Transport for NSW

Productivity Commission Consultation on Impacts of Heavy Vehicle Reform

1. Introduction

Transport for NSW (Transport) welcomes the opportunity to provide a submission on the **Productivity Commission consultation on impacts of heavy vehicle reform and** welcomes a future report to support continued National Competition Policy reforms. Transport also welcomes a revitalisation of the National Competition Policy agenda as outlined in the Productivity Commission's Attachment A and supports further conversations with the Commonwealth to continue progression of heavy vehicle productivity reforms.

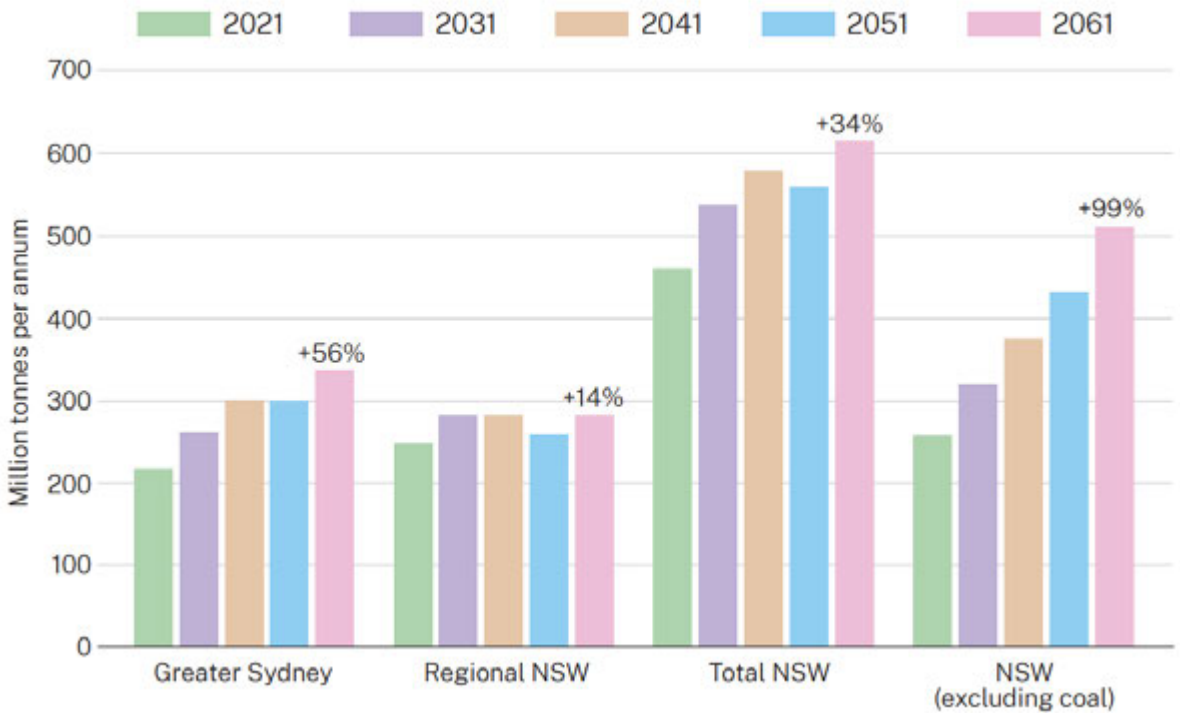
This submission has been prepared by Transport's Freight and Rail Policy team in consultation with areas within the Transport Cluster that structure policy and strategies around heavy vehicles and freight. This submission sets out Transport's position and response to the Productivity Commission's information request questions. In addition, Transport provides additional information for the Productivity Commission's consideration on cross-modal shift implications.

2. NSW Context

Freight is a significant contributor to the NSW economy; it is worth $74.3B (about 10 per cent of Gross State Product) and is projected to increase to $131.5B by 2060-61. Freight employs 330,000 people in NSW and is forecast to increase to 565,000 by 2060-61.

The total freight task in NSW is expected to increase by 34 per cent across NSW, and 56 per cent in Greater Sydney by 2061, as a growing population, higher living standards and online consumerism drives higher volumes of goods and services. Regional NSW economies will continue to play a significant role in this growth.

Figure 1 NSW freight volume forecasts (Source: Transport for NSW 2022, Future Transport Strategy)



NSW has recognised the need to reform the approach to freight in NSW as well as collaborate with the Commonwealth government on national issues requiring standardization and interoperability. Work on the NSW Freight Policy Reform (Reform) has occurred over 12 months from January 2024 to January 2025. The Independent Advisory Panel (Panel) was appointed by the Minister in January 2024 and the final report was released in June 2025.

Some of the key drivers of this need for reform include:

- Population rapid urban expansion, especially in Western Sydney, Central Coast, Hunter, and Illawarra, is driving increased freight demand, as will the drive for housing growth in NSW.
- Decarbonisation and climate change of the freight sector needs to transition to low-emission operations while maintaining reliability. This includes the need to consider how to improve resilience on the NSW network.
- Emerging technologies and innovations in logistics and transport requires updated policy frameworks to support safe and efficient adoption.
- Policy and planning gaps existing transport planning and investment processes do not adequately recognise freight's importance, especially in urban settings.
- Industrial land use - there was a need to better identify and plan for freight-related industrial land to support future growth.

- Fragmented governance of freight policy, operations, and engagement within Transport for NSW lacked the influence and coordination needed to drive reform.

The growing freight task in NSW is diverse, reflecting the many needs of customers in metropolitan and regional cities, towns and centres that use and rely on the freight network. This requires an efficient and effective freight network that is connected to our local communities and commercial hubs across NSW, and integrated with railways, intermodal terminals, ports and airports.

The NSW road network carries approximately 65 per cent of the state's total freight task, underscoring its critical importance in supporting the economy and communities.

A key task for the freight network over the next 40 years is supporting increased demand between ports in the east, particularly Port Botany, freight precincts and strategic economic centres in Western Sydney, and across regional NSW. Road freight will continue to grow along major north-south and east-west corridors across the state providing both interstate and intrastate connectivity over the next decade.

The NSW Heavy Vehicle Access Policy originally released in 2018, and refreshed in September 2024, provides a strategic approach to heavy vehicle access in NSW, enabling safer, more sustainable and productive movement of heavy vehicles on the road network, for the benefit of the people of NSW.

3. Transport for NSW position

Productivity Commission information request 1. Increasing heavy vehicle road access to reduce emissions and increase productivity.

The Heavy Vehicle Fleet

Transport recognises the need and benefits of improving access for higher productivity vehicles including improved productivity, reduced emissions and road damage, improved safety, reduction in workforce pressures and broader benefits to other road users and communities.

Transport released the Towards Net Zero Emissions Freight Policy in October 2023. The policy sets out the strategic direction and actions to support emissions reductions across the road and rail freight transport sector. The transport sector is the second highest emitter of greenhouse gases in the NSW economy, with the bulk of freight emissions from the road freight sector.

The heavy commercial vehicle fleet that is registered in NSW - which includes trucks, prime movers, trailers and plant vehicles- has grown by more than 60 per cent since 2000 and is predicted to continue to grow in response to rising freight volumes. In 2020, articulated trucks, which constituted around 2 per cent of the total freight fleet (light and heavy), performed most of the freight task in NSW (in terms of tonne-kilometres). This was a contribution of 70 per cent of the total tonne kilometres by freight vehicles and 40 per cent of total commodity volume. Articulated trucks, specifically truck-and-trailer combinations, are responsible for the most productive proportion of the freight task.

