



Joint Select Committee on Artificial Intelligence: a human-focused approach to automated vehicle deployment

**SUBMISSION FROM THE TRANSPORT
WORKERS' UNION OF AUSTRALIA
WITH SUPPORTING APPENDIX FROM
THE JOHN CURTIN RESEARCH CENTRE**

About the TWU

The Transport Workers' Union of Australia (TWU) represents tens of thousands of men and women in Australia's aviation and road transport industries. With over one hundred years' experience, the TWU has been proactive in establishing industry standards that improve the lives and safety of transport workers, their families and the community.

Executive summary

The Transport Workers' Union supports the ACTU submission to this inquiry and its call for artificial intelligence and automation to be designed, regulated and introduced with workers at the centre. In transport — Australia's deadliest industry — that principle is urgent. New technology must not intensify deadly pressure on workers, shift risk down the supply chain, or concentrate the benefits of automation among the corporations with the greatest economic power while burdening those with the least. Companies that design, deploy and profit from AI and automation across transport supply chains must be held to account for their safe, fair and sustainable introduction.

The TWU supports responsible innovation. It categorically rejects technology being waved through without proper assessment, regulation and safeguards to protect workers, passengers, road users and the broader community.

Automated Driving Systems and human-less vehicles such as robotaxis are an urgent test of whether governments will require AI and automation to be safe, accountable, worker-centred and in the public interest. If introduced without strict controls, they could trigger a profound upheaval in transport, disrupt the shared use of public roads, destabilise road safety and displace tens of thousands of workers.

The John Curtin Research Centre (JCRC) appendix to this submission illustrates the scale of what is at stake: a human-less vehicle rollout without worker protections **threatens 64,200 to 85,600 jobs**, while even a conservative estimate on early-stage deployment could put **\$220 million in rideshare driver earnings at risk nationally**. Yet the current regulatory pathway is moving in the opposite order: the Automated Vehicle Safety Law and related state and territory reforms are enabling importation and deployment before governments have assessed or regulated the consequences for workers, road users and affected communities.

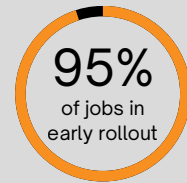
Public concern reinforces the need for caution. TWU-commissioned YouGov polling shows strong community opposition to driverless vehicles, strong support for protecting transport jobs, and support for governments banning or strictly limiting deployment. Australia must not repeat the catastrophic mistake of allowing Silicon Valley technology companies to establish and deploy a business model first, while governments scramble to protect workers and communities after the damage is done.

To avoid that outcome, governments must establish a human-focused deployment model before automated vehicles are introduced. That model must protect secure transport work, ensure productivity gains are reinvested into redeployment opportunities, wages and conditions, preserve human control and accountability, require consultation with affected workers and unions, and ensure any deployment delivers verified social and economic benefit.

For passenger transport, this should include two core requirements: first, an operator-level hybrid model requiring a very high proportion of work to remain with human drivers; and second, Fair Work Commission Minimum Standards Orders to protect and enhance pay and conditions for remaining drivers and workers in new automated-vehicle operational and maintenance roles. More detail is provided in the recommendations section of this submission.

While this submission focuses on the urgent threat posed by robotaxis in passenger transport, automated driving systems in freight, heavy vehicles and broader transport supply chains require separate workforce, safety and supply-chain impact assessments before any law changes enable their deployment. The risks are distinct, more complex and, in heavy vehicle transport, carry heightened consequences for road safety.

Under an operator-level hybrid model, human drivers would be allocated:



1. AI and automation in transport must be shaped by workers and the public interest

Transport supply chains and community impact

Decades of experience in transport, and the catastrophic consequences of unchecked app-based transport gig work, show that:

- transport is critical national infrastructure, including for regional communities and during crises;
- road transport is Australia's deadliest industry, and aviation is safety-critical;
- changes to transport work, pay and conditions directly affect the safety and lives of workers, road users and passengers;
- powerful retailers, manufacturers, oil companies, airports and airlines must be accountable for the safe, fair and sustainable introduction of technology throughout their supply chains;
- standards are dragged down dangerously when responsible operators and clients are not protected by enforceable industry standards;
- impact and risk assessments, consultation, public interest tests and worker protections must precede any rollout; and
- transport workers are industry experts and must help design and manage technology so workers and communities benefit rather than bear the costs.

