

Transport Supply Chain Workforce Outlook 2026



Acknowledgement of Country

Industry Skills Australia acknowledges the Traditional Owners of Country throughout Australia and recognises the continuing connection to lands, waters, skies and communities. We pay our respect to Aboriginal and Torres Strait Islander cultures and to Elders past and present.



About ISA

Industry Skills Australia (ISA) is the Jobs and Skills Council for the transport supply chain industries. These industries include Aviation, Maritime, Rail, Transport and Logistics, and the emerging sectors of Omnichannel Logistics and Distribution, and Air and Space Transport and Logistics.

ISA is owned and led by industry. Our goal is to build a world class workforce for Australia's transport supply chain industries to boost productivity, create better jobs and build opportunities for individuals. Our 30-year history working with industry supports us in researching workforce needs, promoting skills development and creating training products that meet industry priorities.

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Image Credits

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Foreword

The Transport Supply Chain Workforce Outlook 2026 is a companion document to the 2026 Workforce Planning Updates for the Aviation, Maritime, Rail, and Transport and Logistics industries. Together, these reports build on a foundation established by the 2025 Workforce Plans to deliver a comprehensive view of workforce challenges, priorities and progress across Australia's transport supply chain industries.

The 2026 Updates outline current actions to strengthen workforce capability and highlight where further effort is needed. They were prepared with oversight from the Strategic Workforce Planning Committee for each industry.

This Workforce Outlook brings together key insights from the individual Updates to articulate the strategic national significance of these deeply interrelated industries and the shared challenges and opportunities they face. In combination, these industries are critical to Australia's economic performance, national resilience and community wellbeing.

Addressing workforce challenges requires sustained, coordinated action across industry, government and the national skills system. Strengthening skills pipelines, improving access to high-quality training and building workforce adaptability will remain key priorities as industry conditions evolve.

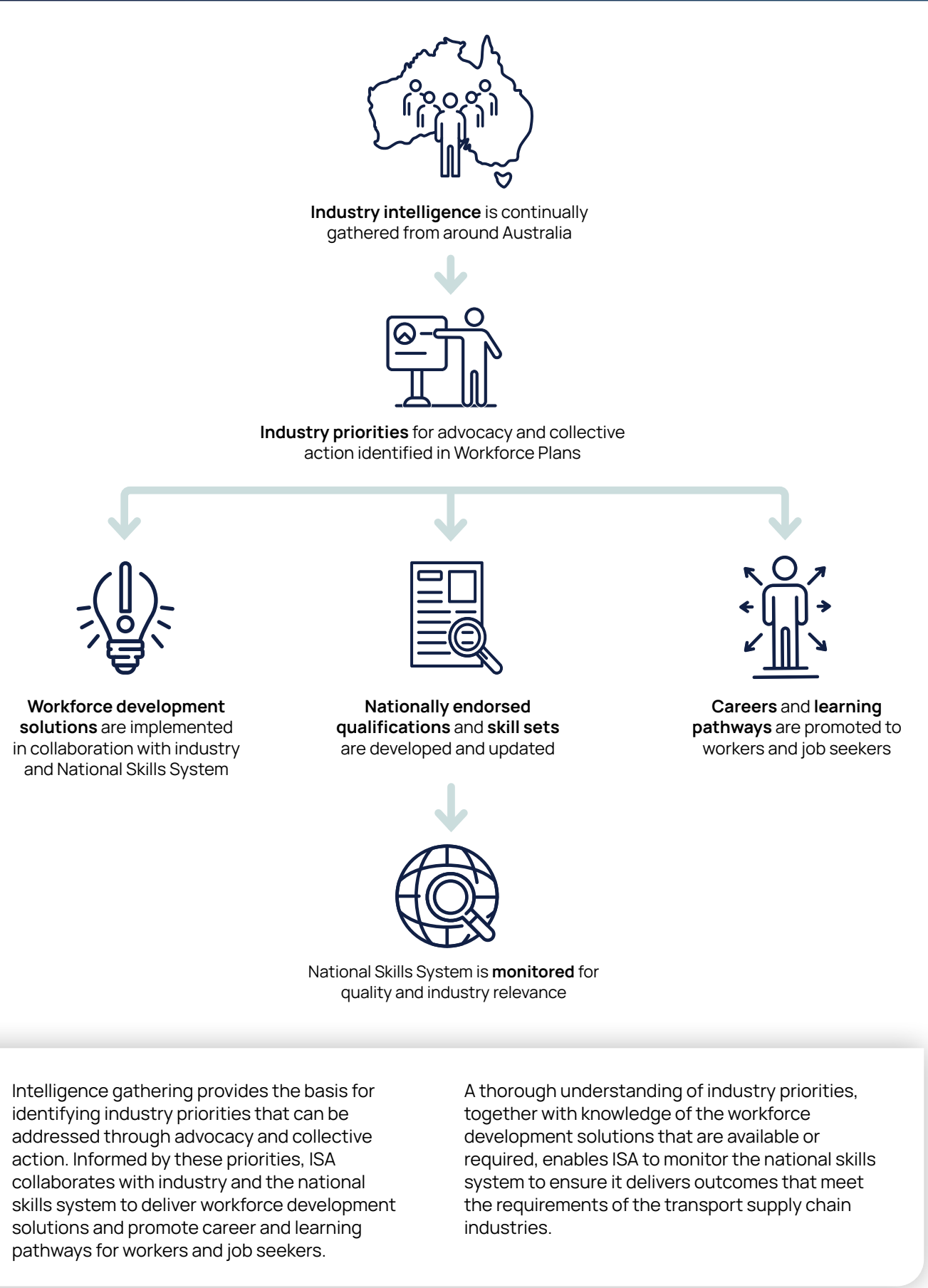
We acknowledge the many stakeholders whose insights and experience have informed this year's workforce planning process. Your continued engagement will be essential for translating insight into action and ensuring the workforce is equipped to meet future demands. We look forward to continuing this collaborative effort with you as we collectively shape the future of our industries.

Adrienne Fleming OAM
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Workforce Planning
Committee

Angela Gillham
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Workforce Planning
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Transport and Logistics
Strategic Workforce
Planning Committee



ISA's Approach to Workforce Planning

Workforce planning is central to the work of Industry Skills Australia (ISA). It enables a clear understanding of current and future workforce needs and supports co-ordinated action across industry, unions, government and training providers. The process begins with a proactive approach to gathering industry intelligence through research and direct engagement with stakeholders across Australia.

ISA's approach to workforce planning follows a continuous process designed to build a strong evidence base, engage stakeholders and drive collective action across the transport supply chain industries.

The **2025 Workforce Plans** provided a comprehensive foundation for understanding workforce challenges and opportunities across the Aviation, Maritime, Rail, and Transport and Logistics industries. These plans established a detailed picture of industry drivers, capability needs and priority areas for action.

In 2025-26, stakeholder feedback confirmed the ongoing relevance of the identified challenges and emphasised the need for future publications to highlight the progress being made to address industry priorities.

In response, ISA introduced the **2026 Workforce Planning Updates**. These present concise, accessible advice on progress. They are designed to help stakeholders connect with initiatives, contribute ideas and support innovative solutions to shared workforce challenges.

Together with this **Workforce Outlook**, the individual Updates support a collaborative approach to exploring, tracking and refining initiatives that will ensure the transport supply chain workforce remains agile, future-focused and responsive to evolving industry needs.

Aviation
Workforce
Planning Update

Maritime
Workforce
Planning Update

Rail
Workforce
Planning Update

T&L
Workforce
Planning Update

2026 Workforce Planning Updates

Transport Supply Chain Industries

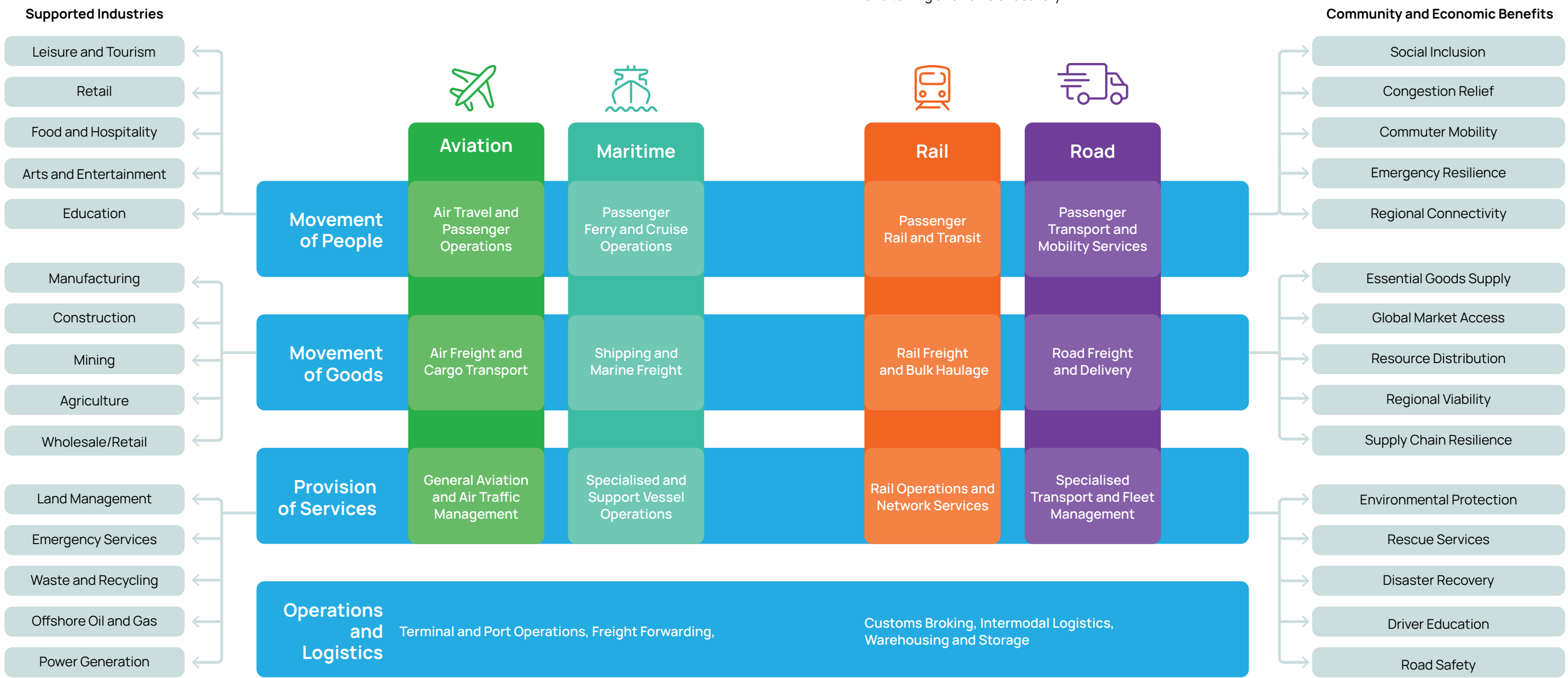
The **transport supply chain** is the end-to-end system of activities, organisations, infrastructure and services that move people and goods from an origin to a destination, often using multiple transport modes and support functions. It provides services and a system that is critical for the operation of all other industries and delivers both economic and community benefits.