The number of articulated trucks enrolled in the Performance Based Standards (PBS) Scheme has also grown rapidly since the Scheme was established in 2007. The PBS fleet has doubled between 2019 and 2023. In 2022, PBS vehicles were responsible for about 21 per cent of the road freight task, based on payload and distance travelled. As at January 2024, there were more than 20,000 PBS vehicles in Australia, and under a high growth forecast, PBS vehicles could make up nearly half of the road freight task by 2030.

In 2023, there were around 3,000 PBS vehicles operating in NSW, with truck and dog combinations, A-doubles, B-doubles, and prime movers and semis being the most common types of vehicle combinations. The heavy commercial vehicle fleet in NSW is ageing, with close to 50 per cent of the registered fleet manufactured before 2010 and 8 per cent manufactured before 1990. The continued operation of aged vehicles imposes costs on the community and the environment through higher levels of air pollution, higher crash risks and trauma costs, lower energy productivity, and more wear and tear of the infrastructure.

PBS vehicles are artificially limited in their productivity and ability to deliver safety and sustainability benefits by access policies and infrastructure constraints nationally. NSW implemented the Heavy Vehicle Access Policy that enables access for innovative PBS vehicles that achieve productivity gains of up to 65-100 per cent over existing high productivity vehicles, with the same on road vehicle performance. Given these innovative PBS vehicles have the same vehicle performance with additional length and mass, road network upgrades are typically limited to any sub-optimal rail level crossings, bridges, and rest areas with marked parking bays. An infrastructure investment program to remove these constraints prioritised by corridor would unlock the further safety, sustainability and productivity benefits of these vehicles across the nation, while minimising investment and maintenance cost to industry and government.

Reforming road access

Reforming heavy vehicle road access delivers major economic and environmental benefits. Allowing larger payloads per trip cuts the number of journeys, lowering costs and improving margins. Easing restrictions enables heavier zero-emission vehicles to compete with diesel trucks, accelerating fleet transition and reducing emissions. Strategic increases to axle mass limits and expanded access networks optimise existing infrastructure and drive productivity growth.

Industry gains include investment in high-productivity, zero-emission vehicles, lowering freight costs and improving service efficiency. These savings cascade through supply chains, reducing consumer prices and boosting competitiveness. Targeted upgrades to roads and bridges create construction jobs and future-proof freight corridors, stimulating broader infrastructure investment.

Implementation should be data-driven, using comprehensive road usage and capacity datasets to inform policy. Aligning domestic and international vehicle standards will simplify imports and reduce compliance costs for zero-emission fleets.

However, justification approaches such as economic appraisal have historically been a barrier to evidencing the value of increasing access for restricted access vehicles (RAVs). NSW modelling is also a barrier when it comes to differentiating vehicle types. The modelling approach estimates commodity volumes (tonnage) at the route level and converts them into heavy vehicle trips. Due to limited observed data on heavy vehicle splits, the model relies on assumptions derived from the Survey of Motor Vehicle Usage (SMVU) and a set of high-level observations. In addition, the vehicle split is based on the Austroads

Vehicle Classification, which may result in a loss of granularity compared with Performance Based Standards.

In the interim, Transport has developed economic out of model adjustments such as measuring the potential growth in RAVs (PBS specifically) based on improvements in access on the NSW network and working on tonnage conversion tables to adjust from GML figures to measure the quantum reduction in movements. NSW also has travel time values by commodity type (in final review) that helps to differentiate and prioritise movements on the network. The most recent methods are available publicly in the Freight Benefit Guidelines.

These tools and guides will assist Transport with quantifying and evaluating the productivity contribution derived from the expansion of access for RAVs.

Appropriate reforms to assess under this proposal, e.g. increases in general mass limits under the HVNL

The Productivity Commission's Boosting Australia's Productivity – Practical Reforms to Improve Living Standards report identifies priority actions to lift national productivity, many of which align with heavy vehicle reform opportunities.

Targeted emissions-reduction incentives and clearer carbon pricing signals support the transition to zero-emission freight fleets, while digital reforms such as default digital financial reporting, and an AI regulatory framework enable adoption of autonomous and data-driven technologies.

Workforce initiatives such as streamlined entry pathways, SME-focused training incentives and a national credit transfer system are designed to address driver shortages and improve credential portability.

Energy infrastructure reforms, including faster approvals and a Coordinator-General for priority projects, will accelerate charging and refuelling network development.

Performance Based Standards scheme reform to unlock productivity through design innovation while enhancing safety and sustainability outcomes. The PBS scheme must encourage the use of innovative vehicle designs that have performance that meets existing network capabilities while introducing crash avoidance, harm minimisation, and emissions standards.

Complementary tax and regulatory changes, such as lower company tax rates and simplified compliance, create a more competitive and innovation-friendly environment for transport operators, reinforcing the sector's role in driving national productivity growth.

The implementation of reform measures needs to consider the ultimate outcomes to be sought; and complementary programs to enable these outcomes to be realised by industry and community. In many cases, reforms will resolve existing barriers to entry but enabling access will require both infrastructure and non-infrastructure interventions.

Transport encourages the Productivity Commission to assess the productivity implications of increased mass allowances under the Heavy Vehicle National Law (HVNL) (general mass limits and Euro VI) including both the economic benefits of improved freight efficiency and the associated impacts on infrastructure use. Given the Productivity Commission's role in evaluating reforms that enhance national productivity, this review should also consider how future road-reform, and cost-recovery frameworks can ensure that access to higher-productivity vehicles is

supported in a sustainable, equitable, and transparent manner. A clear assessment of these interactions will help guide policy settings that maximise freight efficiency while maintaining fair and efficient funding of road infrastructure.

Additional cost of road wear and infrastructure maintenance

This process should note that detailed costing implications for maintenance are typically developed on a project-by-project basis, in line with state (and national) approaches to infrastructure investment justification including business cases and supporting evidence.

Typically, there is a net effect on road wear and infrastructure maintenance that with the decrease in total number of vehicles on the network, general wear and tear of the road is reduced. Maintenance comparisons for new infrastructure are also dependent on the standards used, and there should be consideration made for upgrades to adjust the standard to support HPV access and reduce the frequency and cost of both recurrent and capital maintenance.

In addition, as delivery on action 1.4 of the NSW Heavy Vehicle Access Policy, Transport commissioned a report using NSW data on network impact of increased masses. The report found that there are cost implications to allowing heavier zero emission heavy vehicles, but the rate of deterioration is dependent on mass, uptake and pavement design. The findings provide an evidence base to consider and revise, where appropriate, current policy, funding and asset management approaches in NSW, including fit for future pavement standards.

Intersection with other infrastructure barriers necessary to take up reformed regulation

The NSW road network carries approximately 65 per cent of the state's total freight task, underscoring its critical importance in supporting the economy and communities. However, existing structural constraints, such as load limits and narrow lane widths, have limited heavy vehicle access, increasing costs and community impact.

To address these challenges, the NSW Government is proposing a series of strategic infrastructure upgrades. This includes strengthening road and rail bridges, removing mass limits (such as on the Sheahan Bridge on the Hume Highway), and modernising level crossings. These targeted improvements aim to facilitate the increased use of high-productivity vehicles (HPVs) increasing access for Performance Based Standard (PBS) vehicles, which can carry more freight per trip, reducing the overall number of heavy vehicles on the roads.

Looking ahead, Transport is proactively planning for the state's projected population growth and shifting freight patterns. Key priorities include strengthening north-south and east-west freight connectivity, harmonising standards across state borders, and improving end-to-end access for HPVs, along with supporting infrastructure such as improved rest areas and facilities. These efforts align with the National Freight and Supply Chain Strategy, which calls for coordinated action across all freight modes and levels of government.