Any rollout that fails to strengthen transport supply-chain resilience will destabilise the industry, with serious consequences for the economy and community safety.

The overseas rollout of human-less vehicles is a stark example. Technology companies heavily promote claimed safety benefits, often without independent verification, while ignoring wider safety consequences: the pressure placed on transport workers forced to drive longer, harder and faster to compete with human-less vehicles.

Human-less automated vehicles as an urgent test case

Human-less automated vehicles show why these principles must be applied before AI and automation are deployed across transport. They raise immediate issues of displacement, job quality, safety, accountability, critical infrastructure and public confidence.

Passenger transport and freight are essential services. A shift from human-driven to human-less transport would affect workers, passengers, first responders, local economies and the shared use of public roads. The question is not simply whether these technologies can operate, but who bears the disruption, who absorbs the risk, and whether any benefits are shared with the workers and communities most affected.

Public opinion reinforces the need for caution, as shown by the YouGov polling highlighted on this page.

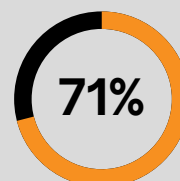
The same caution is required in relation to cybersecurity, surveillance and data. Automated and connected vehicles are not simply road vehicles; they are data-gathering, software-dependent systems capable of collecting location, passenger, worker and operational information. Australia does not yet have a sufficiently robust framework to assess and regulate the cybersecurity, privacy, surveillance and data risks posed by these systems. Those risks must be independently assessed before importation, sale, trials or deployment, including the potential for hacking, remote interference, worker and passenger surveillance, location tracking, offshore data transfer, unsafe software updates, and risks to road safety, national security and transport-system resilience.

Australia should not let automated vehicle policy be shaped by a jurisdictional race to remove regulatory barriers or by the deployment timelines of major technology companies. The starting point must be the public interest: safety, demonstrated social dividend, fair distribution of risks and benefits, and protection for workers whose livelihoods are directly affected.

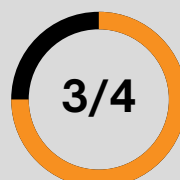
Despite public concern, the Automated Vehicle Safety Law and related state and territory transport changes are progressing to enable importation and deployment without any corresponding national process to assess workforce impacts or establish protections for affected transport workers.

That imbalance goes to the heart of this inquiry: Australia is building the pathway for deployment before building the safeguards needed to protect working people, road users and the public. The likely consequences are heightened pressure in Australia's deadliest industry, hundreds of millions of dollars lost in worker wages – transferred to the pockets of overseas tech companies, and the displacement of tens, if not hundreds, of thousands of jobs.

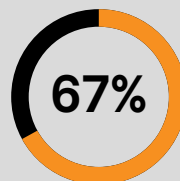
TWU-commissioned YouGov polling of over 1500 voters found that:



oppose driverless taxis and trucks on Australian roads, while 73% would feel unsafe sharing the roads with them



want the Federal Government to intervene to protect transport jobs from automation now



want the Federal Government to lead the world on bans and strict conditions on automated vehicle deployment



would be less likely to vote for a party that didn't intervene when it came to driverless vehicles

Human-less vehicle deployment does not have clear social licence, and governments should not treat the removal of regulatory barriers as neutral or progressive.

Lessons from overseas deployments

Overseas experience shows what can happen when deployment outpaces regulation.

The JCRC appendix to this submission exposes two significant risks if Australia were to follow the “let it rip” approach in American cities like San Francisco and Los Angeles. The available data points to 64,200 to 85,600 job losses, and – at a conservative estimate - \$220 million in annual wages under threat during the first full year of deployment, with this figure to rise exponentially with the projected expansion for human-less vehicle deployment.

Earnings losses do not disappear into the ether. Without intervention, this value is taken from the Australian community and transferred to the pockets of overseas technology companies.