Freight transport enables the steady movement of goods that supports jobs, regional development and national supply chain resilience. **Passenger transport** connects communities, eases congestion and supports social and economic participation.

These activities are supported by a foundation of **operations and logistics**, including warehousing and storage, scheduling, intermodal coordination, customs broking and freight forwarding, which together ensure the safe and efficient movement of people and goods.

Beyond moving passengers and freight, the transport supply chain delivers a range of **other important services**. These include the multiple functions of General Aviation, such as aerial surveying, infrastructure inspection and emergency services support, and the emerging capabilities of advanced air mobility and uncrewed systems. Specialist maritime vessels provide support for offshore infrastructure operations, while specialised land transport services provide driver instruction, pilot and escort vehicles, and towing and vehicle recovery.

Together these interconnected activities form a system that supports an extensive array of downstream industries and is essential to Australia's stability, resilience and long-term prosperity.



Sovereign Capability

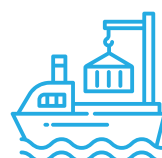


FREIGHT MOVED
BY SEA (2025) **99%**

BUT ONLY

3%

OF INTERNATIONAL FLEET*
CREWED BY AUSTRALIANS
(2023–2024)



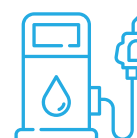
FREIGHT VOLUME EXPORTS
(TONNES) 2025

1.6 billion

FREIGHT VOLUME IMPORTS
(TONNES) 2025

0.1 billion

DAYS OF STOCKS AT NORMAL
RATE OF CONSUMPTION



GASOLINE

39 days

KEROSENE

30 days

DIESEL

30 days

Economic Productivity

OPERATIONAL INTERMODAL
SITES (2026) **171**

GDP CONTRIBUTION
(2024–2025)

\$102.4 b



ESTIMATED ANNUAL
REVENUE
(2024–2025)

\$270.6 b

FREIGHT IMPORT/EXPORT
VALUE (2025)

\$973.6 b



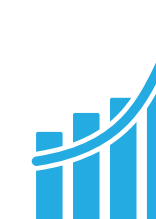
NUMBER BUSINESSES

237,377

200+
employees
244

20–199
employees
2,217

0–19
employees
234,916



DOMESTIC FREIGHT TASK
GROWTH (2026–2050)

15%

Community Wellbeing

RAIL PASSENGER JOURNEYS
IN 2023–2024

912 million



PASSENGERS ON DOMESTIC
COMMERCIAL FLIGHTS

63.77 million



TRANSPORT SUPPLY CHAIN
WORKERS IN REGIONAL
AREAS (2025)



29%

FERRY PASSENGER TRIPS IN
2024–25 (CAPITAL CITIES)

28.3 million



COMMERCIAL VEHICLES ON
AUSTRALIAN ROADS IN 2025



5 million

WORKERS IN TRANSPORT SUPPLY
CHAIN ROLES (2025)

1,040,004



* The International Trading fleet comprises vessels where more than 20 per cent of voyages calling at Australian ports originated from overseas ports.

Environmental Sustainability

TRANSPORT'S SHARE
OF AUSTRALIA'S
EMISSIONS (2026)

22.6%

TRANSPORT'S SHARE OF
AUSTRALIA'S
EMISSIONS (2040)

26.6%

TRANSPORT EMISSIONS
REDUCTION
2026–2040

22%

EMISSIONS INTENSITY BY FREIGHT MODE (G CO₂-E PER TONNE-KM)



AIR FREIGHT IS

~47×

more emissions-
intensive
than road freight

SEA (CONTAINER)

14.9



SEA (BULK)

7.2

ROAD
(ARTICULATED
TRUCK)

48.9

RAIL (ELECTRIC)

25.6



RAIL (DIESEL)

26.9



Sovereign Capability

The transport supply chain is a critical component of Australia's sovereign capability. A stable and efficient transport supply chain is necessary to support the movement of essential goods across the country and to international markets. The performance of the transport supply chain directly influences supply security and Australia's ability to maintain essential services during periods of disruption or rapid change.

However, the operating environment for the transport supply chain is becoming more complex. Global shifts in trade policy, including new tariffs and rising geopolitical tensions, are reshaping the system. As more countries move towards regionalised and nationally focused supply chains, Australia faces increasing pressure to strengthen domestic capability, protect access to critical goods and remain competitive while managing the growing risks associated with global trade.

These pressures highlight the need for coordinated national action. The *National Freight and Supply Chain Strategy* acknowledges that all levels of Australian government and industry need to work together to raise awareness of the importance of supply chains and freight.¹

A systems-level approach is required to ensure that Australia can anticipate disruptions, adapt quickly and maintain continuity of supply. Strategic initiatives such as the National Freight Data Hub demonstrate progress, providing better visibility of freight movements and enabling more informed decision making by industry and government.²

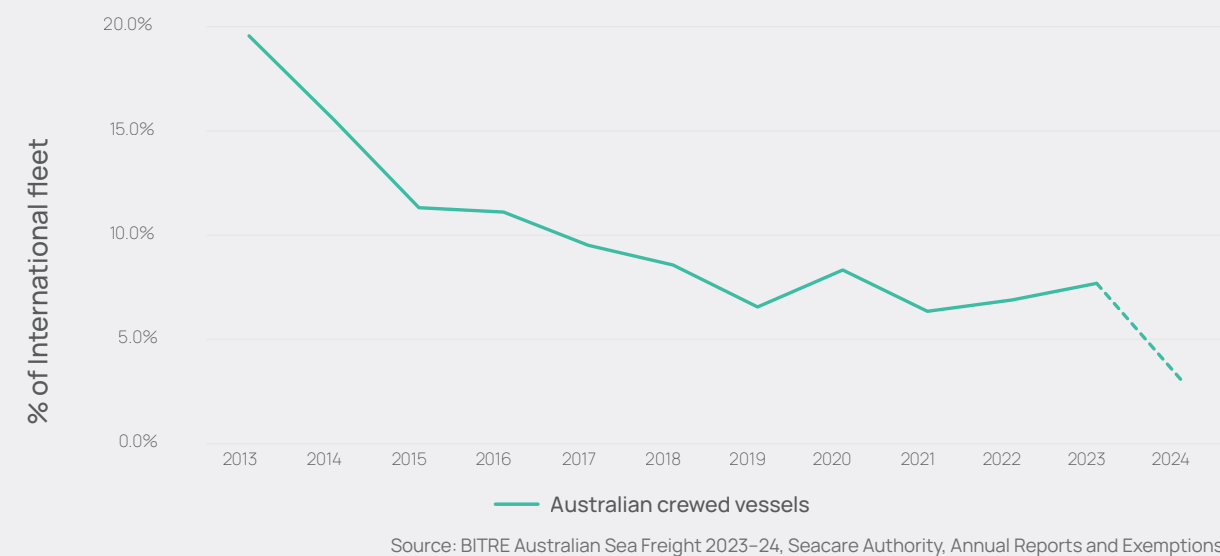
Although ongoing investment in infrastructure and the adoption of new technology are important, they are not sufficient on their own to secure Australia's sovereign capability. The resilience of the transport supply chain depends on a skilled and adaptable workforce that can operate, maintain and optimise these systems under changing conditions.

Key Insight: Without continued attention to workforce capability and readiness of the essential workers in the transport supply chain, Australia risks supply chain vulnerabilities that could limit its ability to manage emergencies, sustain economic activity and support the wellbeing of communities across the country.

Supply Chain Risk from Declining Australian Crewing

More than 99 per cent of Australia's freight volume moves by sea, representing nearly 80% of total trade value.³ Yet Australia's sovereign presence in international shipping is in long-term decline, exposing a growing supply-chain vulnerability. The share of Australian-crewed vessels in the International Trading fleet⁴ has fallen from around 20% of vessels in 2013 to an estimated 3% in 2024 (Figure 1), equating to just two vessels, raising concerns about Australia's ability to reliably access vessels and skilled crews when they are needed most.

Figure 1: Australian-Crewed Vessels as a Share of the International Fleet (%)



¹ Infrastructure and Transport Ministers, *National Freight and Supply Chain Strategy*, Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts, 2025, p 47.

² Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRDCA), *nfdh | National Freight Data Hub*

³ DITRDCA, *nfdh | National Freight Data Hub*.

⁴ The International Trading fleet comprises vessels where more than 20 per cent of voyages calling at Australian ports originated from overseas ports.

Economic Productivity

The transport supply chain industries are central to productivity, connecting producers, businesses and consumers across cities, regions and international markets. Efficient freight and passenger networks ensure that trade gateways function smoothly.

Australia's geographical distance from major global markets means that the performance of the transport supply chain plays a significant role in export competitiveness and the cost of goods.⁵ When supply chains operate effectively, the economic benefits flow widely, supporting industry growth, stabilising prices and enabling businesses to compete internationally.

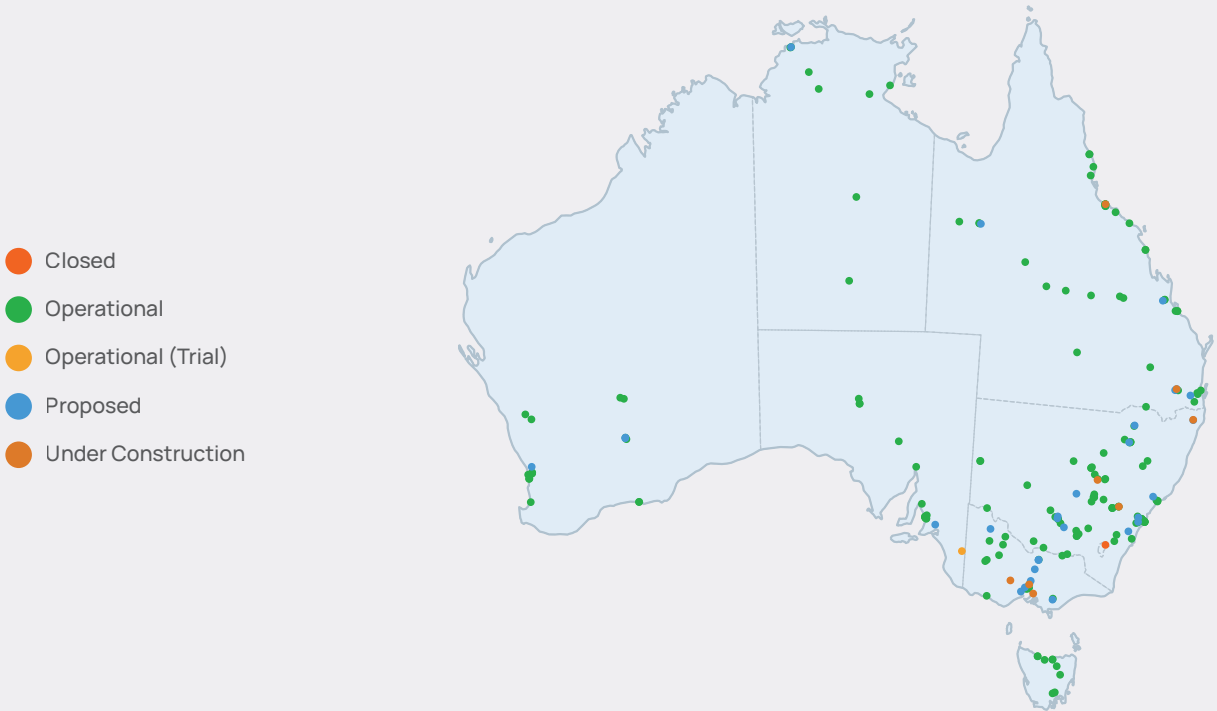
Investment in the development of intermodal terminals demonstrates the commitment of government and industry to build a more integrated and productive freight system.⁶ These investments strengthen economic growth by reducing bottlenecks, improving reliability and lowering costs. Efficiency gains are also being driven by technological advances and AI-enabled systems.