A review of the National Land Transport Network (NTLN) is also a key focus for NSW, particularly in the context of emerging Renewable Energy Zones. The Commonwealth has committed $37.5m funding in the 2025-26 budget to the Golden Highway to support planning and improve access for oversize and/or overmass (OSOM) movements. The

Commonwealth has already noted that Corridor Packages consist of projects across Australia along land transport corridors and/or projects in close geographical proximity to enable more effective management of a large volume of projects. This funding is primarily aligned with the NTLN but given the importance of the Golden Highway for resilience and reliability, reclassification would enable greater investment in a key freight corridor.

Importantly, these infrastructure initiatives are also closely linked to the state's sustainability goals. The Towards Net Zero Emissions Freight Policy is driving a transition to zero-emission heavy vehicles, supported by a two-year trial that enables broader access to the road network.

Implementation issues, including how governments should apportion any increased road infrastructure costs between levels of government

A barrier in delivery of infrastructure that supports Higher Productivity Vehicles is that there is a lack of understanding and guidance on how to design for these vehicle types. Austroads Guidelines do not adequately cover heavy vehicle requirements (particularly restricted access vehicles (RAVs)), resulting in a lack of adequate design for RAVs access on new road infrastructure, even when supported by government policy. These deficiencies and the lack of technical knowledge of design for heavy vehicles drive lack of scope and scope variations that erode productivity benefits both for the road network and the organisation.

Apportionment of infrastructure funds should consider the utilisation of the network by heavy vehicles (all vehicles – both state and those that transverse the state), the potential economic benefits of the infrastructure investment and strategic alignment to key national and state priorities.

This process should note that costings for upgrades are developed on a project-by-project basis, in line with state (and national) approaches to infrastructure investment justification including business cases and supporting evidence.

Transferring ownership of structures supporting the state road network from local to state government would deliver consistency, safety, and efficiency across critical transport infrastructure. State road authorities are better positioned to manage these assets due to their access to broader funding streams, technical expertise, and ability to apply uniform engineering standards. This approach reduces duplication and ensures that structures integral to freight and mobility priorities are maintained to a consistent level of service.

Local governments would retain an important role through structured feedback channels, enabling them to report community concerns, amenity issues, and early signs of defects. This type of model could preserve community engagement while centralising accountability for high-risk infrastructure.

Implementing this change would require legislative amendments to redefine responsible authorities under road management laws and formal processes for asset transfer, including valuation and liability handover. Transitional arrangements such as joint audits and interim service agreements could smooth the shift, supported by clear communication to stakeholders. Ultimately, this governance reform would enhance safety, resilience, and network performance while maintaining transparency and community input.

How imported vehicles can comply with both international and domestic standards to allow vehicles (including heavy zero emission vehicles) to be imported without being repurposed

The alignment and update of vehicle standards can be a barrier to the import of heavy vehicles and associated emerging technologies, however Australia's vehicle standards ensure that all new and used road vehicles being provided to the Australian market for the first time comply with critical standards for safety, anti-theft and emissions performance. The Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRDCSA) manage the Australian Design Rules, and the National Heavy Vehicle Regulator (NHVR) manages compliance with heavy vehicle standards, including approval of modifications.

However, there are still some challenges faced by certain industries, particularly mobile cranes. These are effectively mobile plant that are primarily manufactured in Europe to a mostly harmonised global standard, however face complexities coming into Australia.

Availability of data on road use, the structure of the road network, and different heavy vehicle users (and user industries)

There is limited availability and detail of data on current road use, specifically in the heavy vehicle space. Transport is implementing initiatives such as machine learning cameras to gain a better insight to road use around NSW. This technology could resolve barriers such as understanding vehicle type, differentiating between general mass limit and higher productivity vehicles, differentiating EVs from traditional diesel and petrol vehicles, and providing a better understanding of dangerous goods movements.

Current event/ incident data does not specify what type of heavy vehicle was involved i.e. data most of the time reflects "truck" or "heavy vehicle" which highlights the lack of understanding between general access vehicles and restricted access vehicles (RAV). Event data specific to RAV classes is important as it will provide evidence-based insights into how assets perform in real-world conditions and help continuous improvement of access assessment processes.

Technology is widely available that is affordable and often integrated into existing systems on modern heavy vehicles to enable the vehicle to be accurately tracked, with the combination and mass of the vehicle identified. Satellite tracking and smart on-board mass systems under the National Telematics Framework, managed by Transport Certification Australia within Austroads, can provide detailed information on the movement and impact of monitored heavy vehicles. NSW has committed to rolling out a staged requirement for enrolment in telematics and mass monitoring for all restricted access vehicles soon. There is a significant opportunity to consider the value of a similar approach, albeit with potential government support, for all general access heavy vehicles as well.

Asset data accuracy and completeness is still a barrier to appropriate forward planning of access targeted projects and will hamper automation of access assessments. The system cannot work on the assumption that current asset data is mature and complete and there is a known risk that in the current environment some assets are not able to be assessed and as a result consent may be issued (a permit) without consideration of the asset. Poor data also results in time inefficiencies and lack of transparency.

PC information request 2. National Automated Access System (NAAS)

The NAAS reform is based on the high-level architecture of Tasmania's Heavy Vehicle Access Management System (HVAMS) platform for nationwide deployment. It requires system architecture design, integration with fleet management software, cloud-based infrastructure, and intuitive mobile/web apps. Geospatial intelligence will maintain real-time road access data.

Expected benefits include a 90 per cent reduction in permit applications, replacing delays with instant automated decisions. Vehicle-specific route optimisation and reusable digital access profiles will improve operational efficiency and supply chain reliability.

Key challenges include cross-jurisdictional integration, clear access criteria, and robust digital infrastructure. Critical data requirements include baseline metrics on permit processes, infrastructure capacity analysis, fleet configuration data, and performance evaluation of HVAMS for scalability.

The Automated Access Assessment Program (AAAP) is a representation of Transport's commitment to the NAAS, driven by the ITMM commitment and seeks to address several issues for NSW. This project is not a discretionary enhancement of permit processing, but a necessary reform of current practices, critical to maintaining economic competitiveness and mitigating costly delays across the state's freight network.

Three problems are identified as driving this initiative. These are:

Problem 1: Inefficient and high cost in processing heavy vehicle permits. Despite significant investment in providing access to RAVs to road networks under notice, consent requests to Transport have continued to, and are projected to continue to increase. The consent request application process, though critical to managing the NSW road network, remains highly inefficient and resource intensive. Without proportionate efforts to address the compounding volume of consent request applications, teams will continue to face increasing operational pressures, failing to process requests within legislative timeframes and limiting the capacity to engage in strategic planning. Increased demand will either result in longer turnaround times or necessitate further growth in workforce, beyond the doubling of Transport's road manager positions proposed in this business case.

