



Industry Skills
Australia

VET Workforce Study

Stream 1 2026



JSC

Jobs and Skills Council
Transport and Logistics
An Australian Government Initiative

About ISA

Industry Skills Australia (ISA) has been established as the Jobs and Skills Council (JSC) for the Transport Supply Chain industries, which includes Aviation, Maritime, Rail, Transport and Logistics, and the emerging sectors of Omnichannel Logistics and Distribution, and Air and Space Transport and Logistics.

Owned and led by industry, our JSC is committed to building a world-class supply chain workforce to increase productivity, create better jobs and build opportunities for individuals.

We will do this through:

- LEVERAGING ALMOST 30 YEARS OF HISTORY WITH TRANSPORT SUPPLY CHAIN INDUSTRIES
- UNDERTAKING RESEARCH AND DATA ANALYSIS TO INFORM WORKFORCE PLANNING
- ADVOCATING FOR A WORKFORCE DEVELOPMENT APPROACH IN TACKLING INDUSTRY SKILLS ISSUES, AND
- DEVELOPING PRIORITY TRAINING PACKAGE PRODUCTS.

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Cover (fourth from left) Image courtesy of ERGT

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Supercharging the VET Workforce

When discussion turns to the workforce for Australia's Transport Supply Chain (TSC) Industries – Rail, Maritime, Aviation, and Transport and Logistics (T&L) – words such as “essential”, “vital” and “linchpin” are often used. Accurate though they might be, perhaps they don't do justice to the importance of these sectors to our national productivity and prosperity. Consider that the consequences of one or more of them falling over would be far reaching and potentially catastrophic.

Each of these sectors is confronting its own challenges and opportunities. They also have common trends and face similar issues. The same might be said for the vocational education and training (VET) workforce across the TSC Industries. Where industry is struggling, its VET workforce does too – with an ageing workforce, difficulties recruiting to regional areas and skills deficiencies related to automation and technologies. These are recurring themes across the TSC Industries VET workforce.

The VET environment is also rapidly changing. Upskilling and reskilling are now essential for all workers – not simply for those entering the workforce. As renowned futurist Alvin Toffler once said, **“the illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”**

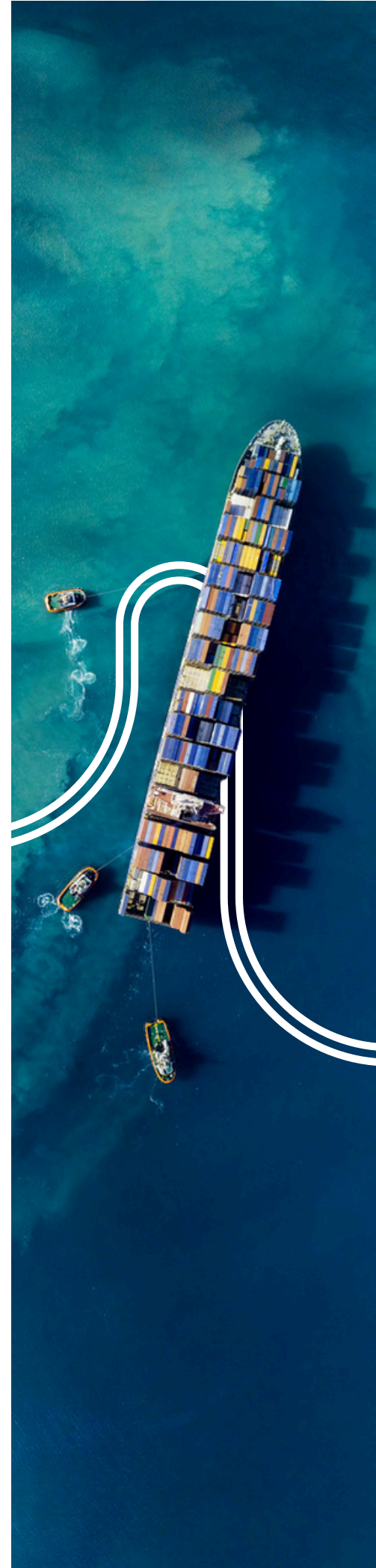
Increasing use of new technologies and immersive learning tools is placing greater demands on Teach, Train and Assess professionals (also referred to as “trainers and assessors”) to not only be digitally competent, but digitally fluent. Meanwhile, regulation and new standards for RTOs are changing, requiring adaptation.

The JSC VET Workforce Project

In late 2024 Jobs Skills Australia (JSA) released its VET Workforce Study (“the JSA Study”), which profiled the Australian VET workforce, estimating its size, composition, characteristics and transitions – movement into, throughout and exiting from the VET sector workforce.

