Submission: Impacts of Heavy Vehicle Reform - Interim Report
5th May 2026

This submission is made in response to the Productivity Commission's Request for additional comment following the release of the interim report: Impacts of Heavy Vehicle Reform. The submission focuses primarily on providing current evidence on issues related to the acceleration of the National Heavy Vehicle Driver Competency Framework (NHVDCF).

About our Research

We are a team of researchers from the University of New South Wales (Canberra) School of Business, currently engaged in a national research project examining gender, safety, training and workforce participation in Australia's road transport industry. The study, entitled "Women in Transport: Examining Career Experiences and Contributions of Female Drivers in the Australian Trucking Industry", is a UNSW Canberra project, partially sponsored by the Transport Education Audit Compliance Health Organisation (TEACHO Ltd.). The study builds on a study of safety and regulation in heavy vehicle transport undertaken for TEACHO Ltd. over a decade ago[i], and reference is also made to a recent study of safety in the retail sector, specifically relating to the interface of workers and road transport delivery vehicles and access to loading docks[ii].

Our current research examines the structural and cultural conditions shaping recruitment, training, retention and working conditions in heavy vehicle road freight across diverse organisational and industry contexts, with a focus on perceptions of the experiences and possibilities for female drivers. Consistent with the current composition of the heavy vehicle transport sector, most survey respondents were male.

Our mixed-method approach has yielded a rich dataset including:

1. national survey (n=495 truck drivers, 95% male).
2. 30+ hours of interview data with key informants (including trainers and assessors, transport company managers, industry leaders and truck drivers) and
3. field observations.

We include in this submission some early findings that may be helpful in your next steps. These relate primarily to findings on issues driver shortages and relate to your information requests as follows:

- **training and competency** (6.1: costs and benefits and their distribution across the workforce, 6.2: safety implications, overseas licence conversions)

- **costs and benefits** (2.1, 2.3, 3.1, and 5.1: unintended consequences of vehicle design and road access changes; and 4.2: rest areas and charging infrastructure).
- **structural barriers** (1.1: age, gender, education, demographics).

We would be happy to provide more detail on the research findings if required.

Background

The Productivity Commission's interim report addresses a number of issues that intersect to impact issues of productivity, safety, recruitment and retention in the heavy vehicle transport sector.

An aging workforce and significant driver shortage place important constraints on the sector. Yet, while BITRE's 2025 Road Vehicles Australia report[iii] identifies some 667,200 registered heavy rigid vehicles and 128,400 articulated vehicles as at 2025, Australian Bureau of Statistics (ABS) data reveals more than 1,024,375 drivers held full heavy rigid driver's licences and 602,008 drivers held full heavy or multi-combination licences. This equates to 1.53 drivers for each heavy rigid vehicle and 4.69 licenced drivers for every registered articulated truck. Furthermore, the ABS data reveals only 195,800 individuals under the occupational category of Truck Drivers (ANZSCO 7331). This number broadly confirms the approximate 200,000 road freight transport workforce reported by the NHVR[iv] and suggests only 12% of licenced drivers are employed in these roles. In brief, there appears to be sufficient licenced drivers although most are no longer employed in the industry.

Together, this appears to suggest that driver retention in the sector is a significant yet underexamined contribution to the current driver shortage. Aged retirement aside, unless factors that motivate drivers to abandon truck driving roles in favour of alternate employment are adequately addressed, any changes to enable faster progression through licencing classes and increased conversion of overseas credentials will be largely ineffective in bringing about the sustainable workforce needed. Furthermore, if the proposed changes (e.g. to licencing, vehicle mass, dimension or access) serve to exacerbate existing concerns about driver safety, licencing and working conditions, then the implementation of reforms risk being counterproductive as they may push more drivers to leave the industry.

This submission therefore seeks to assist the Commission by highlighting recent driver concerns raised in our research and drawing attention to their relationship to the proposed changes. The concerns can be explicitly considered by the Commission in their analysis of the design and implementation of the reforms.

Response to information request

1. Training and competency (information request 6.1 and 6.2)

Our preliminary analysis of heavy vehicle transport workforce data regarding the training landscape identifies several critical structural concerns regarding the current "throughput"

approach to training and licensing. Major concerns centre around driver competency and capability, the availability and quality of training, and approaches to assessment and licencing.

1.1 Training quality and throughput pressures undermine the framework's safety and competency objectives

Our research strongly supports the NHVDCF's aim to shift heavy vehicle licensing toward genuine competency, but finds that this goal will be very difficult to achieve under current training conditions, and that accelerated implementation without addressing those conditions risks entrenching the very problems the framework is designed to fix. Across our interviews, a consistent finding emerged: given stark labour shortages, existing training practices prioritise what respondents described as getting "bums on seats" and rapid throughput over genuine competency development. Critically, these structural pressures reflect the commercial incentives of the training market and the workforce needs of operators, not simply individual trainer conduct. An accelerated NHVDCF rollout that does not address these underlying incentives risks reproducing the throughput model under a new regulatory name.