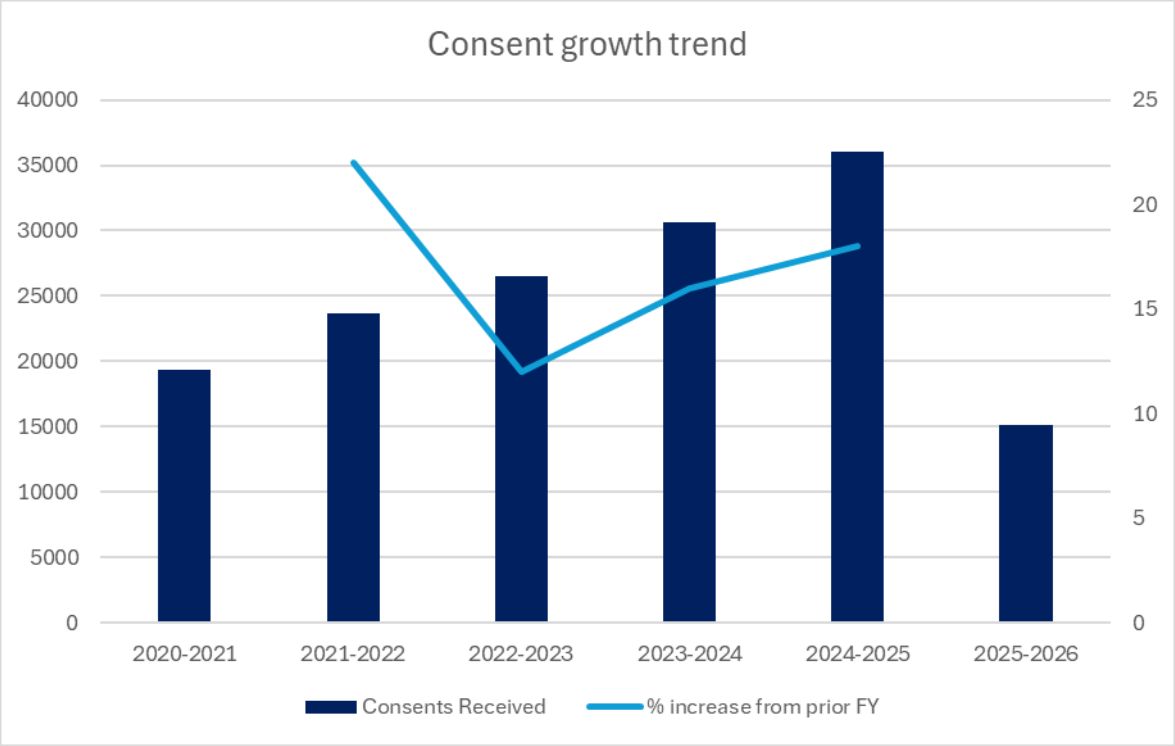
Problem 2: Poor data is leading to inefficient decision making by road managers. Road managers and third-party infrastructure managers, such as Rail Infrastructure Managers, are frequently working with inconsistent data, making it difficult to assess the capability of structures (e.g. bridges and rail crossings) to safely accommodate intended vehicle movements. While Transport's Rapid Bridge Assessment Tool (RBAT) provides foundational assistance, local councils and third-party infrastructure owners do not have access to equivalent tools. Consequently, for State and Local Road managers, the process remains heavily dependent on manual data input and assessment, leading to the reoccurrence of several issues such as the manual errors, and sub-optimal decision making as a result of poor data quality. If data gaps are left unaddressed, this may continue to lead to poor decisions by road managers and pose a reputational risk to both the state and local governments.

Problem 3: The current permitting system is leading to lost productivity for the freight industry and crane operators. The freight network plays an important role in NSW's economy and the broader national freight task. As noted, the volume of permit applications[1] is forecast to grow, particularly for Class 2 vehicles, which include Performance Based Standard (PBS) vehicles. Delays in receiving access approvals discourage freight operators from investing in safer, more productive and sustainable PBS vehicles (which are available). In addition, inefficiencies in the approval of requests will likely continue to dissuade industry efforts to invest in new, more productive vehicles, in the future. Other adverse impacts for freight and non-freight operators include disruptions to the supply chain and, at a more granular level, higher operational costs and lost productivity and revenues. Consent requests for restricted access vehicles has been growing year on year in NSW. From 1 July 2024 to 30 June 2025, Transport received 36,044 consent requests for restricted access vehicles on the State Road network.

Growing rate of access requests

There was a financial year increase of 18 per cent on 2023-24 for total access requests received. Over the last four complete financial years, the year-on-year increase was approximately 17 per cent.

Based on the first quarter of financial year 2026 the trend indicates that Transport will exceed 40,000 requests this financial year.



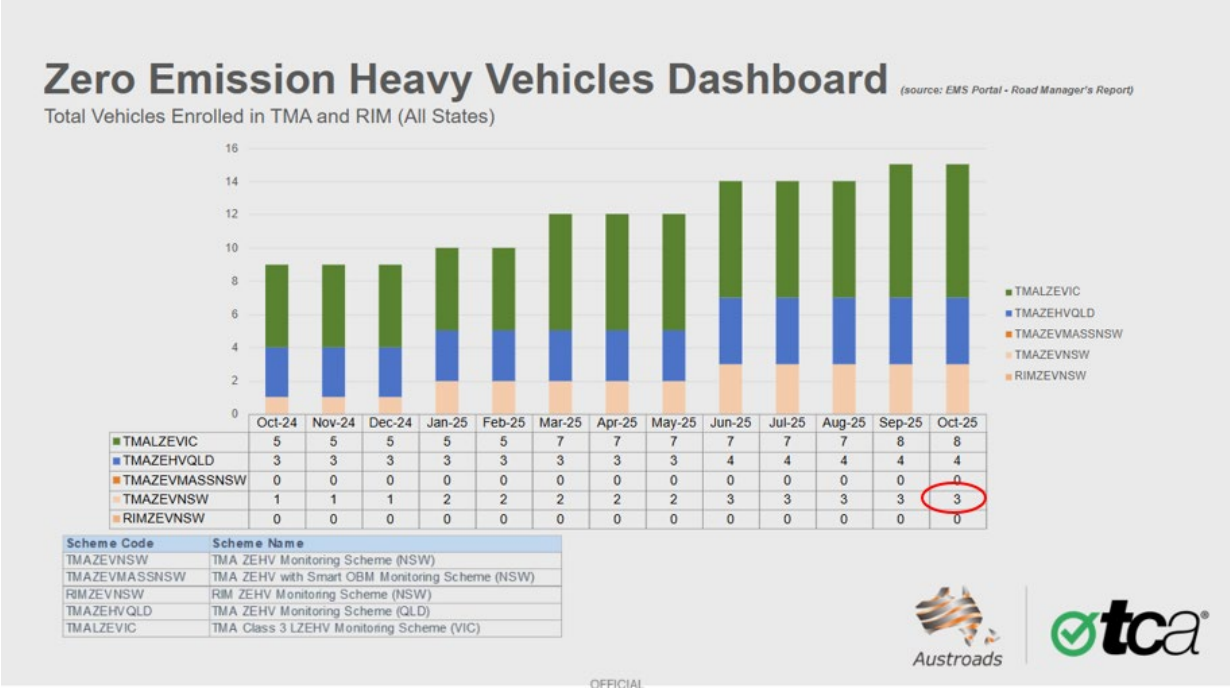
[1] Consent requests received by Transport for NSW

Despite the increases in numbers of consent requests and the broader complexity in resolving issues related to third party assets, resourcing to support manual processing of requests has not changed in the last four years. Due to the technical nature of the roles, these functions are hard to resource when vacancies arise, and training takes an extended period.

The resourcing requirements to support the growth of zero emission heavy vehicles (ZEHV) is unknown. There is a specific ZEHV access Notice, and is required for nearly all movements as evidenced by the ZEHV layers on the National Network Maps.

The demand for contests is minimal at this stage with only 21 consents processed for period 5 September 2024 to 21 November 2025 (this does not include PBS ZEHV as the data does not drill down, we would need to see if NHVR can provide).

October 2025 report from TCA confirms only three ZEHV enrolled (extract below).