The Department of Employment and Workplace Relations (DEWR) used data from this work to develop the VET Workforce Blueprint (“the Blueprint”), with the stated aim of growing, supporting and sustaining the VET workforce. The Blueprint identifies eight opportunities and 14 associated actions to support and grow a sustainable national VET workforce.

As the Jobs and Skills Council (JSC) for the TSC industries, Industry Skills Australia (ISA) was tasked with delivering the TSC VET Workforce Project, which concentrates on industry-specific vocational education providers.



Understanding the TSC Teach, Train and Assess role

As part of the TSC VET Workforce Project, the first step was to understand the demographics, composition, challenges and barriers, as well as the new and emerging trends faced by the TSC VET workforce's Teach, Train and Assess role.

A variety of methods were used to draw out industry responses. Adopting a mixed-method approach, the ISA VET Workforce Study (ISA Study) combined quantitative analysis of VET workforce data with qualitative research, which involved consultation with a broad range of RTO and VET practitioners. A workforce survey, interviews, and a workshop with TAFE representatives were conducted. This approach ensured that robust, data-driven insights were provided.

Some of what was gleaned was newly disclosed, while other intelligence that was gathered served to confirm existing findings from annual ISA's Workforce Plan consultations and training package development projects.

The ISA Study profiled the size, composition and characteristics of the TSC Industry's VET Teach, Train and Assess workforce. It identified trends and needs – current and emerging – including changes resulting from new regulation and industry practices. Data was drawn from interviews with industry participants, cross-checked and validated. Representing Stream 1 (of three streams) in the ISA VET Workforce Project, the intelligence gathered during the ISA Study is presented in this report.

Some of the feedback received was repeated across the TSC Industries. Representatives from all four TSC Industry domains said the complexity and cost of the Certificate IV in Training and Assessment (TAE) is often a disincentive to prospective Teach, Train and Assess professionals.

Thank you to our stakeholders

ISA wishes to thank our stakeholders who participated in our consultations, without whom the ISA Study would not have been possible. The interview data, findings and suggestions published here were made possible by their contribution.

The ISA Study identified that the TSC industries' VET workforce is potentially much larger than initially thought. It also clarifies the actions required to build a sustainable supply of Teach, Train and Assess professionals for the TSC Industries into the future.

Note also that the information presented here by ISA has been distilled from a longer, more detailed document prepared for DEWR. It is represented here with permission.



Leslie Young
Project Manager – VET Workforce

Report Snapshot

The ISA VET Workforce Study at a glance

The vocational education and training (VET) workforce is an intrinsic part of addressing occupational shortages and meeting the evolving skill needs in Australia's Transport Supply Chain (TSC) Industries: Aviation, Maritime, Rail, and Transport and Logistics (T&L).

Concentrating on vocational education providers in the TSC industries, the ISA VET Workforce Project is designed to support the growth and sustainability of the VET workforce in Australia, particularly as it relates to Teach, Train and Assess professionals.

The study's objectives are to:

- Understand the TSC's VET workforce
- Examine VET workforce current and emerging trends
- Examine VET workforce current and emerging roles
- Examine barriers and burdens in attracting and retaining the VET workforce

ISA's sector-specific Workplan is a 12-to-18-month initiative. As part of the workplan, ISA will execute a suite of activities to identify and address industry-specific actions grouped into three streams.

- **Stream 1** – Undertake industry-specific VET workforce studies to develop a comprehensive understanding of industry-specific roles.
- **Stream 2** – Investigate industry-specific VET workforce challenges and issues and identify industry-led responses.
- **Stream 3** – Investigate and support pathways and the pipeline of VET workforces, and identify industry-led actions e.g., attraction and promotion strategies.



Image courtesy of Training Ahead Australia

Stream 1 outcomes

Key findings

- The VET workforce in the TSC Industries is ageing, male-dominated, and less diverse than both the broader VET and general Australian workforce.
- Attracting younger and more diverse entrants into the VET workforce is critical, particularly in sectors that have ageing workforce profiles.
- Women, First Nations people, and individuals with disability are underrepresented, indicating potential systemic barriers that may require targeted recruitment, support, and inclusion strategies.
- There exists a shortage of qualified Teach, Train and Assess professionals in regional, rural, and remote areas, with this compounded by the high cost of accommodation.
- The digital transformation of learning and assessment – together with rapid technological change in TSC Industries – is placing increasing time and cost pressures on both individual VET practitioners and training providers to maintain vocational currency and professional competency.
- The complexity and cost of the Certificate IV in Training and Assessment (TAE) is a disincentive to prospective Teach, Train and Assess professionals.
- The VET workforce for Maritime, Rail and T&L tend to attract older professionals transitioning into training roles later in their careers. In Aviation, younger professionals often take on training roles to maintain their flight hours.