Several specific concerns compound this risk. Most commonly cited was a need for more training; particularly more "in truck" training that better targeted those practical skills drivers need on the road. Most frequently mentioned were loading and unloading safely, using and checking load restraints, reversing trailers, rules around log books and rest breaks, training on the specific vehicle types the person would then be authorised to drive, and driving in poor conditions. Drivers also called for greater minimum hours supervised on road training before obtaining a full licence and greater opportunities for meaningful mentoring and skills development.

Our data suggests some ad-hoc, on-the-job training occurs in the field. While this provides an important contribution to driver training, it occurs outside formal structures which makes providing consistency and oversight of training quality difficult to capture within a competency assessment regime. Our research also identified significant variation in training quality across the industry, with key informants questioning whether current oversight arrangements are adequate to enforce meaningful standards. Operators with tight margins have little financial incentive to invest beyond minimum compliance requirements, and no current mechanism encourages them to do so.

Our interviewees also identified a conceptual gap in how training is currently framed. Approaches that facilitate appropriate scaffolding and mentoring, such as internship-style progression, and micro-credentials were advocated, yet are not well captured in the existing framework. Given that driving is a degradable skill and vehicle technologies are changing rapidly, a strong case was also made for the NHVDCF to move toward a lifelong competency model with periodic refresher and assessment requirements, rather than treating licensing as a one-time 'get and forget' threshold event.

Finally, respondents also raised concerns regarding current processes for conversion of overseas licences; where assurance of learning and competency is not assessed using the same approach as for local drivers. The cancellation in New Zealand last November of heavy vehicle driver licences[v] fraudulently gained by 459 Indian-born drivers (18 of which held licences converted here in Australia) illustrates this concern and supports calls for practical, as well as theoretical competency assessment prior to converting overseas truck licences.

We recommend the Commission consider whether the implementation package includes sufficient mechanisms to:

- Address throughput incentives in the training market model to balance efficiency and effectiveness through enhanced compliance oversight of organisations delivering heavy vehicle training
- Provide financial support or incentives for small and medium sized operators to invest in targeted, quality training, with clear guidelines, above minimum compliance requirements
- Incorporate pre-post assessment, learner-centred strategies (e.g., value of prior experience, self-directed learning, experiential learning) and a lifelong competency development model into the framework's design from the outset to ensure training provides an appropriate foundation and continues to address skills and competency gaps

1.2 Trainer and assessor capacity is a limiting factor (i.e. shortage of quality trainers)

No competency framework can outperform the workforce delivering it. Both survey participants and key informants repeatedly identified a significant shortage of appropriately qualified trainers and assessors as a binding constraint on the quality and reach of heavy vehicle driver training, and by extension, on the feasibility of any accelerated implementation timeline. Accelerating the NHVDCF timeline without a corresponding strategy to build and equip the trainer workforce risks increasing demands on a supply that is already insufficient.

In particular, our data revealed significant concerns on assessment integrity: some respondents called for formal auditing of trainers and assessors, while many expressed strongly the view that training and formal competency assessment should be functionally separated; that is, the person who trains a driver should not be the same person who assesses the driver's competency for licensing purposes. This separation would strengthen the credibility of framework outcomes but requires a larger and more differentiated assessor workforce than currently exists.

Beyond the number of trainers and assessors, there is also a quality and support dimension. A number of survey respondents were concerned some trainers lack practical truck driving experience. Key informants identified a need for better professional development resources for truck driver trainers, potentially through a centralised resource hub, greater consistency in the standards and materials they deliver against, underpinned by practical knowledge. The NHVDCF reforms offer an opportunity to establish such infrastructure, but doing so requires investment and lead time that may not be compatible with an accelerated schedule.

We recommend the Commission consider:

- A need to map the current trainer and assessor workforce, including regional distribution and projected demand under different implementation timelines, as a precondition to setting an accelerated schedule
- Requiring functional separation of training and assessment roles as a quality safeguard within the framework
- A need to investing in centralised professional development infrastructure and standardised resource materials for trainers and assessors
- Developing a targeted trainer workforce growth strategy, with particular attention to regional supply gaps (see 1.3, below)
- Exploring opportunities for suitable older drivers to transition into mentoring, new driver development and/or training roles, thereby opening new career pathways whilst retaining their valuable industry expertise through knowledge transfer.