	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25
TMALZEVIC	5	5	5	5	5	7	7	7	7	7	7	8	8
TMAZEHVQLD	3	3	3	3	3	3	3	3	4	4	4	4	4
TMAZEVMASSNSW	0	0	0	0	0	0	0	0	0	0	0	0	0
TMAZEVNSW	1	1	1	2	2	2	2	2	3	3	3	3	3
RIMZEVNSW	0	0	0	0	0	0	0	0	0	0	0	0	0

Scheme Code	Scheme Name
TMAZEVNSW	TMA ZEHV Monitoring Scheme (NSW)
TMAZEVMASSNSW	TMA ZEHV with Smart OBM Monitoring Scheme (NSW)
RIMZEVNSW	RIM ZEHV Monitoring Scheme (NSW)
TMAZEHVQLD	TMA ZEHV Monitoring Scheme (QLD)
TMALZEVIC	TMA Class 3 LZEHV Monitoring Scheme (VIC)

Potential resourcing requirements for growth in ZEHV will need to be considered if the market expands into this space more rapidly than the current uptake.

Restricted Access Vehicles and Third-Party Asset Issues - need to risk assess and ensure safety is front of mind

The process for third party consultation (i.e. Rail Infrastructure Managers (RIMs)) under the Heavy Vehicle National Law (HVNL) is poorly defined and has been an issue for over a decade. Transport has been strongly advocating for changes to the law both as part of the National Transport Commission's (NTC) review of the HVNL and the Rail Safety National Law (RSNL). Transport has also raised this issue directly with the Office of the National Rail Safety Regulator (ONRSR) and the NHVR.

Recommend the reform consider referencing the Rail Safety National Law (NSW) No 82a of 2012 - NSW Legislation and increase awareness that there are obligations under this law

for all Road Managers of a public road (state, regional and local) to identify and assess, so far as is reasonably practicable, risks to safety that may arise from the existence or use of any rail or road crossing and determine measures to manage, so far as is reasonably practicable, those risks.

Transport is a Road Manager and has delegations under the HVNL to process heavy vehicle permit requests within 28 days. There are some steps within the process which are reliant on other parties providing consent such as affected third parties (ARTC, UGL Regional Linx, Sydney Trains). To successfully deliver on reform objectives and ensure safety and productive benefits are achieved, improved engagement and coordination with the rail industry (and other third parties such as utility providers) is required to address the known risks.

The current RAV operational practice is not supported by robust processes or training packages, nor does it promote a coordinated and transparent process for Road Managers to consult with third parties (such as RIMs).

Some of the proposed heavy vehicle reform actions may cause a change to a heavy vehicle type and its configuration with the intention to increase network access, reduce emissions and increase productivity. The reform needs to consider this type of change may increase the risk to public safety and ensure that there are mitigations in place. To mitigate the risk and ensure safe outcomes for NSW, third parties such as RIMs and utility providers are to be consulted with and allowed ample time to carry out risk assessments on their assets and be able to provide consent (or not) if it's safe for a specific RAV to traverse.

Due to significant risk being identified, Transport has made it a requirement for operators to provide evidence of consultation for level crossings (from RIMs) before providing consent as the Road Manager. Despite the condition to consult having always been required, RIMs in NSW have experienced a significant increase in requests indicating that operators were not consulting prior to this request for evidence being implemented.

Complaints have been received by Transport including references to poor permit processing times from Transport and third parties. These complaints are also being sent to Ministers, the NHVR and RIMs in NSW. RIMs do not have the resources to process the volume of permits coming through creating significant delays to the processing of permits, as railway operations, rather than permit processes, is their core business.

Enforceability of conditions has been raised with NSW Police and NHVR due to the lack of compliance. Transport is providing information to NHVR and NTC to support long overdue legislative reform.

Councils (local Road Managers) are not as aware or as knowledgeable of issues with third parties as Transport are, there is a need for education, knowledge uplift and support for local councils and should be a consideration as part of reform deliverables.

Asset Management considerations

There should be further focus on asset accountabilities and obligations as they will be slightly different depending on ownership and should clearly delineate between asset owner, asset manager, who inspects/maintains.

Road design requirements need to be reviewed and updated to ensure methodology is fit for purpose for current heavy vehicle configurations and future proofed to support heavy

vehicle innovation into the future. Currently, there is little guidance to address RAV requirements.

Up to date technical standards and risk assessment methodologies also need to be in place to support access decision making for both manual and automated access assessment.

Future coordination and alignment between the states and territories

Future coordination and alignment between the states and territories will be achieved through the NAAS Technical Advisory Group (TAG), the NAAS Steering Committee (SteerCo), the NAAS Statement of Work (SoW) for the commercial project team, and ongoing engagement with third parties. Alignment between jurisdictions is a key requirement for the progression of the NAAS.

How best to determine which roads might be eligible for automatic access, initially and on an ongoing basis

Roads eligible for automatic access can be determined initially and on an ongoing basis by considering road manager feedback and requests, industry feedback and requests, known corridors, consent volumes, and incident history. Initially, to support automated access within NSW, the AAAP will be targeting the whole State Road network for inclusion, and local council's B-double network only. This network represents the significant freight corridors around NSW and will achieve a good geographic coverage across all local councils to facilitate automated access in NSW. This network can be expanded as local councils upload their own asset data to meet their needs and requirements post this initial network coverage.

The technical and administrative practicalities of scaling up Tasmania's model to the whole of Australia

Scaling Tasmania's heavy vehicle access and permitting model to the whole of Australia requires careful attention to numerous technical, safety and administrative adjustments. On the technical side, cross-jurisdiction road alignment is essential. Tasmania's relatively contained road network makes it easier to classify and manage access conditions, but at a national level this means harmonising road hierarchies, bridge load ratings, and route approvals across vastly different terrains and climates. Mapping and access condition alignment must also be standardised or aligned, ensuring that operators can rely on consistent conditions when crossing state borders. This requires integrating datasets from state road authorities, local councils, and private operators into a unified national mapping framework, or ensuring different basemap sources are interoperable.

Asset data requirements present another challenge. Tasmania's asset registers are manageable in scale, but a national rollout demands consistent metadata formats for bridges, pavements, and culverts, level crossings, etc, along with real-time updates through GIS platforms and asset libraries. Assessment module development is equally critical and drives the ultimate data requirements for automated access. Tasmania's modules are tailored to local conditions but scaling them nationally means creating interoperable tools capable of handling significantly larger numbers of structural assessments, more varied vehicles, dynamic routing based on weather and traffic, and automated compliance checks against NHVR standards.

Additionally, interoperability between the NAAS and Heavy Vehicle Structural Assessment Permit System (HVSAPS) is a priority. Shared APIs, common data dictionaries, and standardised workflows would allow permits lodged in one system to be recognised nationally without duplication. Involving third parties early is crucial to prevent major safety risks, such as those at level crossings and railway structures. While Tasmania can consult its smaller stakeholder base more directly, national scaling requires proactive involvement of local councils, private asset owners, and industry groups, facilitated by State governments, to ensure smoother adoption and fewer disputes.

Finally, seamless NHVR integration is the linchpin of national scaling. Tasmania's systems should integrate directly into the NHVR's, with unified application portals, real-time data exchange, and consistent enforcement protocols across jurisdictions. This approach reduces duplication, improves asset investment decisions, and creates an easy-to-understand environment for continued industry use.

The costs and benefits of the current access permit system borne by heavy vehicle operators

Heavy vehicle operators bear the cost of $91 per permit, while benefiting from a familiar process that is well understood by both Industry and Road Managers.

The AAAP aims to provide the following economic benefits for industry and road managers in NSW, which are outlined below.