Aside from these catastrophic impacts to transport workers and the economy, examples from AV-active markets overseas also demonstrate public risk and city chaos, including:

- during a San Francisco (Dec 2025) power outage, Waymo reported almost 1,600 vehicle stoppages, blocking major roads and intersections;
- during San Francisco’s July 4 celebrations, autonomous vehicles became immobilised, blocked key streets, trapped Muni shuttles and required tow trucks that could not reach the scene;
- in Wuhan, more than 100 robotaxis stalled, with some passengers stuck for hours in busy multi-lane roads;
- 911 dispatchers reportedly called Waymo 31 times during the San Francisco outage, with one call kept on hold for 53 minutes;
- Waymo vehicles have been investigated for illegal and dangerous behaviour around school buses, including more than 20 recorded instances in Austin;
- fire and police officials have made dozens of complaints about robotaxi incidents in Austin, including vehicles failing to stop for uniformed police with lights and sirens operating;
- a Waymo robotaxi blocked an ambulance responding to a mass shooting in Austin; and
- passengers have been trapped or unable to get timely human assistance, including a Phoenix airport trip where support staff were unable to take control of the vehicle.

In July 2026, the Mayor of San Francisco — an advocate of AV adoption — wrote to California’s transport agency calling for stronger regulation after the July 4 disruption.

These are not isolated technical glitches. They show how quickly one company’s fleet failure can become a transport-network failure, affecting emergency services, public transport, passengers, road users and transport workers.

2. The cost of regulating too late

Lessons from the gig economy

Australia has already seen what happens when governments allow powerful platform businesses to establish a labour model before protections are in place. In the gig economy, regulation came far too late. Workers were exploited, denied basic rights, and pressured to rush and work long hours to pay the bills. At least 25 transport gig workers have been killed on Australian roads.

That regulatory lag cost lives, livelihoods and industry standards.

The same dynamic is visible in the 'Amazon Effect': commercial power and the introduction of unfair gig models squeeze transport supply chains from both ends, pressuring operators to lower standards or be pushed out. At FedEx, TWU members have reported freight and entire runs being shifted to gig-style Direct Service Contractors on piece rates, while overseas automated truck trials have commenced.

This experience is directly relevant to automated vehicles: once a human-less business model becomes embedded, it spreads, and displacement, earnings loss and degraded standards become harder to reverse.

Opening up a new loophole

Australia has led on gig economy regulation by closing loopholes exploited by technology companies to evade workplace rights. But human-less automated vehicles could become the next escape hatch.

The AVSL and accompanying road transport changes focus on liability when something goes wrong in a road incident. That is valuable, if automated vehicles are to be deployed, but it does not answer the central question: who bears the economic and social cost when human-less vehicle business models reduce work opportunities, cut earnings, increase pressure on remaining drivers, lower industry standards, disrupt public roads and weaken the resilience of essential transport services?

Without safeguards, human-less vehicles will arrive through a loophole of our own making. A loophole which governments in the future will scramble to close after earnings fall, workers are displaced, standards decline, and unsafe pressure intensifies. Similarly, new and emerging job roles must not be left for technology companies to define. The way transport workers are engaged, allocated work, paid and protected is inseparable from safety on the road.

3. A human-focused model

If automated vehicles are introduced, they must be introduced only under a binding human-focused model. At its centre should be an operator-level obligation: every authorised passenger transport operator that deploys automated vehicles must maintain a substantial human driver workforce and direct a very high proportion of trip opportunities to human drivers.

The second part to this hybrid model is to ensure that any profit gained from the human-less vehicle rollout is not absorbed by overseas tech companies, but instead channelled into decent wages and conditions for both passenger transport drivers and those working in new roles to remotely support, clean and maintain the automated vehicles. There already exists an appropriate mechanism to do this part: the Fair Work Commission must set or adapt Minimum Standards Orders to protect and enhance rideshare pay and conditions in line with industry sustainability.

The operator obligation is critical. Fully automated operators must not be allowed to compete on labour avoidance. A hybrid model must require each operator to internalise the social and workforce impacts of deployment, preserve human work, and balance any productivity benefit against employment, earnings, service quality and public safety.

This approach is a concession. The JCRC scenarios in the appendix of this document create a compelling case for a hybrid model approach to protect jobs working alongside a Fair Work Commission Minimum Standards Order to protect earnings. However, it also outlines that job losses will still occur. Even with a 10 per cent cap on human-less vehicles, 6,400 to 8,600 jobs are likely to be lost nationally.

What is abundantly clear, is that no law that enables the importation and deployment of human-less vehicles should pass Federal, State or Territory Parliaments without these far-reaching consequences being examined and accounted for.

4. Recommendations

1. Require a workforce impact assessment and public interest test before any law changes are introduced or adopted to enable commercial authorisation.