1.3 Structural cost and access barriers risk narrowing the framework's benefits for those least embedded in the industry

The NHVDCF will likely impose significant new training and assessment costs. How those costs are distributed and who is expected to bear them will shape who can realistically access the competency pathway this framework creates. Our research raises concerns that without deliberate design attention, these costs will fall most heavily on those with the least capacity to absorb them, and that the framework's net productivity benefits will be correspondingly narrower than aggregate projections suggest.

Our findings reveal that women entering heavy vehicle driving are disproportionately likely to be new entrants without employer support, to be working in lower-paid or more casualised segments of the industry, and to face additional out-of-pocket costs associated with accessing training in contexts where facilities and supervision are not designed with their needs in mind. A cost-benefit analysis that does not disaggregate these impacts by gender and employment status will overstate the net benefits for underrepresented groups.

Geography compounds these costs in ways that are not evenly distributed. Drivers in regional and remote areas face greater travel distances to training providers and assessment facilities, higher associated costs, and more limited access to the informal mentoring networks that supplement formal training in metropolitan areas. Those with lower formal education levels and other constraints (e.g., caring responsibilities) face additional barriers that interact with both geography and cost in ways that aggregate analysis will obscure.

These are not exceptional cases at the margins of reform. They describe a significant portion of the potential workforce that current driver shortages make strategically important to attract. A framework designed primarily around the experience of a metropolitan driver employed by a large operator will deliver benefits narrowly. A framework designed to be accessible across the full range of industry entry conditions will deliver them broadly.

We recommend the Commission consider:

- Requiring disaggregated cost-benefit analysis by employment status, gender, geographic location, and Indigenous status in the final impact assessment
- Designing subsidised or employer-linked training funding mechanisms into the framework, with specific provisions for independent contractors and new entrants
- Establishing accessible training and assessment infrastructure in regional and remote areas as a condition of implementation in those jurisdictions
- Developing non-traditional entry pathways, including recognition of prior learning and structured workplace-based assessment that reduce cost barriers for experienced drivers

1.4 Gender-responsive competency standards are a prerequisite for the framework to realise its workforce diversification potential

Women represent a substantial and largely untapped potential workforce in an industry facing significant and growing labour shortages. The NHVDCF represents a structural intervention point at which participation conditions are being reset through formal regulatory design. How the framework is designed will determine whether that reset produces a more accessible and diverse workforce or codifies existing barriers in new regulatory form.

Our survey data show that Australian truck drivers broadly acknowledge both the opportunity for women to enter the industry and the specific challenges they face, including excessive scrutiny of technical competence, work-family conflict, and risk of discrimination and sexual harassment. Various competency and interpersonal strengths women bring to the industry are well-recognised by respondents as genuine value-adds to team environments and customer interactions. These contributions should be acknowledged and supported within the training and recruitment process (for men and women), not treated as incidental to a framework focused on technical competency alone.

Our findings indicate that alongside technical competencies, training on respectful workplace culture, diversity and inclusion is essential for preparing drivers for a more inclusive, contemporary transport industry. This is a competency content question: if the framework defines what a competent driver knows and can do, it should include awareness of the conditions that enable a diverse workforce to participate safely and productively.

We recommend the Commission consider:

- Including respectful workplace culture and diversity and inclusion content as explicit competency requirements within the NHVDCF, not as optional additions
- Requiring training materials and delivery methods to be reviewed for gender-responsiveness as part of the framework's implementation quality standards
- Disaggregating workforce participation outcomes by gender in the framework's performance evaluation metrics, to make progress measurable

2. Costs, benefits and unintended consequences (information request *2.1,2.3, 3.1, 4.2 & 5.1*)
Our preliminary analysis of heavy vehicle transport workforce data also highlights potential costs, benefits and unintended consequences that may be relevant to the consideration of the proposed reforms.

2.1 Worker safety implications of changes to mass, dimensions & loading

When modelling changes to mass, dimensions and loading, we encourage the Commission to include an analysis of costs and benefits associated with the implications for drivers' work health and safety. Issues raised by our survey respondents that have relevance here include concerns about road conditions, access to loading and unloading infrastructure, and access to appropriate rest areas.

a) Road conditions. More than 30% of survey respondents ranked poor road conditions as their most important safety concern and more than 65% ranked it as one of the top three concerns. Poor road conditions increase the likelihood for vehicle accidents and rough surfaces, potholes, and poorly maintained road surfaces can expose drivers to risks such as hazardous vibration. According to Safe Work Australia data, between 2009 to 2023 more than 300 truck drivers sustained vibration-related injuries resulting in temporary, permanent partial or total incapacity, and compensation payments exceeding $16,971,000. Vibration-related injuries include musculoskeletal injuries of the lower and upper back, limbs, wrists and ankles, spinal disc and neck compression, head injury, abrasions and associated pain.