Freight Productivity Benefits

Faster permit approvals significantly reduce delays for freight operators, who face an average 14-day turnaround under the manual system. These delays cause inefficiencies such as idle vehicles, missed delivery windows, and reduced fleet utilisation. With the proposed direction for the AAAP development, 70 per cent of decisions can be automated within half a day and the rest within five days, cutting the average processing time to just over two days. This improvement allows operators to mobilise vehicles earlier, schedule trips more efficiently, and minimise costly downtime, resulting in substantial productivity gains across the supply chain.

Cranes and Special Purpose Vehicles (SPVs)

Non-freight users such as cranes, elevated work platforms, and other large machinery also benefit from faster approvals. These vehicles are critical for construction, utilities, and emergency response, where delays can lead to lost productivity, higher hire costs, and disruptions to essential infrastructure projects. By streamlining permit processing, the system reduces operational bottlenecks and ensures that SPVs can be deployed promptly, supporting smoother project delivery and more reliable service in time-sensitive industries.

Transport Cost Reduction

Improved permit processing also drives reductions in vehicle kilometres travelled (VKT) per tonne of freight. Faster and more predictable approvals encourage greater use of high-productivity vehicles, which carry more freight per trip and reduce the total number of journeys required. Additionally, broader network coverage and quicker turnaround times enable operators to select more direct routes rather than circuitous or overly cautious paths. Together, these behavioural shifts lower transport costs, enhance efficiency, and

deliver measurable economic value through reduced fuel use, emissions, and overall distance travelled.

Availability of data on road use, the structure of the road network, and different heavy vehicle users (and user industries)

There is limited availability and detail of data on current road use, specifically in the heavy vehicle space. Transport is implementing initiatives such as machine learning cameras to gain a better insight to road use around NSW. This technology could resolve barriers such as understanding vehicle type, differentiating between general mass limit and higher productivity vehicles, differentiating EVs from traditional diesel and petrol vehicles, and providing a better understanding of dangerous goods movements.

Current event/ incident data does not specify what type of heavy vehicle was involved i.e. data most of the time reflects “truck” or “heavy vehicle” which highlights the lack of understanding between general access vehicles and restricted access vehicles (RAVs). Event data specific to RAVs is important as it will provide evidence-based insights into how assets perform in real-world conditions and help continuous improvement of access assessment processes.

Asset data accuracy and completeness is an important consideration for the NAAS and all related processes. The system can’t work on the assumption that asset data is mature and complete, and there is a known risk that in the current environment some assets are not able to be assessed and as a result consent may be issued (a permit) without consideration of the asset. Poor data also results in time inefficiencies and lack of transparency.

Any changes to network configuration must be updated in the National Network Map which is managed and administered by the National Heavy Vehicle Regulator (NHVR). Today there are several assets where ownership and maintenance responsibilities remain in dispute and unclear which means regulatory maps may be inaccurate, may contribute to incidents occurring and generally causes confusion for customers and stakeholders as they do not know who is accountable for which assets access decision making.

Future development supporting the NAAS will likely include the integration of intelligence from advanced analytics platforms and telematics systems, which enable real time monitoring of freight movements, permit activity, and asset performance. These systems are outside the scope of this option and would need to be considered as separately. These tools provide road managers and policy makers with a much richer dataset to support investment decisions and risk management strategies.

By gaining visibility into how and where freight vehicles are using the network, agencies can make more targeted and cost-effective decisions about infrastructure upgrades, maintenance scheduling, and future policy interventions. For example, understanding load distribution across bridge structures can help prioritise structural assessments or pre-empt deterioration in high-risk corridors. Similarly, usage data can be used to validate network planning assumptions, detect compliance issues early, and identify underutilised routes or assets.

From a compliance perspective, access to high-quality real-time data reduces reliance on manual reporting and improves the ability of agencies to detect unauthorised movements or repeat infringements. This can lead to a reduction in compliance-related workload and associated enforcement costs.

Limitations in capability and capacity to fulfil the requirements of the heavy vehicle reform program in NSW

The program requires a level of technical and operational competence that exceeds organisational capability and capacity. Without additional specialist resources or training, there is a risk that delivery obligations will not be met to the required standard.

The program's success relies heavily on specialised RAV operational knowledge, which is presently held by only two experienced employees. Although technical teams e.g. engineering, possess competency and qualifications in their specialised field, often this is at best for general mass limit vehicles. They do not possess satisfactory knowledge of RAVs, permit processing, Notices, Operator Guides, access Schemes, the National Network Maps and current access.

The dependency on minimal staff that have specialised RAV operational knowledge presents a critical risk to program delivery and organisational resilience.

To reduce this dependency and ensure continuity of program delivery, additional capability development which will require specialised training packages to be built and resourcing (both technical – engineer and non-technical) are required.

This limitation in resources has also generated an administrative burden. Some opportunities to alleviate this issue (in addition to acceleration of the NAAS) includes:

- Identify both infrastructure and non-infrastructure barriers to increasing heavy vehicle access including structure constraints and complexity of the road and third-party access eco-system (including resolution of low hanging fruit)
- Strengthen the governance and records management around access decision making
- Streamline decision making (structural and level crossings assessments, workings out captured in a system modules).

PC information request 3. National Heavy Vehicle Driver Competency Framework

The National Heavy Vehicle Driver Competency Framework (NHVDCF) was developed by Australian governments to set minimum competency and assessment standards for heavy vehicle drivers.

Austroads has been leading a review of the NHVDCF, to address inconsistencies in heavy vehicle driver licensing, enhance training quality nationally, and ultimately lead to improved safety for heavy vehicles. Transport Ministers approved a Decision RIS in late 2023.

The project seeks to align and uplift heavy vehicle (HV) licensing and training throughout Australia. It will also offer an experience pathway for HV licence upgrades as an alternative to the tenure requirements for heavy vehicle licence upgrades

Austroads is developing the training and assessment material that is required for the roll out of the revised NHVDCF.

Austroads advise that jurisdictions can incorporate the training and assessment material from July 2026 with a two-year window for implementation.

NSW has conducted an initial impact assessment on the NHVDCF reforms. Implementing the reforms will require changes to at least: legislation, IT and other systems, scheme governance and communications. Many of these changes will be complex and time consuming.

What are the largest hurdles for timely or accelerated implementation of these reforms

Legacy IT systems mean that NSW is expected to need the full two years following completion of the training and assessment materials to implement the changes. Achieving this two-year time frame will only be possible if sufficient resources for the roll out can be identified.

What federal, state & territory or private bodies are expected to handle the various stages and aspects of implementation. What timeframes are sensible for accelerated implementation of the reforms

Austroads is responsible for the development of the training material and systems such as the online learning management system (LMS). Transport leads the legislation, IT and other systems, scheme governance and communications changes for NSW. Registered Training Organisations (RTOs) accredited by Transport under the Heavy Vehicle Competency Based Assessment (HVCBA) scheme will need to upgrade the training and assessment they carry out in line with the revised NHVDCF.

Data relevant to quantitative estimates of productivity impacts of the reforms. How best to quantify the impact of the reforms

The benefits of the changes are difficult to quantify, especially in the short term. It may be possible to identify the number of drivers who take advantage of the experienced pathway and any impact on the driver shortage. Similarly, data on crash rates amongst heavy vehicle drivers in the years following gaining of their heavy vehicle licence may be able to show whether there is any improvement in crash rates with the updated training and testing regime.