Key Insight: Ongoing investment in a skilled and adaptable workforce is needed to ensure the industry, and the nation, can reap the benefits of infrastructure investment and technological innovation.

Australia's Intermodal Network at a Glance

The map below (Figure 2) illustrates an extensive freight network, which has a strong pipeline for growth. Of the 209 mapped sites, 171 are operational and a further 37 are proposed or under construction. Terminals cluster along the eastern seaboard, and the network extends across every mainland state and Tasmania, with many sites located in regional freight catchments rather than metropolitan areas.

Figure 2: Australian Intermodal Terminals



⁵ Australian Competition and Consumer Commission (ACCC), *Container stevedoring monitoring report 2024–25*, 12 December 2025, p 1.

⁶ Infrastructure and Transport Ministers, *National Freight and Supply Chain Strategy*, DITRDCA, 2025, p 22.

Community Wellbeing

The transport supply chain industries underpin community wellbeing by keeping essential goods and services moving to where they are needed, when they are needed. The transport supply chain is vital to the livelihoods of all Australians and supports liveability and economic prosperity across communities.⁷ This role is most visible during disruptions, when reliable transport networks help maintain access to food, medicine, fuel and other critical supplies.

Passenger transport services are a critical determinant of health and wellbeing in regional, rural and remote communities.⁸ They reduce isolation, enable community participation and provide equitable access to essential services, particularly for older residents, people with disabilities and those without private transport options.

Bus, rail and ferry networks and regional aviation enable communities to access employment, education, healthcare and other services. They also support fly-in-fly-out (FIFO) workforces for remote industries and enable specialist providers,

including medical and other professionals, to reach communities that may otherwise have limited access. The emergency rescue and medical support services enabled by general aviation are literally lifesaving in regional, rural and remote communities.

Key Insight: Sustaining community wellbeing requires place-based training that strengthens local skills pipelines and develops workers who are deeply connected and committed to the wellbeing of their communities.

Transport Networks Support Community Wellbeing
Australia's key freight routes (Figure 3) connect major ports, airports and inland corridors, helping essential goods and services reach communities across the country. These networks are especially important for regional, rural and remote areas, where reliable transport links help maintain access to food, fuel, medicine and other critical supplies during both everyday operations and periods of disruption.

Figure 3: National Key Freight Routes



⁷ Infrastructure and Transport Ministers, *National Freight and Supply Chain Strategy*, DITRDCSA, 2025, p 9.
⁸ Community Transport Organisation, *Future Strategy for Community Transport in Regional, Rural & Remote NSW*, October 2022.

Environmental Sustainability

Australia's decarbonisation goals place the transport supply chain industries at the centre of the national effort to transition to net zero. Transport is currently one of the largest sources of emissions and is on track to be the largest by 2030 if no action is taken.⁹ Decarbonising the transport sector will be critical to achieving the Australian Government's target of net zero by 2050.¹⁰

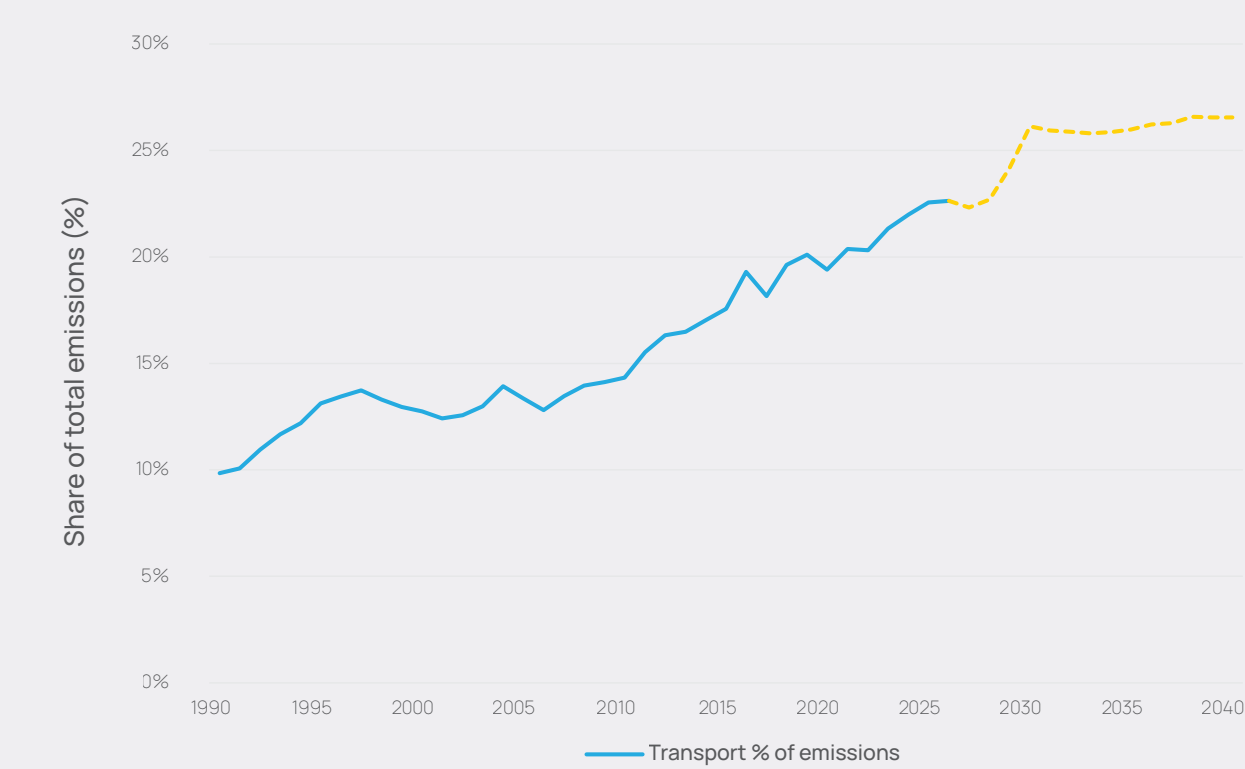
For transport supply chain operators, decarbonisation will impact operations and infrastructure. Achieving net zero goals will require investment in low and zero emissions transport infrastructure and national standards for data collection, measurement and reporting of embodied emissions.¹¹

Key Insight: To support the transition to net zero, the workforce will need new digital and clean energy capabilities and a safety culture that accommodates new fuels, technologies and operating conditions.



Transport's Rising Share of Emissions
As Australia's economy decarbonises, transport is expected to account for an increasing share of national emissions because it is harder to decarbonise than many other sectors. Transport's share of Australia's emissions (Figure 4) has more than doubled since 1990, rising from 9.9% to 22.6% by 2026, and is projected to reach 26.6% by 2040¹².

Figure 4: Transport share of Australia's total emissions, 1990-2040



Source: DCCEEW 2025. Australia's emissions projections, by sector

⁹ Australasian Railway Association (ARA), *ARA Strategic Plan 2025-2030* [PDF], 2025, p 4.
¹⁰ Australian Government, *Transport and Infrastructure Net Zero Roadmap and Action Plan* [PDF], September 2025.
¹¹ Australian Government, *Transport and Infrastructure Net Zero Roadmap and Action Plan* [PDF], September 2025, p 5.
¹² Department of Climate Change, Energy, the Environment and Water (DCCEEW), *Australia's emissions projections 2025*, November 2025.

Impact of Rising Fuel Costs

Fuel prices are spiking in Australia and around the world amid geopolitical tensions in the Middle East and disruptions to the Strait of Hormuz. The transport supply chain industries play a critical role in fuel distribution and are also directly exposed to fuel cost and availability shocks. These disruptions expose the vulnerability of Australia's fuel-dependent transport system, sharply increasing transport and logistics costs nationwide, with widespread implications for the broader economy.

Fuel represents 25–35% of operating costs for typical Australian road freight businesses.¹³ Industry stakeholders have reported that the scale of current cost increases put trucking businesses at imminent risk of collapse.¹⁴ The extreme cost pressure has significant implications for workforce stability and investment in training, particularly for small and medium-sized operators.

In the Aviation industry, flight schedules are threatened by the uncertain availability of aviation fuel. Australia generally maintains only 29–32 days of jet-fuel reserves while China, Australia's largest supplier of aviation fuel, has restricted fuel exports.¹⁵ Increases in fuel prices are having a flow-on impact on the cost of airfares and airfreight.

Maritime supply chains are being hit by soaring bunker fuel prices and emergency surcharges from major carriers as vessels reroute thousands of extra nautical miles around Hormuz, dramatically increasing voyage fuel consumption and landed freight costs.¹⁶ Rising fuel costs are making some operations unviable for the Near Coastal fleet where cost-of-living issues are also reducing demand for tourism services and high-end seafood products.

In response to industry and union requests for urgent government support¹⁷, the Australian Government amended the *Fair Work Act* to allow road transport operators to make an emergency application for a contract chain order to deal with the current spike in fuel prices.¹⁸ Further Australian Government action to address fuel cost and availability included a temporary reduction in fuel excise, changes to fuel standards, targeted release of fuel reserves, increased price monitoring¹⁹ and an expansion of on-shore fuel reserves.²⁰

Implications for workforce capability

The knock-on effects of the crisis for workforce capability building are likely to be significant. Research has shown that when Australian businesses anticipate a poor economic outlook, they plan to invest less in learning and development for their workforce.²¹ Past economic downturns have aligned with reduced investment in training by employers.

Employers faced with unsustainable operating costs understandably prioritise their financial viability and survival over workforce training. For example, in an effort to improve fuel efficiency, some transport operators are reducing vehicle loads, including passenger weight, which limits their ability to conduct in-vehicle training. However, neglecting workforce development in the face of short term cost pressures can create lasting capability gaps that undermine productivity and future operational strength.

As government and industry consider options to support Australian employers through the fuel crisis, it will be essential to recognise the importance of a capable, future-ready workforce in any response. Short-term financial pressures may tempt organisations to scale back investment in training, but doing so risks entrenching long-term capability gaps that will be costly to address later.

Ensuring that workforce development remains a core component of future initiatives is vital for safeguarding Australia's economic resilience in the face of ongoing supply chain volatility.

¹³ S Jayashinghe, *Fuel Shortage Impact on Australian Industry 2026*, Trace website, March 2026.

¹⁴ *Big Rigs*, *Trucking businesses cannot absorb these increased fuel costs*, 24 March 2026.

¹⁵ C Zappone and L Visentin, *Australia's jet fuel supply is safe for now, but a price crunch is in the pipeline*, *The Sydney Morning Herald*, 18 March 2026.