   Transitioning aging fleets to newer, well-designed vehicles has the potential to reduce, in-cabin vehicle vibration exposure. Conversely, where the impact of increased vehicle mass and access on road infrastructure is not managed appropriately, deteriorating road surfaces may lead to an increase in exposure to hazardous vibrations and other risks.

b) Other road use concerns. Almost half (46.5%) of survey respondents ranked poor awareness and behaviour of other road users among their top three safety concerns. Drivers consistently raised concerns about the psychological stress of operating heavy vehicles in conditions that leave little margin for error; including navigating metropolitan road networks where GPS systems frequently misroute trucks onto unsuitable streets, managing limited local knowledge in high-traffic environments, contending with deteriorating road edges and lane widths poorly matched to vehicle dimensions, and manoeuvring in poorly designed loading and unloading sites. There may be opportunity to consider how changes that propose to make heavy vehicles heavier and taller might impact these scenarios to increase or decrease the psychosocial safety of drivers.

c) Exposure to diesel particulates. The potential for transitioning to zero emission vehicles would be expected to reduce driver health exposure to diesel particulates.

Collectively, these factors – the design and maintenance of the truck, road conditions, availability of GPS and other technologies, occupational health exposures – act as physical and psychological stressors with negative implications for driver safety, long-term health, burnout and consequently, driver retention. Any regulatory changes must therefore be assessed not only for their operational and infrastructure impacts, but for whether they improve or worsen the day-to-day working conditions that determine whether drivers can and will sustain long, healthy careers in the industry. Getting this balance right is essential to both worker safety and the long-term viability of the heavy vehicle transport workforce.

2.2 Leveraging private investment in charging infrastructure to improve driver amenities

The most frequent concern raised in our study by both key informants and surveyed drivers pertained to the inadequacy of driver rest areas and amenities. Many drivers struggle to find somewhere to pull up when breaks are required and often when they do, road-side rest areas lack access to basic amenities such as toilets, or they find dedicated parking areas are increasingly taken by cars and caravans. Drivers travelling off major highways also reported being unable to stop at towns for food or toilet breaks due to an inability to access safe and appropriate parking. Frustration at this inability to access clean toilets, showers and quality food was cited as a key factor challenging both driver recruitment and retention.

We also note that the lack, and poor quality, of basic amenities at rest stops was raised by truck drivers as a significant concern in the driver survey undertaken almost a decade ago. It appears this situation remains unresolved. If private investment (or co-investment) in charging stations is encouraged, there may be an opportunity to build into those proposals a requirement to ensure infrastructure assets include the provision of, or co-investment in adequate truck parking, clean toilets, showers and other amenities.

3. **Reform design must account for the structural conditions of the industry, not just its demographics** (information request 1.1)

Any reform framework that does not account for the normative features of the heavy vehicle industry risks reproducing existing structural inequalities under new institutional arrangements. Gender is not simply one demographic variable among many to be disaggregated in a distributional analysis, but is a structural feature of the industry itself, embedded in how work is designed, how training is delivered, how schedules are structured, how safety is managed and how participation is enabled or constrained. The same applies to geography, Indigenous status, income, education and disability, which intersect with gender in ways that shape who can access reform benefits and those who cannot afford to. The Commission is right to note that drivers in regional and remote areas face particular barriers, and that Aboriginal and Torres Strait Islander workers warrant specific consideration. We would extend this observation that these are not exceptions to a broadly accessible reform pathway, they are evidence that the baseline conditions of the industry, that is, its cultures, its infrastructure, its employment arrangements are themselves narrowly and unequally distributed. The NHVDCF reforms are being implemented into an industry where inclusion, safety and access are not yet secure for

significant portions of the potential workforce. A reform framework that does not address these baseline conditions will deliver narrower benefits than projected and risks entrenching the workforce composition that current shortages make unsustainable. This is not a women-in-trucking concern, it is a structural reform issue.

Summary

Our preliminary research findings indicate that the success of the NHVDCF implementation depends on a fundamental shift away from "throughput" training models toward a robust, competency-based system that provides quality theoretical and practical training. The evidence also advocates a separation of training and assessment, balanced with realistic acknowledgment that suppliers of these services—trainers and assessors also need support.

This submission also highlights the opportunity for the NHVDCF to unlock the potential of a more sustainable and diverse workforce by improving training quality, integrating gender-responsive standards, and ensuring training and work environments are physically and psychologically safe and healthy.

We appreciate that the implementation of the National Heavy Vehicle Driver Competency Framework (NHVDCF) represents a critical strategic lever to modernize Australia's transport sector. We remain committed to providing evidence-based insights as our study progresses and would welcome the opportunity to share further details with the Commission or discuss how these findings can support the Commission's objectives.

Respectfully,

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