PC information request 4. Barriers to EV Truck Charging Infrastructure

Range anxiety and lack of charging facilities is a key barrier to electric heavy vehicle uptake. Investment programs targeting either public, private, or mixed charging networks can help support and scale early adoption in the urban delivery and short haul freight segments. The most effective short-term investment is the battery electric urban short haul segment, as technology is more mature, and heavy vehicles are more widely available for purchase. Urban freight also suits electrification due to shorter distances travelled.

Expanding the charging network is critical for electric heavy vehicle adoption. This includes fast-charging stations along freight corridors and high-power technology to minimise downtime. Priority sites include truck stops, distribution centres, and ports. Transmission

and distribution infrastructure improvements are essential, supported by depot and private charging solutions. Alternative models like battery swapping can further reduce delays.

Regulatory reform is key: streamlined approvals, simplified licensing, and nationally consistent standards will accelerate rollout. Zoning and planning changes should secure land at optimal sites, while faster grid connections and uniform safety standards ensure reliable access.

Transport's Towards Net Zero Emissions Freight Policy acknowledges industry feedback about the challenging commercial and regulatory environment, uncertainties regarding future technologies and market development and the concerted effort required to transition to net zero. As an emerging technology there are numerous parallel investigations and research, Transport encourages the Productivity Commission to undertake analysis of system-wide productivity impacts of the transition to electric heavy vehicles to reduce duplication and improve certainty to transition.

Regulatory barriers to the roll out of charging infrastructure for battery heavy powered EV trucks. Policy issues affecting the long-term implementation of an effective network of publicly accessible EV truck charging infrastructure. Other practical barriers that may be limiting installation and operation of charging infrastructure

Transport has undertaken a considerable policy program of work in relation to infrastructure for recharging and refueling heavy vehicles, in line with the Towards Net Zero Emissions Freight Policy, Heavy Vehicle Access Policy and in the development of the Freight Policy Reform Program.

Transport has been working closely with the Department of Climate Change, Energy the Environment, and Water on the EV Strategy Refresh, which aims to expand the current strategy and funding to heavy vehicles and their charging needs in NSW.

Transport is a participant in the iMove funded project, a joint collaboration between the Australian Government Department of Infrastructure, Transport, Regional Development, Communication and the Arts, Transport for NSW, Queensland's Department of Transport and Main Roads, and Victoria's Department of Transport and Planning, with the research component led by Swinburne University of Technology.[2] The project is in its final stages and aims to:

- Develop a detailed analysis of the total cost of ownership (TCO) for low and zero-emission heavy vehicles to allow Australian businesses to make an informed decision regarding their future fleet management
- Undertake a geospatial roadmap analysis for refueller and electric vehicle chargers; and

[2] Zero emissions heavy vehicles: Analysis, planning and policy

- Based on the outcomes of (1) and (2), to develop recommendations and policy directions for the transition towards low carbon freight transport.

The Australian Renewable Energy Agency (ARENA) commissioned report by AECOM proposes the action for a National Freight Electrification Strategy, noting a focus on ensuring transmission and distribution networks as energy generation is not likely to be the key determining factor in road freight electrification.[3]

The Australian Government's 2025 Transport and Infrastructure Net Zero Roadmap and Action Plan commit to investment in charging infrastructure. Its focus on kerbside charging will primarily benefit light vehicles rather than heavy vehicles. Further, although there is support for innovation and future-focused heavy vehicle technologies through the Driving the Nation Fund, the Roadmap does not clearly outline immediate incentives to achieve cost parity or accelerate near-term uptake of heavy EVs, an area industry has identified as critical to decarbonising the heavy vehicle sector.

PC information request 5. Curfews and Operational Flexibility for EV Trucks

Allowing 24/7 operations for electric trucks delivers major efficiency gains. Off-peak movements reduce congestion, speed deliveries, and improve labour utilisation through night shifts. These changes support just-in-time logistics and enhance supply chain flexibility.

This is also supported by The Australian Logistics Council who noted that 24-hour operations can support economic growth and competition; enhance resilience in supply chains; support job flexibility and job creation; and encourage technical innovation and sustainability.

Regulatory conditions from planning authorities at all levels of government impact all parts of that logistics chain and these can determine when certain parts of the chain can operate. A wide range of uncoordinated law and regulations by federal, state and local governments influence the hours when freight moves. These controls apply to all activities along the freight chain and any one constraint, apparently unrelated to vehicle movements, can in fact dictate when a delivery or pick up is able to be made. The laws and regulation relate mainly to four matters:

- noise
- zoning requirements
- specific road and rail law and policies
- workforce issues.

[3] AECOM – Electrifying Road Freight Report - Australian Renewable Energy Agency (ARENA)

NSW has identified the need to coordinate across state agencies and local government to resolve these barriers. The uplift in use of EVs will be critical in enabling last mile movements where noise curfews may apply.

EV operators gain advantages via permissive routing, curfew exemptions, and EV-specific access maps. Early adopters benefit from operational flexibility and service differentiation, improving asset utilisation and productivity. Broader benefits include reduced daytime congestion, safer conditions, and less disruption to business districts.

Comparative noise levels of electric heavy vehicles and internal combustion engine heavy vehicles. How significantly any noise reduction ameliorates the negative impacts of night-time travel. Implementation considerations, given different levels of government have responsibility for the implementation of curfews, particularly local governments in residential areas

Coordination of implementation across various state agencies and local councils is critical to enabling flexibility in use of EVs outside of curfew restrictions.

In NSW, regulations are generally made by the state and various local governments – and apply to vehicles, places and times of operation.

- NSW Road Noise Policy sets acceptable noise levels for different road types and land uses at different times of day and night. For residential areas near major roads, the acceptable noise level is typically 55-60 dB(A) during the day and 50-55 dB(A) at night.

- State Environmental Planning Policies (SEPPs) can include specific provisions for transport corridors and freight facilities. For example, SEPP (Infrastructure) 2007 includes considerations for development near busy roads and freight handling facilities.

- At the local government level Local Environmental Plans (LEPs) typically include buffer zones between industrial/commercial areas and residential zones, and specific operating hour restrictions in sensitive areas.

In addition, there are planning restrictions on noise in NSW that apply to various developments involving heavy vehicle operations. These restrictions are designed to balance operational needs with community amenity. The key planning controls related to noise are zoning regulations, development approval conditions, specific noise controls, operational restrictions and heavy vehicle access curfews.

- With zoning regulation different noise limits apply based on land use zones (residential, commercial, industrial), with stricter limits in residential areas.

- The development approval process typically requires noise impact assessments if any significant noise is expected. Acoustic reports may be mandatory for heavy vehicle depots, logistics centres, and distribution facilities. Councils assess the potential impact of noise on nearby sensitive receivers (homes, schools, hospitals).

- Specific noise controls set maximum permissible noise levels measured in decibels (dB). There are stricter limits during evening hours(6pm-10pm) and night hours (10pm-7am). Pre-existing background noise levels plus 5dB is often the standard benchmark for acceptable noise.

- Operational restrictions also apply involving time-of-day limitations for loading/unloading activities; heavy vehicle movement paths are designated away from residential areas; requirements are set for acoustic barriers or building treatments; and the number of vehicle movement caps during sensitive hours are limited.

- Heavy vehicle curfews apply in certain local areas. These are not statewide but vary by location.

Finally, noise abatement notices can be issued for consistently noisy vehicles though exemptions exist for emergency vehicles, essential services, garbage collection, some food delivery vehicles and road maintenance vehicles.

Heavy vehicles are also covered by various curfew arrangements that are not related to the noise regulations discussed above. Legally the main heavy vehicle curfew arrangements in NSW are applied through the *Road Transport Act 2013* (NSW). There are also powers under the *Local Government Act 1993* (NSW) that allows councils to make local traffic orders on local roads.