The Joint Select Committee should recommend that the Automated Vehicle Safety Law and associated changes to State and Territory laws be paused until a comprehensive workforce impact assessment has examined likely effects on driver employment, hours, earnings, geographic coverage and labour-market adjustment. The introduction of this technology should also be subject to a public interest test, including demonstrated community benefit, transparency about risks, and evidence that deployment has social licence. If the risks outweigh the benefits, human-less vehicles should not be imported or deployed in Australia at all. These assessments must occur before, not after, deployment begins.

2. Make a human-driver obligation a condition of market entry.

Every authorised operator must maintain a human-centred hybrid network, with at least 95 per cent of the work reserved for human drivers and no more than 5 per cent undertaken by human-less vehicles in early deployment phases, reducing to no less than a ratio of 85:15 over time. The obligation should apply at the operator level, not across the market as a whole, so driverless-only entrants cannot avoid this reasonable requirement.

3. Pay and conditions for all relevant workers are underpinned by enforceable minimum standards set by the Fair Work Commission.

Profit gains must be reinvested into the workforce and stay within the Australian economic environment. Minimum Standards Orders made by the Fair Work Commission must protect earnings, including cost recovery, and other rights and conditions. All remaining passenger transport drivers and all workers in new roles related to the operation and maintenance of automated vehicles must have minimum rights and protections. This avoids operators gaming the system by allocating trips to drivers while worsening pay and conditions.

4. Redeployment costs, including training, must be funded by operators introducing automated vehicles

Operators should offer redeployment opportunities to the existing workforce first, and fund the cost of transition.

5. Mandate workforce and operational data.

Operators should be required to report monthly data on human and human-less trips, hours, earnings, utilisation, time of day and geographic coverage, as well as safety incidents, service disruptions, emergency-service interference, and vehicle immobilisations. Regulators should have audit powers to test reported figures against platform records, with escalating penalties for non-compliance.

6. Preserve peak, geographic and accessibility capacity

Authorisation conditions should require operators to maintain sufficient human-driver capacity for evening and weekend peaks, outer-metropolitan and underserved areas, passengers with accessibility needs and circumstances in which human judgement remains necessary. This would prevent AV operators from concentrating services in the easiest and most profitable markets while leaving those in greatest need underserved.

7. Worker consultation should be a condition of any trial, pilot, authorisation or commercial expansion.

Workers are experts in the field, and should contribute to the design, introduction and potential expansion of technology.

8. Require separate workforce, safety and supply-chain assessments before automated driving systems are permitted in freight, heavy vehicles or other transport sectors.

This submission focuses on the urgent threat posed by robotaxis in commercial passenger transport. However, automated driving systems in freight, heavy vehicle transport and broader transport supply chains raise distinct and more complex risks, including greater consequences for public safety, road users, supply-chain resilience and transport workers. No law changes should enable this technology to enter those sectors until those risks have been independently assessed and enforceable regulatory protections are in place.

9. Establish mandatory cybersecurity, privacy, surveillance and data risk assessments and protections before any automated or connected vehicle is imported, sold, trialled or deployed.

No automated or connected vehicle should be imported, sold, trialled or deployed unless independent risk assessment confirms enforceable Australian standards are met and can protect against: hacking, remote interference, worker and passenger surveillance, location tracking, offshore data transfer, unsafe software updates and risks to road safety, privacy, national security and transport-system resilience.

10. Regulation should impose clear accountability on companies that design, own, operate, procure, or profit from AI and automated vehicle technology.

Any company benefiting from the rollout of AI and/or automation, including automated vehicle technology, must be accountable for its safe, fair and sustainable introduction and deployment. This includes wealthy clients at the top of supply chains and goes beyond liability in an accident.

Conclusion

If automated vehicles are introduced on Australian roads, they must be introduced on terms set by the community, not private technology firms. A framework that permits displacement first and asks questions later would repeat the failures of the gig economy on a larger, more dangerous and more permanent scale.

The Committee should recommend that automated vehicle deployment proceed only under a national, worker-centred framework requiring workforce impact assessment, worker and union consultation, enforceable human-work obligations, earnings protections, transparent reporting and demonstrated public benefit. Without those conditions, automated vehicles risk becoming another example of innovation measured by private profit but paid for by workers, passengers and communities. Australia should choose a different path: technology that serves people, rather than people being pushed aside to serve a technology-driven business model.