¹⁶ *The Maritime Executive*, *Hormuz Shutdown Drives Up Bunker Prices. With Broad Effects on Shipping*, 17 March 2026.

¹⁷ Queensland Trucking Association (QTA), *QTA warns soaring diesel costs will bring industry to a halt*, 18 March 2026.

¹⁸ Ministers' Media Centre, *Support for truckies across Australia*, Australian Government, 23 March 2026.

¹⁹ Prime Minister of Australia, *Fuel excise halved for three months*, Media Release, 30 March 2026.

²⁰ Prime Minister of Australia, *Government securing more fuel reserves – the Australian Fuel Security and Resilience package*, Media Release, 6 May 2026.

²¹ RMIT Online, *Ready Set Upskill – Maximising the ROI of skills and training* prepared with Deloitte Access Economics, 2024.

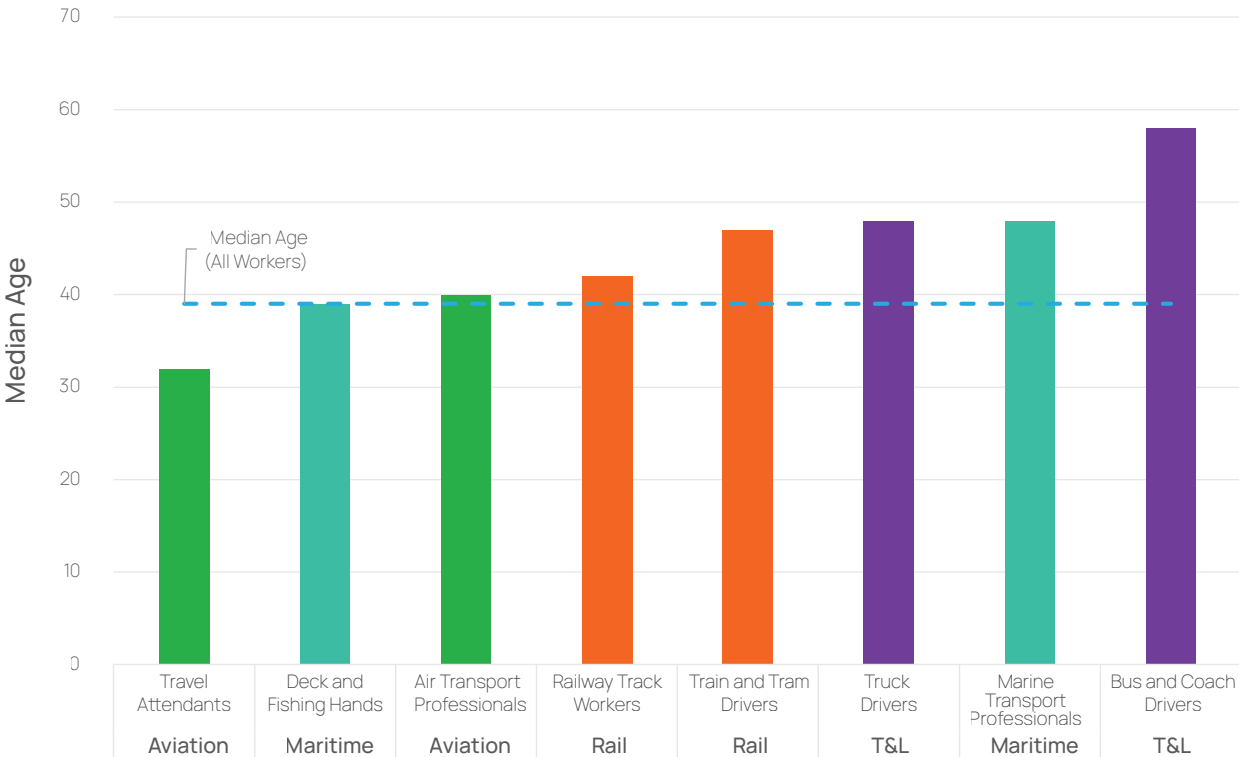


Impact of Global Megatrends

Megatrends are major long-term shifts that reshape the economy, workforce and global environment. They influence how industries operate, innovate and plan for the future. Six global megatrends are having significant and enduring impacts across industry and society.

For the transport supply chain industries, these megatrends have implications for future workforce skill requirements.

Figure 5: Median Age of Transport Occupations Compared to the National Median



Source: JSA, Occupation Profiles data

Demographic Shifts

The effect of an ageing population is most evident in road, rail and maritime occupations, where median ages far exceed that of the broader Australian workforce (**Figure 5**). These industries risk losing valuable expertise as a large proportion of the workforce approaches retirement age. Without a stable pipeline of new industry entrants, many critical occupations are in shortage across the industries (**Table 2**).

Table 2: Transport Occupations in National Shortage (2025)

Aviation	Maritime	Rail	Transport and Logistics
Aeroplane Pilot	Deck Hand	Rail Engineer	Articulated Truck Driver
Air Traffic Controller	Marine Engineer	Rail Protection Officer	Bus Driver
Air Transport Professionals nec ²²	Marine Pilot	Rail Signalling Engineer	Charter and Tour Bus Driver
Flight Instructor	Marine Technician	Railway Track Plant Operator	Crane, Hoist or Lift Operator
Helicopter Pilot	Ship's Master	Railway Track Worker	Transport Engineer
	Ship's Officer		Truck Driver (General)

Employers report that young people are entering the labour market with different expectations around career progression, mobility and workplace culture²³ and that they have little awareness of the range of transport supply chain career opportunities available.

Issues for industry

Aviation	- Limited succession planning has slowed progression for early-career workers until senior employees retire, reducing opportunities to retain younger talent. - Younger entrants to the industry do not stay long-term as they are highly mobile and are often drawn to opportunities overseas or in other industries.
Maritime	- The demanding nature of work, irregular hours and extended time away from home can deter young people from entering the industry. - Career progression pathways for highly skilled roles take a long time and are highly regulated.
Rail	- Projections indicate that up to 35% of the workforce may retire by 2035,²⁴ creating significant business risks around knowledge transfer. - Competition from other sectors, especially mining, which offers higher wages, reduces the industry's ability to replenish the ageing workforce.
Transport and Logistics	- Succession planning is a major challenge for industry operators, especially in small and medium-sized enterprises. - The rise of sham contracting in road freight operations, whereby employees are categorised as independent contractors, is changing the composition of the driving workforce and risks eroding industry standards.

To address these issues, industry will need support to:

- Raise awareness of opportunities among young people, including by leveraging community values around sustainable and meaningful jobs.
- Redesign career pathways and strengthen succession planning to attract transitioning mid-career workers, including those displaced by AI in other industries.

²² Not elsewhere classified (nec)

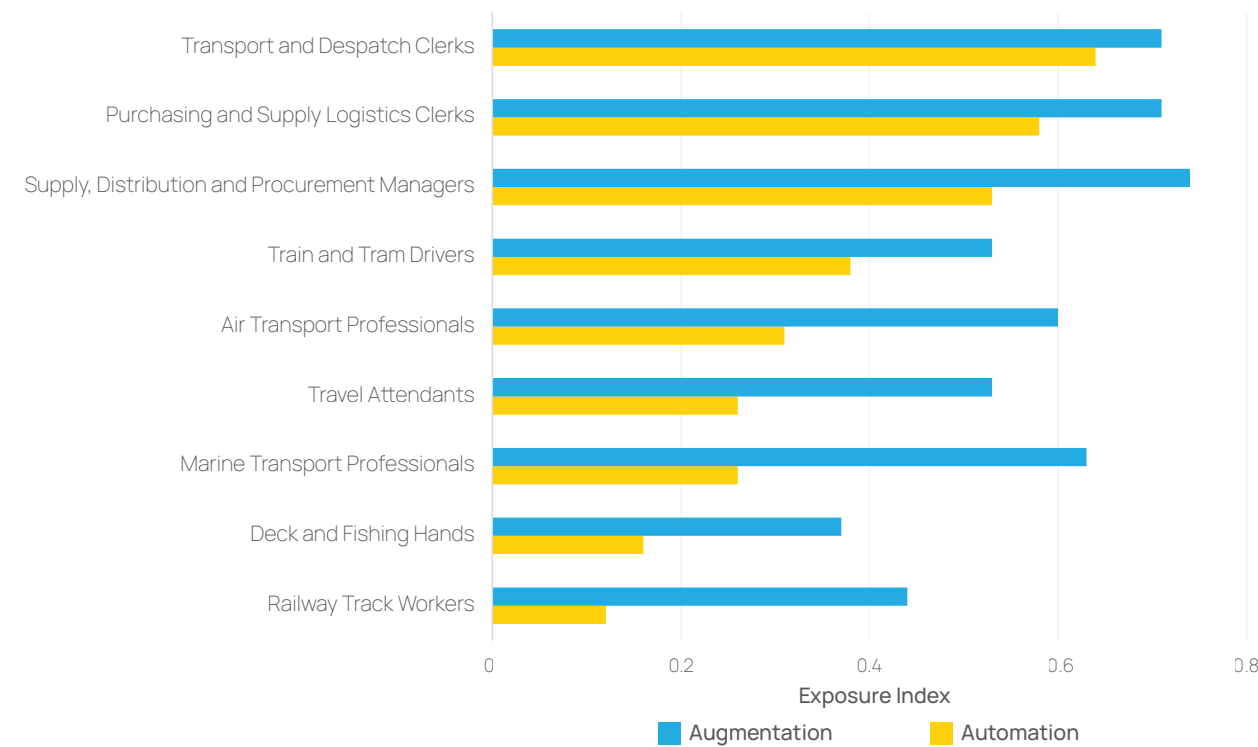
²³ Randstad, *The Gen Z Workforce Blueprint: future focused, fast moving* [PDF], 2025.

²⁴ Railway News, *Australia's Rail Workforce Crisis: A Looming Shortage*, 23 April 2025.

Technological Change

Advances in AI, automation and digital technologies are impacting job roles across the transport supply chain industries, driving productivity gains while also disrupting some traditional workforce structures. JSA's *Generative AI Capacity Study*²⁵ frames Gen AI impacts in terms of exposure, adoption and adaptation. Exposure indicates where current technology could affect tasks, while actual workforce impacts depend on organisational uptake and changes to work design. **Figure 6** shows that transport occupations are generally more exposed²⁶ to AI-enabled augmentation than automation. Consistent with the report's broader findings, this suggests Gen AI is more likely to enhance productivity and support task redesign than drive widespread job replacement, with automation risk remaining highest in more routine clerical and administrative work.

Figure 6: Augmentation and Automation Exposure in Transport Roles



Source: JSA, *Generative AI Capacity Study*

Technological change will increase employer demand for workers who have the digital proficiency to operate, manage and collaborate with intelligent and autonomous systems. However, the pace of uptake is uneven across industry sub-sectors and organisations, adding complexity to requirements for targeted upskilling and transition planning.

The widespread adoption of new technologies may also disproportionately affect underrepresented cohorts. Many of the occupations most exposed to AI augmentation and automation, such as administrative and customer-facing positions, are more likely to be filled by women and other underrepresented groups.