National Heavy Vehicle Regulations also cover curfews and restrictions on specific areas. These cover the Sydney Metropolitan area, some local government areas, particular routes, and the port of Sydney.

In the Sydney Metropolitan Area some arterial roads in residential areas have night curfews (typically 8pm-7am) for trucks over certain weight limits. Examples include parts of King Georges Road, Beecroft Road, and sections of the Pacific Highway through residential areas. Many councils have implemented specific curfew zones in residential streets. An example is restrictions in Leichhardt, and Marrickville covered by the Inner West Council.

There are also area specific restrictions. For example, some access routes to Port Botany have time of day restrictions for heavy vehicles as does the M2 and the Eastern Distributor restricts vehicles over 12.5 metres after certain hours. These curfews are typically signed on affected roads and enforced through penalties under road transport legislation. There are exemptions that include local deliveries or specific vehicle types.

In residential areas restrictions apply between 8:00pm and 7:00am on weekdays and weekends and public holidays. They typically restrict heavy vehicles over 4.5 tonnes and commercial delivery trucks; and also apply on certain freight corridors through urban areas.

Adding to the complexity local councils may have specific bylaws with stricter time restrictions and some areas have designated truck routes that must be always used.

In NSW, the aim would be to provide greater certainty to industry about their required operating environment by setting standards and acceptable noise limits for operations at different times of day. This approach applies a common noise standard in ‘quiet zones’ defined by time (say a standard of 72dBA for a truck and 60dBA for all other equipment) in the period 10pm to 6am and a normal operating zone where a more permissible standard

would apply. The state government would define the standard and the application against the standard sitting with local councils. Additional considerations could be made for electric vehicles, if other noise considerations (such as reverse warnings) could be mitigated at certain times of the day.

How the effects of any reform could be quantified, including any data and modelling requirements.

An understanding of the potential redistribution of demand with the easing of restrictions would be the basis for quantification of any reforms with the key benefits sought; improved road network reliability, improvements in travel time, associated improvements in vehicle operating costs, safety and emissions, amenity improvements and broader economic productivity benefits, assuming that land use considerations are included to enable more efficient last mile movements.

However, there are barriers to quantification now; specifically observations of detailed heavy vehicle movements on the network. There is limited availability and detail of data on current road use, specifically in the heavy vehicle space. Transport is implementing initiatives such as machine learning cameras to gain a better insight to road use around NSW. This technology could resolve barriers such as understanding vehicle type, differentiating between general mass limit and higher productivity vehicles, differentiating EVs from traditional diesel and petrol vehicles, and providing a better understanding of dangerous goods movements.

Current event/ incident data does not specify what type of heavy vehicle was involved i.e. data most of the time reflects “truck” or “heavy vehicle” which highlights the lack of understanding between general access vehicles and restricted access vehicles (RAV). Event data specific to RAVs is important as it will provide evidence-based insights into how assets perform in real-world conditions and help continuous improvement of access assessment processes.

However, justification approaches such as economic appraisal have historically been a barrier to evidencing the value of increasing access for RAVs. NSW modelling is also a barrier when it comes to differentiating vehicle types. The modelling approach estimates commodity volumes (tonnage) at the route level and converts them into heavy vehicle trips. Due to limited observed data on heavy vehicle splits, the model relies on assumptions derived from the Survey of Motor Vehicle Usage (SMVU) and a set of high-level observations. In addition, the vehicle split is based on the Austroads Vehicle Classification, which may result in a loss of granularity compared with Performance Based Standards.

In the interim, Transport has developed economic out of model adjustments such as measuring the potential growth in RAVs (PBS specifically) based on improvements in access on the NSW network and working on tonnage conversion tables to adjust from GML figures to measure the quantum reduction in movements. NSW also has travel time values by commodity type in final review that helps to differentiate and prioritise movements on the network. The most recent methods are available publicly in the Freight Benefit Guidelines.

These tools and guides will assist Transport with quantifying and evaluating the productivity contribution derived from the expansion of access and changes in time distribution with the introduction of EVs.

Transport for NSW advice to submission on Cross-Modal Shift Implications

Intermodal Competition and Complementarity

A notable absence in the Productivity Commission's Call for Submissions paper is consideration of the substitutability of road with other transport modes in key contestable markets – especially in markets where governments are seeking mode shift to secure public policy benefits. Where markets are contestable, rail is most commonly the substitutable mode and is the focus of comments in this submission. It is noted that, however, these considerations may also apply to shipping for some tasks.

While contestability and modal substitutability have typically not been considered in detail in recent heavy vehicle access reforms, they have at times been noted. A 2016 Austroads Report, *Improving High Productivity Vehicle Access through Potential Charging Regimes*, looked at a case study of increased access on the Bruce Highway in Queensland, and indicated that "A-double access has potential to significantly reduce parallel rail freight competitiveness". While further consideration of this issue was outside the scope of that research, the Report included the observation that "it is considered important that jurisdictions consider the impacts of continuing innovations in freight efficient HPVs on their freight rail policy settings." (p.108).

There has been research on the impact of heavy access reform on mode share in contestable markets in other jurisdictions. This is particularly the case in Europe, where there were heightened concerns about potential loss of rail mode share from the introduction of larger, more efficient heavy vehicles on the road network. More recent studies have sought to assess the impact of these decisions against initial forecasts of mode share loss for rail. These have generally found that, while typically less pronounced than anticipated, a measurable loss in rail mode share is often associated with increased heavy vehicle access decisions. Similarly, research in a European context has also pointed to the benefits of HPVs being overstated once mode shift is considered, albeit the experience to date has generally been that benefits still outweigh the costs. A common theme, however, was the need both to consider the ongoing risk of mode shift to overall economic outcomes, and to tailor future heavy vehicle access decisions in contestable markets to mitigate the risk of ongoing loss of rail volumes.

The European experience also provides some direction on alternative public policy frameworks that can be employed which focus on modal complementary, rather than a more binary road versus rail approach. The Combined Transport Directive has been in place in the European Union (EU) since 1992, with the objective of promoting intermodal freight transport – or Combined Transport – as a more environmentally friendly, energy-efficient alternative to direct-road haulage, reducing road congestion, pollution, crashes, and other negative externalities.

Combined Transport is defined as when goods are transported between EU Member States using road for the initial and/or final legs (i.e. pick-up or delivery), and rail, inland waterways or maritime transport for the main leg. Under current settings, the non-road (rail/water/sea) leg must exceed 100km. The road "feeder" leg (initial/final) must link the loading/unloading point to the nearest suitable rail/water terminal or port. For inland waterway or sea legs, the road leg must lie within a certain radius (in practice, up to 150km) from the relevant port.

To encourage the use of Combined Transport, various exemptions and incentives are in place including:

- Removing authorisation procedures and quantitative restrictions (quotas) that Member States might otherwise impose on Combined Transport operations.

- Clarifying that road-cabotage restrictions do not apply to the road legs of combined transport — i.e. trucks performing a road segment in combined transport are exempt from certain cabotage limits that apply to direct road movements.

- Permitting heavier/larger loads for vehicles used on the short road legs of combined transport for example via related rules under the broader Weights and Dimensions (Directive (EU) 2015/719 amending Council Directive 96/53/EC) legal regime.

- Enabling Member States (and the EU) to offer financial or fiscal support (incentives) for combined transport operations to make combined transport more competitive vs road-only.

The EU experience demonstrates an alternative and constructive policy lens for government when considering heavy vehicle access and how to secure public policy benefits, including economic productivity benefits, from the transport sector.