, and the mobile (cellular) black spots on designated routes must be addressed.²⁹

Additionally, the service levels must include heavy vehicle route services such as rest areas and, where appropriate, livestock effluent dumping facilities.

Road service standards should be in addition to the existing road design standards. Maintaining these service delivery standards would also be linked to the operating guidelines of independent road funds or managing authorities.

As an example, the duplication of the Hume Highway and the current duplication upgrade works of the Pacific Highway should include service delivery standards to allow access by HPFVs. The benefits of the large scale investment in these corridors should be maximised by increasing the productivity of vehicles utilising these routes.

²⁹ Austroads, [Assessment of key road operator actions to support automated vehicles](#). Research report AP-R543-17, May 2017.

Case Study: Upgrading the supply chain for digital disruption

Fixing mobile black spots will be a requirement before a road can be specified within the road service levels as ready for vehicles with higher levels of automation, and levels of mobile connectivity should be included more broadly.

We cannot predict how technology will change and the things that people will do with it. Ultimately what's important is not trying to predict the future or focus on introducing a particular form of technology. Instead, we must deliver policies which deliver the right settings, outcomes and platforms from which businesses and the community can maximise the benefits of technological change to achieve gains in safety, connectivity, and economic growth.

A common feature of technological change is connectivity – access to mobile data, and through that access to information and technologies of the wider world. Australia is unique, covering a large geographical area, where mobile data connectivity is not universal. Publically reported blackspots for mobile phone reception are significant, as represented in the below map.



The Australian Government has committed \$220 million to the Mobile Black Spot Program to invest in telecommunications infrastructure to improve mobile phone coverage along major regional transport routes, in small communities and in locations prone to natural disasters.³⁰

Whilst this investment is welcome, ultimately there are still significant transport routes without mobile phone data connectivity, limiting the ability to take advantage of technological change, and presenting a clear safety risk for emergency situations. Providing mobile data connectivity on transport routes is a minimum first step before Australian road freight companies can take advantage of the technological change and disruption of the future.

Road access in urban areas

The discussion paper also identifies urban growth pressures, port corridor pressures, and land use conflicts as a critical issue and emerging trend, with two thirds of the value of Australia's international trade flowing through the four largest cities of Sydney, Melbourne, Brisbane and Perth.

The movement of freight through urban regions can be highly regulated. Infrastructure Australia has identified that:

Local trucking operators are often regulated by rules that restrict how, when and where they can provide services. Local councils routinely restrict the hours of deliveries to supermarkets

³⁰ Department of Communications and the Arts, [Mobile Black Spot Program](#), website accessed on 19 July 2017.

and other customers. This restricts goods vehicles to operating in peak periods and imposes significant costs on road users and freight customers.³¹

As Australia's urban regions grow, there is also an increasing mix of both residential and commercial areas. This can bring, for example, apartments in closer proximity to loading docks, which in turn can lead to increased restrictions on freight deliveries.

For Australia's supply chains to operate at low cost and at globally competitive levels, state, territory, and local governments need to ensure that urban regions prioritise freight connectivity. This should include the provision of appropriate infrastructure, corridors, loading zones and facilities, roads, and the ability to use them. These should be integrated with appropriate road service standards, and the associated management and funding of roads by independent road funds.

Likewise, restrictions should not be the only policy mechanism for responding to community concerns about noise, traffic, and the potential impacts of heavy vehicles. As recommended by Infrastructure Australia:

Caps, curfews and restrictions should be the last resort in achieving an intended outcome, and regularly reviewed to ensure the restriction is still the most appropriate and efficient means of achieving that outcome.

For example with regard to rail, Infrastructure Australia suggested that restricting vehicle movements at night may be less effective than enforcing a maximum noise level, to encourage operators to both minimise impacts on local communities and seek more productive outcomes.³² Likewise, allowing high productivity freight vehicles can reduce the number of trucks required to move a particular freight task. Instead of increased restrictions on trucks, community impacts may be better addressed by allowing newer, safer, high productivity freight vehicles. Road access standards in urban areas should restrict the imposition of curfews, caps, and other vehicle restrictions.

Recommendation 7

The road investment reform agenda needs to include setting service levels for roads. This should incorporate:

- Setting road access service standards for significant freight and supply chain corridors, which allow the use of modern, high productivity freight vehicles operating at higher mass limits.
- Setting significant 'last mile' higher mass limit connections, connecting our supply chain corridors with industrial, port, agricultural and other economic businesses, both in regional and urban areas.
- Setting road access service levels for other freight routes, and include the provision of rest areas and, where appropriate, livestock effluent dumping facilities.
- Specifying roads that are ready for vehicles with higher levels of automation.
- Mandating communication and mobile data access standards.
- Road service standards that restrict the imposition of caps, curfews, and restrictions on identified routes, including in urban areas.

³¹ Infrastructure Australia, [Australian Infrastructure Plan](#), February 2016, 20

³² Ibid, 20.