²⁵ JSA, *Our Gen AI Transition: Exposures, Adaptation, Dynamism*, 2 September 2025.

²⁶ Note: JSA exposure scores estimate the potential for Gen AI to augment or automate tasks in each occupation. They reflect technical potential rather than actual adoption or employment effects.

Issues for industry

Aviation	- As automated systems are introduced for baggage and ramp operations, ground handlers will increasingly be required to interact with robotic equipment and intelligent systems. - Regulatory settings and infrastructure for airspace management are evolving to support the rapid growth in uncrewed and autonomous systems.
Maritime	- Remote vessel operation is emerging in small and specialised segments of the Maritime industry, creating new skill requirements for workers who monitor and control these vessels from shore. - The introduction of new technologies requires ongoing review and refinement of regulatory settings to support safe and efficient implementation.
Rail	- The introduction of new technologies highlights the need to build foundational skills to prepare workers for the introduction of digital train control, intelligent transport systems and decarbonisation technologies. - Mid-career workers in other industries who are displaced by technological change may transition into rail if supported pathways are available.
Transport and Logistics	- While some transport and logistics operators are modernising through AI-driven systems, predictive analytics and automated decision-making, the adoption of these technological tools is uneven, with smaller and regional operators sometimes less equipped for the transition. - Increased automation in warehousing and stevedoring is shifting workforce composition from manual roles to technical and supervisory positions, requiring retraining and role redesign.

To address these issues, industry will need support to:

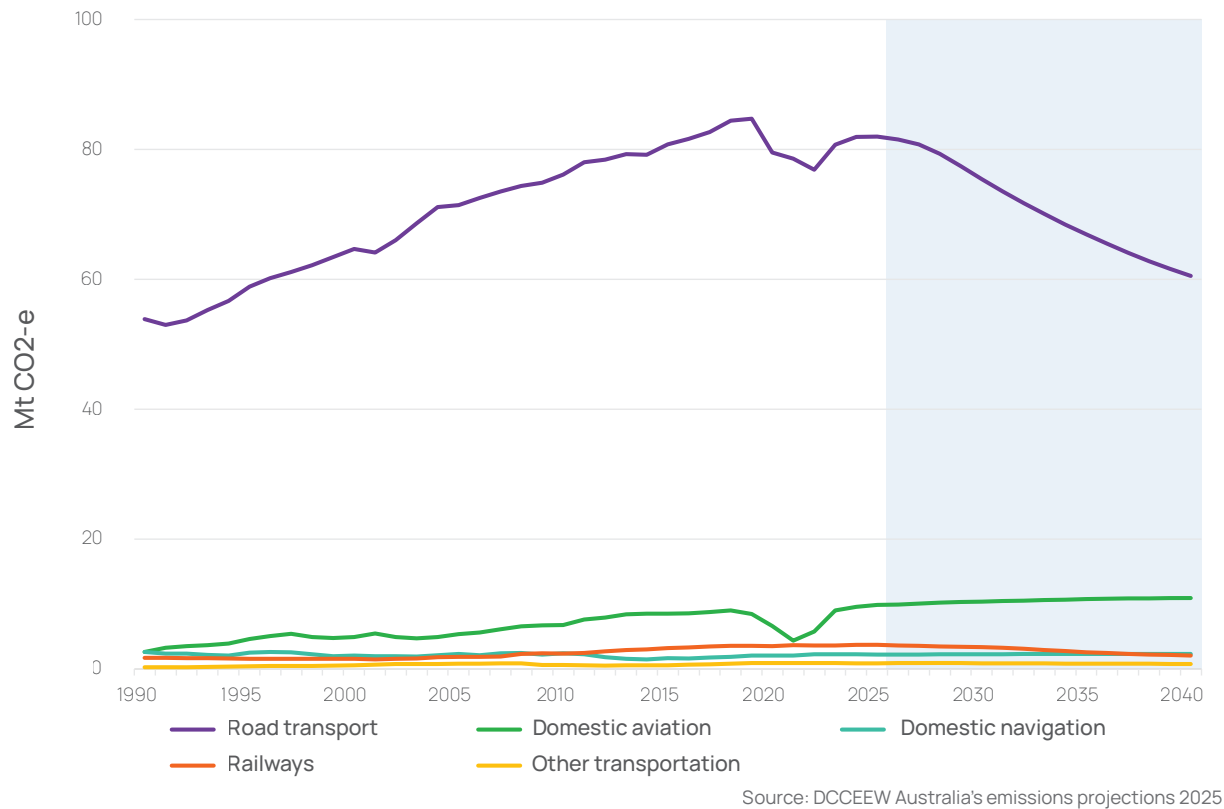
- Conduct targeted upskilling to build digital proficiency in the workforce.
- Align transition planning and capability building to regulatory change to harness emerging technologies safely and effectively.



Energy Transition

Australia's uneven transition to low-carbon energy systems has been thrown into sharp relief by the current disruption to global oil supplies. While a shift to alternative fuels and electrification will transform the transport supply chain industries, the pace of transition is uneven and hampered by capital constraints, regulatory uncertainty and varied technological readiness. Road transport remains the dominant source of transport emissions (Figure 7), rising steadily through the 2000s and projected by the Department of Climate Change, Energy, the Environment and Water (DCCEEW)²⁷ to decline only gradually after the mid-2020s, underscoring the scale of the task facing vehicle electrification and fuel switching. Aviation emissions rebounded sharply following the COVID-19 shock and continue to grow through 2040, reflecting limited near-term substitutes for liquid fuels. By contrast, rail, domestic navigation and other transport modes contribute a relatively small and largely stable share of emissions.

Figure 7: Transport emissions, 1990 to 2040



The Australian Government's *Transport and Infrastructure Net Zero Roadmap and Action Plan*²⁸ provides insights into the collaborative action that will be required to build a resilient workforce to support the transition to net zero.

²⁷ DCCEEW, [Australia's emissions projections 2025](#), Australian Government, November 2025.
²⁸ Australian Government, [Transport and Infrastructure Net Zero Roadmap and Action Plan](#) [PDF], September 2025.

Issues for industry

Aviation	- Aviation workers will need new technical skills to safely support the commercial introduction of hydrogen-powered aircraft. - Increased use of sustainable aviation fuel (SAF) will require specialised skills in refining, fuel quality assurance, logistics and airport fuel-handling operations.
Maritime	- The International Maritime Organization is advancing two sets of interim training guidelines for seafarers using alternative fuels. - Energy transition in the Australian industry is constrained by uncertainty around available bunkering infrastructure for alternative fuels.
Rail	- Although some private operators have acquired battery-electric locomotives, many freight operators lack the capital needed to transition away from diesel in the short term. - There is growing recognition that increasing rail's share of national freight movements will aid Australia's net zero goals by shifting demand away from higher-emissions transport modes.
Transport and Logistics	- Freight and passenger operators are beginning to adopt electric vehicles and low-carbon fuel but alternative energy sources are not yet viable for all vehicle types and operational contexts. - Uptake will progress more slowly in regional areas due to the need for charging and refuelling infrastructure.

To address these issues, industry will need support to:

- Update safety and training frameworks to accommodate increasing demand for new technical skills.
- Undertake agile workforce planning to safely adopt new energy systems while maintaining operational continuity.



Climate Impacts

As extreme weather events such as heatwaves, floods, storms and wildfires become more frequent and severe, they will put additional stress on the infrastructure and operations of the transport supply chain industries. According to the Australian Climate Service, transport and supply chain infrastructure are at significant risk from climate change, with regional and remote communities particularly vulnerable because of their reliance on long, sparse transport networks and limited alternative modes of supply²⁹.

Issues for industry

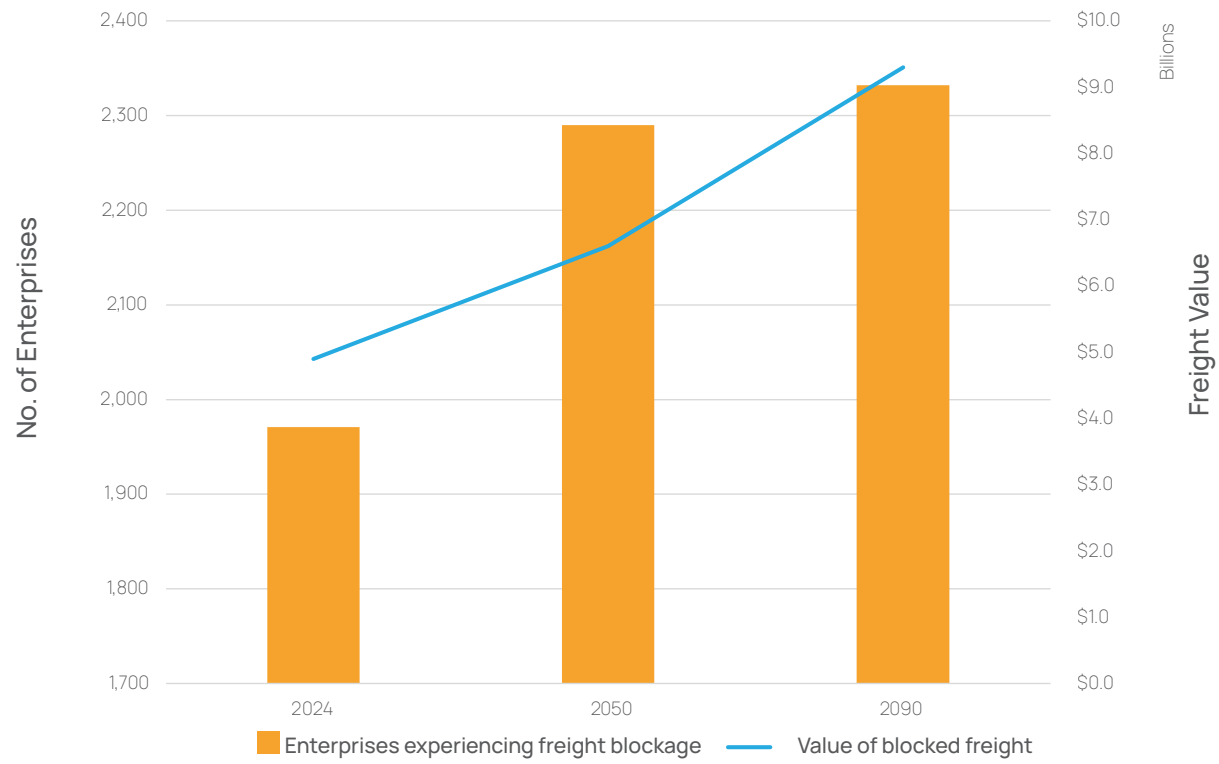
Aviation	• Extreme weather disrupts airport operations, damages infrastructure and increases the need for workforce resilience in responding to operational and safety risks. • When community connectivity is impacted by extreme weather events, aviation services are needed to respond to restore essential supplies and support recovery efforts.
Maritime	• Seafarers already face serious harm from severe weather. With more extreme storms, they face the prospect of even more challenging working conditions. • Rising seas and more intense cyclones will accelerate infrastructure deterioration in northern Australia, increasing demand for workers with skills in recovery, maintenance and resilience-planning.
Rail	• Extreme weather damages rail infrastructure and disrupts freight and passenger operations, especially in regional and remote networks that are highly exposed to severe heat and flooding events. • Resilience planning will be essential for maintaining rail network performance and community access following major weather events.
Transport and Logistics	• Climate impacts disrupt logistics, scheduling and route planning, with remote First Nations communities disproportionately affected due to limited storage, isolation and few alternative routes. • Skills in emergency freight management and heat impact mitigation will be needed as floods, fires and heatwaves become more common.

To address these issues, industry will need support to:

- Upskill workers in heat-impact mitigation, emergency freight management, recovery operations and adaptive planning.
- Build recognition for the transport supply chain industries' critical role in national preparedness, response and recovery during climate-related events.

An illustrative CSIRO case study (Figure 8) based on the October 2022 NSW-Victoria floods highlights how more severe future flood scenarios could intensify transport disruption, increasing blocked freight, detour costs and the risk of interrupted food and fuel supplies.³⁰

Figure 8: Enterprises and Freight Value Affected by Climate Risk in Northern Victoria



Source: ACS, Supply Chains Technical Report



²⁹ Australian Climate Service, [Systems - Infrastructure](#).

³⁰ Australian Climate Service, [Supply Chains Technical Report](#)

Geopolitical Instability

International conflict, trade tensions and political volatility are creating widespread uncertainty across the transport supply chain by disrupting global supply routes, weakening market confidence and affecting investment and planning horizons. These pressures create operational risk, threaten profitability and force industries to adapt rapidly to shifting markets.

Issues for industry

Aviation	• Conflict zones and unstable regions force long haul carriers to reroute, increasing flight times, operational costs and commercial complexity while reducing passenger demand. • Disruption to global supply chains impacts the cost and availability of aviation fuel and critical technology and components, undermining long-term planning and investment.
Maritime	• Geopolitical instability poses serious risks to maritime supply chains, strengthening the need for a sovereign strategic fleet to sustain national resilience. • Workforce shortages in the Defence sector may draw recruits from maritime occupations in times of instability, exacerbating existing skill shortages in the maritime industry.
Rail	• Instability increases unpredictability around long-term asset investment and operations, complicating workforce and infrastructure planning. • Disruption in adjacent industries may impact demand for rail services.
Transport and Logistics	• Volatile global conditions may force supply chains to reroute or diversify, creating immediate resourcing pressures that can disrupt workforce development and require rapid workforce expansion or reskilling in regional ports and intermodal hubs. • Organisations face increased demand for logistics planners and workers with strong strategic, modelling and leadership skills as they respond to rapid shifts in global market and supply chain conditions.

To address these issues, industry will need support to:

- Create cross-sector career pathways that enable workforce mobility in times of need.
- Build workforce adaptability and organisational capability in scenario modelling and strategic logistics planning.

Infrastructure Demand

Growing population pressures, urban expansion and the shift towards renewable energy are creating sustained demand for new and upgraded infrastructure across Australia, placing significant pressure on transport supply chain industries. Competing infrastructure priorities in transport, energy, housing and digital networks are intensifying funding constraints, limiting land availability and challenging workforce capacity.

Issues for industry

Aviation	• Urban infrastructure development restricts access to airspace and limits the ability of airports and flight schools to expand, forcing relocations and constraining operations. • Inequitable distribution of infrastructure costs at regional, rural and remote airports can compromise viability and long-term security of tenure for General Aviation operators.
Maritime	• Australian ports will require upgraded power systems capable of supporting larger vessels and alternative fuel technologies, including the provision of green shore power. • In Northern Australia, new or upgraded floating and fixed assets are required to support defence and border force operations for national security.
Rail	• Rail infrastructure investments are occurring multiple jurisdictions, creating a constantly shifting pipeline of work and intensifying competition for skilled labour. • Growth in the rail freight task exposes gaps in heavy-haulage infrastructure and long-term operations and maintenance funding, challenging industry sustainability and safety.
Transport and Logistics	• The development of renewable-energy zones and large-scale infrastructure projects increase demand for specialised logistics skills to safely transport oversize/overmass (OSOM) components. • Inadequate regional freight routes complicate OSOM movements, highlighting the need for workforce capability in route assessment.

To address these issues, industry will need support to:

- Anticipate workforce planning and capability-building requirements that align with planned infrastructure developments.
- Understand the intersections and overlaps between industry sectors involved in infrastructure development, operation and maintenance, to ensure that workforce capability is shared and leveraged to deliver nationally beneficial outcomes.

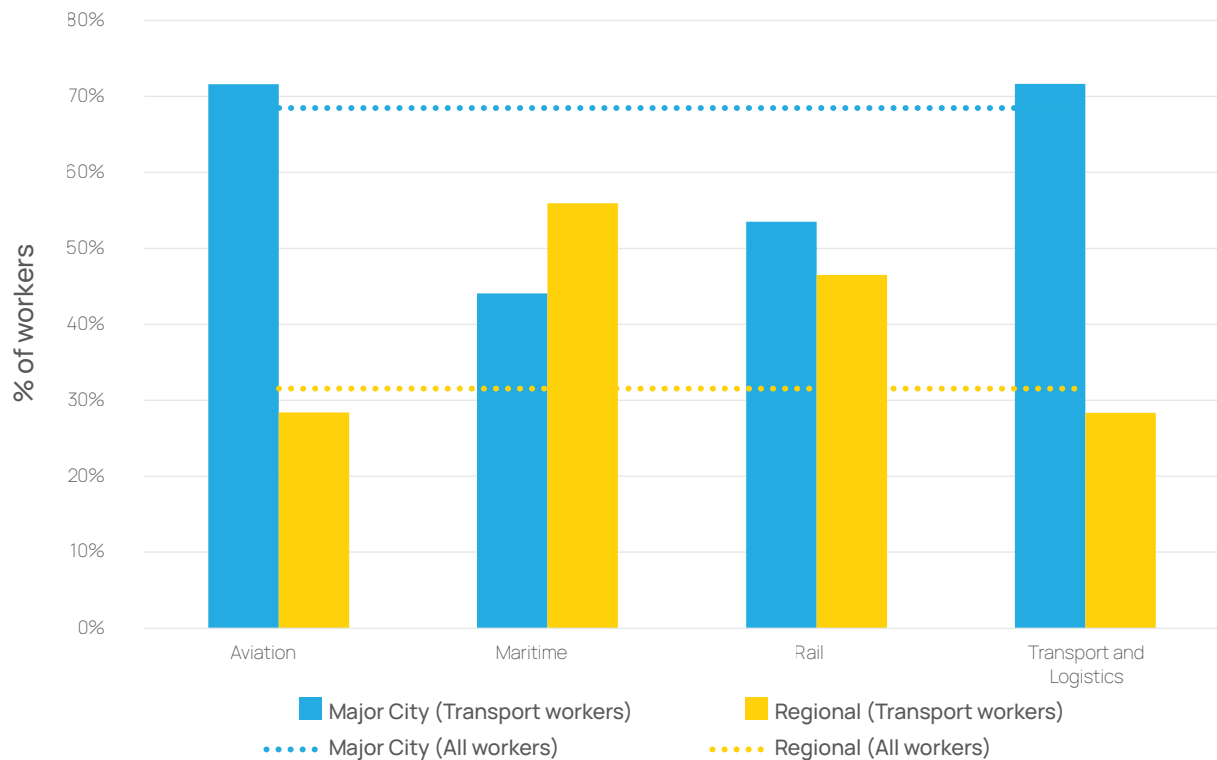


Regional Workforce Issues

Regional Australia covers 99% of the geographic area of the country³¹ and is now home to 10 million people, including 30% of Australia's total working age population.³² The transport supply chain industries are critical to the vitality and viability of Australia's regions, providing essential services for regionally based businesses and populations.

Transport supply chain operations are also significant regional employers (**Figure 9**) with both maritime and rail significantly exceeding the national average. However, employers in regional Australia face numerous challenges in attracting and retaining a skilled workforce.

Figure 9: Transport Workers vs All Workers by Location



Source: JSA, NERO for Regional and Northern Australia

³¹ JSA, *Jobs and Skills Roadmap for Regional Australia – Phase 1*, Australian Government, 3 July 2025.

³² Regional Australia Institute, *Ten million Australians now call the regions home as growth continues*, RAI website, 7 April 2026.

Limited labour pools and strong competition for workers impact the availability of potential employees for transport supply chain operators in regional areas. The ageing of the workforce is more pronounced in many regional areas while investment in regional infrastructure, such as offshore wind and vessel construction, is increasing competition for workers.

Housing, services and community infrastructure constraints limit employers' ability to attract and retain workers in regional areas. Acute housing shortages, limited childcare, unreliable digital connectivity and poor access to healthcare deter potential workers from relocating to regional areas.

Training access, availability and quality barriers mean that regionally based employers and workers often do not have local options for skill development. Employers and individuals must absorb the cost of travel and accommodation for in-person training, while the quality of online training does not always meet employer requirements. RTO viability is an issue in regional areas due to thin markets, long distances that trainers need to cover and difficulty finding suitably qualified trainers.



Regional Australia is not a single labour market, but a group of diverse local communities and regions that each have their own challenges and opportunities. While some issues are shared or cross-cutting, many issues require tailoring to the needs of local communities.'

Professor Jeff Borland³³

Jobs and Skills Australia (JSA) has released *Jobs and Skills Roadmap for Regional Australia*, which aims to improve the equity, effectiveness and efficiency of the regional jobs and skills system. The Roadmap introduces metrics and indicators to assess system performance and outlines 10 policy design principles to guide improvement. In 2026, JSA is progressing this work in partnership with states and territories. Strengthening the regional jobs and skills system through coordinated, strategic action has the potential to support transport supply chain employers by building regional workforce capability and improving access to training in regional areas.

³³ JSA, *Jobs and Skills Roadmap for Regional Australia – Phase 1*, Australian Government, 3 July 2025.

Industry Priorities

The 2026 Workforce Planning Updates for Aviation, Maritime, Rail and Transport and Logistics report on progress to address industry priorities and respond directly to workforce challenges and drivers that were identified in the 2025 Workforce Plans. The Updates highlight initiatives led by ISA and industry partners to support the development of an agile, productive and future-ready transport supply chain workforce.

Collaborative action is addressing priorities that are critical across the transport supply chain industries. Cross-sectoral projects are under way to address three shared priorities:

- 1 Access to a Skilled Workforce
- 2 Availability of training
- 3 Preparedness for change

Industry-specific actions to address these priorities are detailed in the 2026 Workforce Planning Updates.

In addition to the three shared priorities, the Aviation, Maritime, Rail and Transport and Logistics industries have distinct workforce needs shaped by their own regulatory environment, niche and emerging sectors, and specific operational challenges. These industry-specific pressures, from highly regulated training and licensing requirements to the demands of specialised technical roles, create unique workforce requirements that cannot be met through a one-size-fits-all approach.

The 2026 Workforce Planning Updates detail activities and initiatives that address industry-specific priorities:

-  **Capability for Uncrewed Systems**
-  **Co-ordinated National Response**
-  **National Interoperability**
-  **Skills for Specialist Roles**



1

Access to a Skilled Workforce

Across the transport supply chain industries, issues with accessing a skilled workforce are resulting in occupational shortages. The transport supply chain industries have an ageing workforce and are losing experienced workers faster than they can be replaced. Employers report that young people have limited awareness of the breadth of career opportunities available and are entering the labour market with different expectations around mobility and progression.

Structural barriers also deter new entrants or slow their progression, including unclear or lengthy career pathways, licensing requirements and uneven access to apprenticeships and traineeships. Workforce diversity remains limited, with gender imbalance and the underrepresentation of some cohorts contributing to persistent shortages across priority occupations.

ISA is working with industry stakeholders on cross-industry and industry-specific initiatives to strengthen the skills pipeline.

Cross-industry initiatives

Improving Career Information

Working in collaboration with relevant partners, ISA will lead a campaign to redefine the image of the transport supply chain as a vital sector that underpins Australia's economic prosperity and quality of life. By promoting the benefits of working in the sector, the campaign aims to support long-term workforce growth and retention. This project will seek to leverage existing workforce development initiatives where appropriate.



Increasing Diversity across Transport Supply Chain Industries

This project is building a comprehensive understanding of the current diversity and inclusion landscape across the transport supply chain industries to inform scalable solutions in a second phase. It responds to fragmented diversity and inclusion efforts and the persistent underrepresentation of women, First Nations peoples, culturally and linguistically diverse (CALD) communities, neurodiverse individuals and people with disabilities. By analysing demographics, reviewing existing initiatives, mapping gaps, and consolidating tools and resources, the project will deliver an environmental scan and recommendations that support a more inclusive, resilient and future-focused workforce.



Skilled Migration

This activity will examine existing skilled migration pathways and policy settings for transport supply chain occupations to assess how well they meet the current and emerging skill needs of industry. The work will involve analysis of available data and targeted consultation with industry, unions and government stakeholders. It will consider issues raised by stakeholders, including the responsiveness and cost of existing processes, and the extent to which current settings ensure that migrant workers have the skills, experience, and safety awareness required to perform effectively in Australian workplaces.



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Collaboration Creates Pathways

ISA works with stakeholders to support VETiS in Tasmania



Tasmania is experiencing a major skills gap across transport and logistics, with shortages in driving, warehousing, fleet operations and diesel fitting. Despite this challenge, school-based pathways were not available to prepare young people for careers in the industry. Attempts to introduce VET in Schools (VETiS) for transport and logistics were at an impasse: schools lacked resources, industry was willing but unsure how to engage, and students had limited awareness of their career opportunities. The problem seemed intractable: awareness without a pathway, and pathways without student interest.

The turning point came when ISA and the Tasmanian Transport Association (TTA) partnered to address the identified issues. Together, ISA and TTA worked with the Department for Education, Children and Young People (DECYP) RTO and a workforce development contractor to align the missing pieces.



ISA has really helped with ongoing support and engagement to develop resources in the schools... that piece has always been missing. So, ISA's involvement – that's made a real difference."

Damian Peirce, TTA Workforce Project Consultant from DPCTas

ISA's coordination enabled progress by:

- Working with stakeholders and TTA members to identify 14 suitable Units of Competency.
- Working directly with the DECYP RTO to develop learning and assessment resources.
- Supporting industry engagement and validation processes.
- Helping to establish a pathway based on the Certificate II in Supply Chain Operations, a broad Transport and Logistics qualification that connects into multiple transport-related occupations.
- Contributing to the development of career awareness tools to support consistent engagement with schools.

The collaborative effort was designed to overcome past challenges, including:

- Low student interest due to poor awareness and misconceptions about transport career pathways and jobs.
- School constraints, including competing pathways and fears about safety, licensing and risk.
- Timing pressures in the school year, as qualifications must be approved before subject selection periods (April–August).
- Ongoing requirements to rebuild trust and understanding as school and department staff rotate roles.

Early outcomes are strong, with two schools committed to delivery of the qualification and a further 10 in exploratory conversations. Training resources are completed and undergoing industry validation. Following the validation process, the resources will support the RTO's application to ASQA for an addition to its scope of registration.

ISA's role in aligning stakeholders, managing timelines against school selection cycles, and clarifying perceived risks has been critical.



In the past, we've had the school on board, but no student interest. We've had industry on board, but no schools. And even if we had achieved those three points on the triangle, we've never had the learning and assessment resources. We haven't had a coordinated career-awareness approach, which is now under way through the TTA's Drive Your Career campaign, so those things are now all coming together, which makes a real difference."

Damian Peirce, TTA Workforce Project Consultant from DPCTas

TTA's strong connections with transport and logistics employers will be essential to the success of this pilot and future programs. Employer involvement will help to secure work experience placements and potential job opportunities for students, providing an immersion program that exposes students first-hand to transport careers.

Through the project, ISA found Tasmania to be an ideal environment to pilot new skilling initiatives. Features that enable rapid project progress when coordination is aligned include:

- small population and close-knit networks making it easy to convene stakeholders
- clearly identified workforce shortages
- limited competition for new pathways
- proximity between schools and industry
- strong existing relationships between stakeholders.

Industry Skills Australia

TTA
Tasmanian Transport Association

2027 Tasmanian Transport & Logistics VET in Schools program

An exciting opportunity in 2027 is now available for secondary students based in Tasmania to kick off a career in Transport & Logistics (T&L)

The first of its kind in Tasmania, the program provides students with an opportunity to acquire a Certificate II in Supply Chain Operations. Students will undertake classroom-based learning and gain practical work experience through placements at workplaces in the region.

The 14 Units of Competency that make up the Certificate II in Supply Chain Operations are:

• Participate in basic workplace communication • Ensure the safety of transport activities (Chain of Responsibility) • Follow work health and safety procedures • Complete workplace induction procedures • Identify the roles and functions of the supply chain industry • Carry out basic workplace calculations • Participate in stocktakes	• Pick and process orders • Receive goods • Provide First Aid • Shift materials safely using manual handling methods • Process workplace documentation • Work effectively with others in a team • Apply quality procedure
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Speak with your Grade Coordinator for further information.

Key stakeholders involved in the program include:
Industry Skills Australia, Tasmanian Transport Association,
Department for Education, Children and Young People, local schools
and various Tasmanian T&L companies

Training availability across the transport supply chain industries is constrained by high training costs, limited subsidies and inconsistent training quality. The availability of training is also uneven across regions, with many employers in regional and remote areas lacking access to training providers or suitable delivery options. The challenge is compounded by a shortage of qualified trainers, which limits the capacity of RTOs to offer high-quality and timely training. These barriers reduce employers' ability to attract, develop and retain a skilled workforce.

ISA is working with industry stakeholders on cross-industry and industry-specific initiatives to ensure that training meets industry requirements.

Cross-industry initiatives

VET Workforce Project

The aim of this project is to grow and support a secure and sustainable VET workforce. Stream 1 investigated, identified and validated VET workforce challenges and issues. In Stream 2, ISA explored industry-led responses by collaborating with stakeholders across aviation, maritime, rail and transport and logistics to develop resources and identify practical pathways to attract, develop and retain a diverse and capable VET workforce. In Stream 3, promising initiatives were developed and piloted. ISA will share outcomes and key insights from the project with the transport supply chain industries through ongoing engagement.



Improving Regional Training Delivery

ISA will explore and develop strategies to address the limited access to training in regional areas, including how these considerations can be incorporated into other projects to improve training implementation.



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Training Outcomes Monitoring Framework

In this project, the JSC will design, test and establish a Training Outcomes Monitoring Framework to track learner, employer, RTO and training product outcomes delivered by the national VET system. The project will strengthen evidence-based continuous improvement by identifying low uptake products, delivery quality issues and examples of best practice. Key outcomes include improved training responsiveness, stronger employer and learner insights, and an embedded training outcome monitoring function.



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New Resource

ISA Trainer ToolBox

This new online learning hub provides free professional development for transport supply chain trainers and assessors. The Trainer ToolBox is a pilot initiative that includes interactive training modules, video seminars and a live forum community of practice.



The transport supply chain industries are undergoing significant transformation as the shift towards decarbonisation and net zero coincides with rapid advances in automation and digital systems. The changes are expected to reshape job roles and increase the need for workers with strong technical and digital capability.

ISA is working with industry stakeholders on cross-industry and industry-specific initiatives to identify and address future skill requirements.

Cross-industry initiatives

Digital Skills

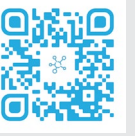
ISA is analysing the digital skills required across Australia's transport supply chain to support and strengthen workforce capability. Using the international DigComp framework, the project will develop Digital Occupational Profiles for key roles in aviation, maritime, rail, and transport and logistics. These profiles will define the digital knowledge, skills and proficiency levels required for workers to support their readiness in an increasingly digital operating environment. The profiles will also inform a strategic review of training packages by identifying skills gaps and reskilling needs that reflect these evolving job roles and digital skill requirements.



Technology Futures Taskforce Phase 2 – Occupational Analysis

The Technology Futures Taskforce (TFT) will pilot a methodology to identify new and emerging technologies set to reshape key transport supply chain occupations and the training products that support them. It will combine AI analysis with expert insights from industry to validate the findings and anchor them into the Australian context.

This phase will focus on four transport supply chain occupations undergoing significant technological change. It will deliver occupation reports, map affected training products, estimate the technology adoption rate and develop a scalable Technology Trend Radar. Together, these outputs will strengthen workforce readiness, guide upskilling and reskilling, and enable training packages to anticipate future skills needs.



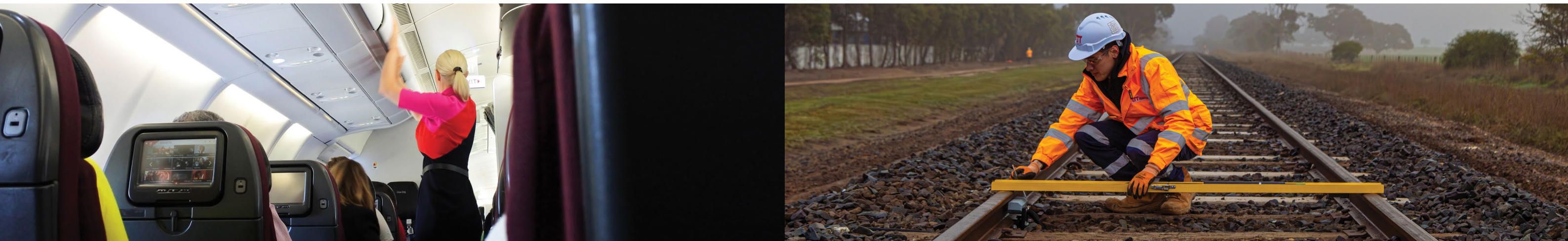
Technology Futures Taskforce Phase 2 – Geographical Analysis

This TFT activity will expand the methodology by piloting it at the geographic level, focusing on a high-growth investment in the Western Sydney Aerotropolis. The project will examine how emerging technologies are likely to be adopted across the local ecosystem, and the subsequent impacts on workforce demand, occupational profiles, and skills requirements across the transport supply chain.

It will deliver a comprehensive workforce report, map impacted training products, model workforce impacts and timelines, and analyse portable skills from adjacent occupations to identify pathways. Together, these outputs will strengthen workforce readiness, guide upskilling and reskilling, and enable training packages to anticipate future skill needs.

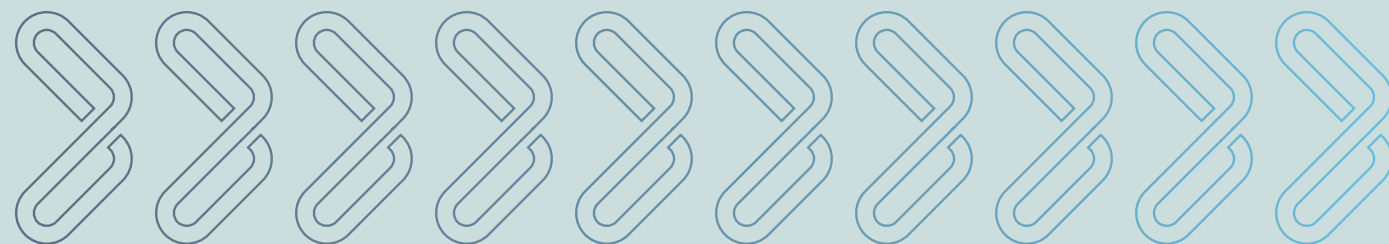


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Technology Futures Taskforce

Building an early warning system for technology-driven skills change



Australia is undergoing a period of accelerated digital transformation, with new and emerging technologies reshaping work faster than ever before. To ensure the nation leaves no worker behind, new approaches are needed to understand how technology will alter jobs, skills and training. Australia must strengthen its ability to anticipate workforce change, not simply respond to it.

The **Technology Futures Taskforce** (TFT) identifies new and emerging technologies that will reshape key transport supply chain occupations and potentially create significant demand for upskilling or reskilling.

In partnership with CSIRO's Data61, ISA developed and successfully piloted a methodology for the TFT that uses generative AI and expert insights to forecast the impact of new and emerging technologies across the Aviation, Maritime, Rail, and Transport and Logistics industries.

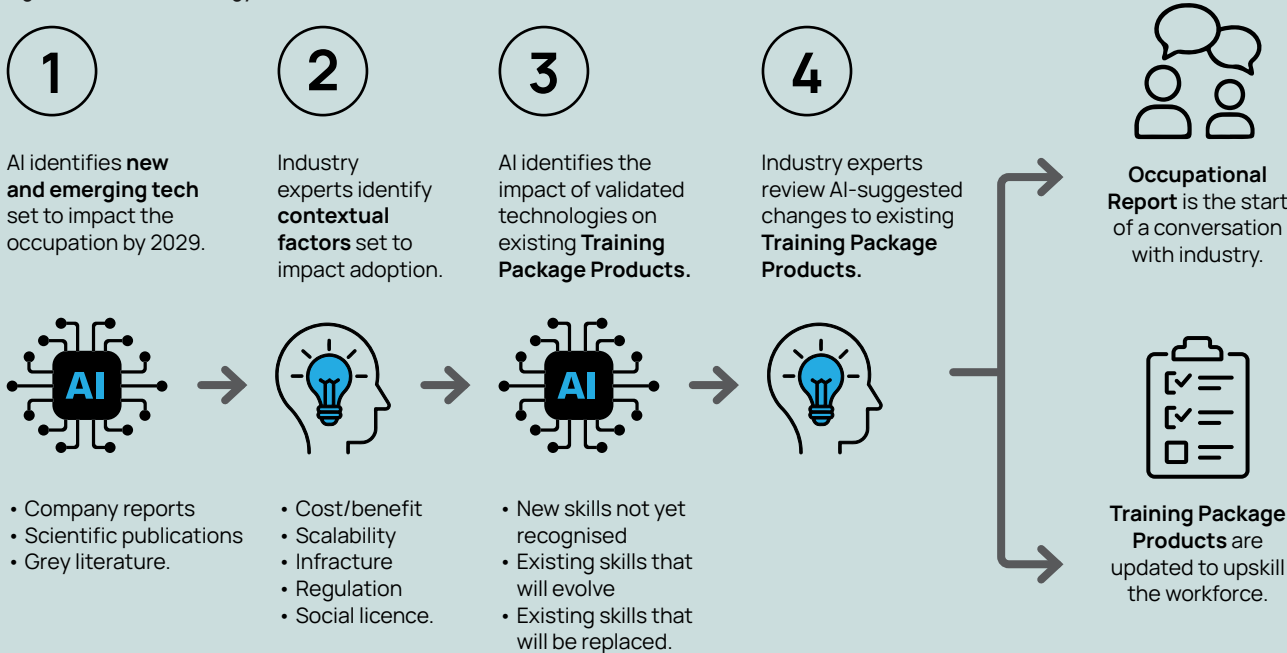
Four occupations were selected for the pilot: Truck Drivers, Train Drivers, Ship's Masters, Baggage Handlers and Ground Crew.

At the heart of the TFT methodology is the combination of:

- **AI Analysis** – AI is used to search and rapidly review large volumes of data, including global research, company reports and the national endorsed training packages.
- **Expert Validation** – Interviews with industry experts help validate, refine and contextualise the findings within an Australian context.



Figure 10: TFT Methodology



The TFT can act as an early warning system for:

- **Employers** – Help employers understand the likely implications for upskilling and reskilling the existing workforce in advance of new technology adoption.
- **Employees** – Help employees understand the skills they are likely to need as their occupations evolve and thereby strengthen their value in the workplace and job market.
- **National Skills System** – Ensure the nationally endorsed Aviation (AVI), Maritime (MAR) and Transport and Logistics (TLI) training packages anticipate the skills required for new and emerging technologies and, as a result, support the national skills system's ability to build a highly productive and globally competitive workforce.

Next steps

Phase 2 of the TFT will build on the methodology developed in the pilot. It aims to achieve proof of concept by stress-testing the approach through a focus on a set of transport supply chain occupations that are subject to significant technological change. This work will raise industry awareness of emerging change and enable training packages to better anticipate future skill needs.

Find out more - [Technology Task Force Pilot – Occupational Analysis](#)

Benefits of the TFT methodology

- **Faster, broader research**
The use of AI within the methodology will significantly expand the scope of research and allow ISA to scan technology trends, both locally and globally, much more quickly than traditional methods.
- **Deepening industry engagement**
Combining AI insights with industry expertise will enable more targeted and meaningful discussions with industry experts to support relevant and contextualised findings.
- **Strengthening the 'future of work' conversations**
The Occupation Reports will help industry start meaningful conversations about workforce readiness ahead of technological change.
- **More agile training product development**
Earlier visibility of technology trends will enable faster, more targeted updates to training packages. This will support workers to adapt ahead of change while complementing existing consultation processes.

Explanatory Notes to Data

When analysing the workforce and industry data in Australia, two classifications are commonly used: ANZSCO/OSCA and ANZSIC.

- ANZSCO (Australian and New Zealand Standard Classification of Occupations) or OSCA (Occupation Standard Classification for Australia) categorises occupations based on skill level and specialisation
- While OSCA replaced ANZSCO for use in Australia in December 2024, the underlying data (such as the Labour Force Survey, or the Occupational Shortage List) are yet to be updated.
- ANZSIC (Australian and New Zealand Standard Industrial Classification) classifies businesses into industry sectors. This groups companies based on the primary activities they are engaged in.

In simple terms, ANZSCO/OSCA is about what people do in their jobs, and ANZSIC is about the industry or sector where businesses operate. They are used for different purposes and are not directly comparable.

In this document, we use the term 'Workers' when referring to occupational data (ANZSCO/OSCA) and industry 'Workforce' when referring to industrial data (ANZSIC).

Occupational Shortage vs Skills Shortage

In this document, we distinguish between occupational shortages and skills shortages.

- Occupational shortage: This occurs when employers struggle to fill vacancies for a specific occupation or can't find employees with specialised skills needed in that occupation. Essentially, there aren't enough qualified people available to do the job.
- Skills shortage: This refers to a situation where the existing workforce does not possess the right skills to meet the demands of their sector or occupation. It's not about the number of employees, but about the quality or suitability of their skills.

Business Count

In the Counts of Australian Businesses data, industries are classified by the main industry linked to a business ABN. This method has limitations. Firstly, businesses operating in several States/Territories are counted only once, making enterprise figures appear low in some areas. This does not mean that there are no enterprises in those regions; rather, that their headquarters are located elsewhere. Secondly, if an organisation operates in multiple industries, it is only counted in one, leading to potential inaccuracies in industry classification.

Training Data

Total VET Activity (TVA) data is collected from all types of RTOs and not only those in receipt of Commonwealth or state funding.

Sources for infographics

Data	Source
Commercial vehicles on Australian roads in 2025	BITRE, Road Vehicles, Australia, January 2025
Ferry passenger trips in 2024–25 (capital cities)	BITRE, Yearbook 2025
Passengers on domestic commercial flights	BITRE, Domestic Aviation Activity 2024–25
Rail passenger journeys in 2023–2024	BITRE, Trainline 12
Transport Supply Chain workers in regional areas (2025)	JSA, NERO for Regional and Northern Australia
Workers in Transport Supply Chain roles (2025)	JSA, Employment Projections 2025
Business No	ABS, Counts of Australian Businesses 2025
Domestic freight task growth (2026–2050)	BITRE, Australian aggregate freight forecasts – 2022 update
Freight import/export value (2025)	DITRDCA, National Freight Data Hub, Imports and exports dashboard
GDP contribution \$b 2024–2025 Estimated annual revenue \$b 2024–2025	IBISWorld Industry Wizard
Operational intermodal sites (2026)	DITRDCA, National Freight Data Hub, Australian Intermodal Terminals
Emissions intensity by freight mode (g CO ₂ -e per tonne-km)	Smit & Boulter, Impacts of mode shift on well-to-wheel emissions from inter-capital transport in Australia – Part II: Sea and air transport, 2024
Transport's share of Australia's emissions (2026) Transport's share of Australia's emissions (2040) Transport emissions reduction 2026–2040	DCCEEW, Australia's emissions projections, by sector
Days of stocks at normal rate of consumption	DCCEEW, Minimum Stockholding Obligation (24 March 2026)

Abbreviation List

AAM	Advanced Air Mobility
AI	Artificial intelligence
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
ARA	Australasian Railway Association
AVI	Aviation Training Package
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DECYP	Department for Education, Children and Young People (Tasmania)
DITRDCA	Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts
FIFO	Fly-in-fly-out
ISA	Industry Skills Australia
JSA	Jobs and Skills Australia
JSC	Jobs and Skills Council
LAME	Licensed Aircraft Maintenance Engineers
LCLF	Low carbon liquid fuel
MAR	Maritime Training Package
OSCA	Occupation Standard Classification for Australia
OSL	Occupation Shortage List
OSOM	Oversize/Overmass
QTA	Queensland Trucking Association
RePL	Remote Pilot Licence
RPAS	Remote Pilot Aircraft Systems
RTO	Registered Training Organisation
SAF	Sustainable Aviation Fuels
SWPC	Strategic Workforce Planning Committee
TFT	Technology Futures Taskforce
TLI	Transport and Logistics Industry Training Package
TTA	Tasmanian Transport Association
VET	Vocational Education and Training
VETiS	VET in Schools
VR	Virtual Reality



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