Opportunities and next steps

- ISA's data analysis revealed a previously unidentified pool of potential VET Teach, Train and Assess professionals. The discovery of this larger-than-expected cohort presents a genuine opportunity for recruitment.
- A priority is to raise awareness of clear and supported pathways from industry into the VET workforce.
- ISA will collaborate with stakeholders to address systemic barriers and support the development of a sustainable VET workforce pipeline for the future.

By analysing the differing environments and structures within which Teach, Train and Assess professionals deliver training in the Aviation, Maritime, Rail and T&L Industries, the ISA VET Workforce Study improves understanding of the TSC Industries' VET workforce. It also provides better clarity on what is required to build a sustainable supply of Teach, Train and Assess professionals for TSC Industries.

Understanding the TSC VET Workforce

How many Teach, Train and Assess workers service the TSC Industries?

Putting a precise number on the tally of Teach, Train and Assess roles within the Transport Supply Chain (TSC) Industries' VET workforce is challenging, for several reasons. Various methods offer insights but each also has limitations and unintended consequences that affect the reliability of the overall count.

To determine an accurate total, ISA began by using data from the VET Workforce Study^[1] conducted by Jobs and Skills Australia. Based on the 2021 Census, this study estimated there are about 32,000 VET practitioners across all industries. To identify how many of these service the TSC Industries, this analysis initially used 2021 Census data to identify "Teach, Train and Assess" workers employed by transport-related organisations.

This approach proved to be too narrow, however, because it primarily captures those individuals working within enterprise RTOs and excludes those employed by private RTOs, TAFE Institutes and other training providers. Using this method, Driving and Flying Instructors were over-represented relative to VET educators, because they teach both professional and general-public learners, tapping into a far larger pool than transport workers alone.

Also using 2021 Census data, a second method selected "Teach, Train and Assess" workers whose field of study was transport-related (e.g., marine or aircraft operations). This broadened the scope to include individuals in any sector. However, this method also likely leads to undercounting because it only captured individuals' highest qualification.

Combining methods

We can combine methods to gain some insight into the undercount. In the Census 2021 data, 163 workers in the Teach, Train and Assess category were counted in the Rail Transport sector, but a mere 18 had Rail Operations as their highest field of study.

To address the absence of compelling data, the analysis explored data from the National Centre for Vocational Education Research (NCVER)'s National VET Provider Collection (2016–2023), counting individuals who hold both Training and Assessment (TAE) and transport-specific qualifications. Analysis of this data shows that there are about 3,332 individuals who have completed a TAE qualification and hold at least one qualification from the Aviation, Maritime, and T&L training packages. Yet this approach does not exclusively identify professionals in Teach, Train and Assess roles; it may also capture individuals delivering informal or workplace-based training alongside their primary duties.

[1] Jobs and Skills Australia. (2024). [VET workforce study](#).

Limitations

This dataset has limitations. Only those who qualified from 2016 through 2023 are counted, and it is not known whether or not individuals who met the criteria are still facilitating training or assessment today. The dataset also does not capture individuals who have relevant Industry skillsets who may also be engaged in Teach, Train and Assess roles, but who do not hold a TAE qualification.

Supplemented by results from the ISA VET Workforce Survey (ISA Survey), this is the primary dataset for the demographic analysis that follows. Although we refer to these individuals as Teach, Train and Assess workers, professionals or roles – and/or members of the VET workforce – we acknowledge that not all may identify with these terms.



Image courtesy of ERGT

Defining the TSC VET workforce

Workforce composition and demographics

The VET workforce within the TSC Industries is predominantly male. According to NCVER data (Table 1), female representation across the four major domains – Aviation, Maritime, Rail, and Transport and Logistics (T&L) – ranges from 13% to 16%. This is significantly lower than the national VET workforce average of 33%, underscoring a persistent gender imbalance within these traditionally male-dominated industries. At 14%, female representation overall in the TSC Industries is also low, indicating a broader gender imbalance in the sectors.

Table 1: Demographic Characteristics of Teach, Train and Assess Professionals (NCVER Data)

Sector	Female (%)	Average age	First Nations (%)	Living with disability (%)	Born overseas (%)	Linguistic diversity (%)
Aviation	16	43	1.6	1.2	25.7	6.3
Maritime	13	47	4.5	1.9	19	3.2
Rail	14	52	9.2	1.8	18.1	2.3
Transport and Logistics	13	53	1.7	1.9	33.6	13.8
National Average	33	44	3.9	4.9	31.2	11.6
TSC Industries Total	14	50	4.4	2.7	19.5	8

Source: NCVER, National VET Provider Collection 2024 (de-identified unit record file data)

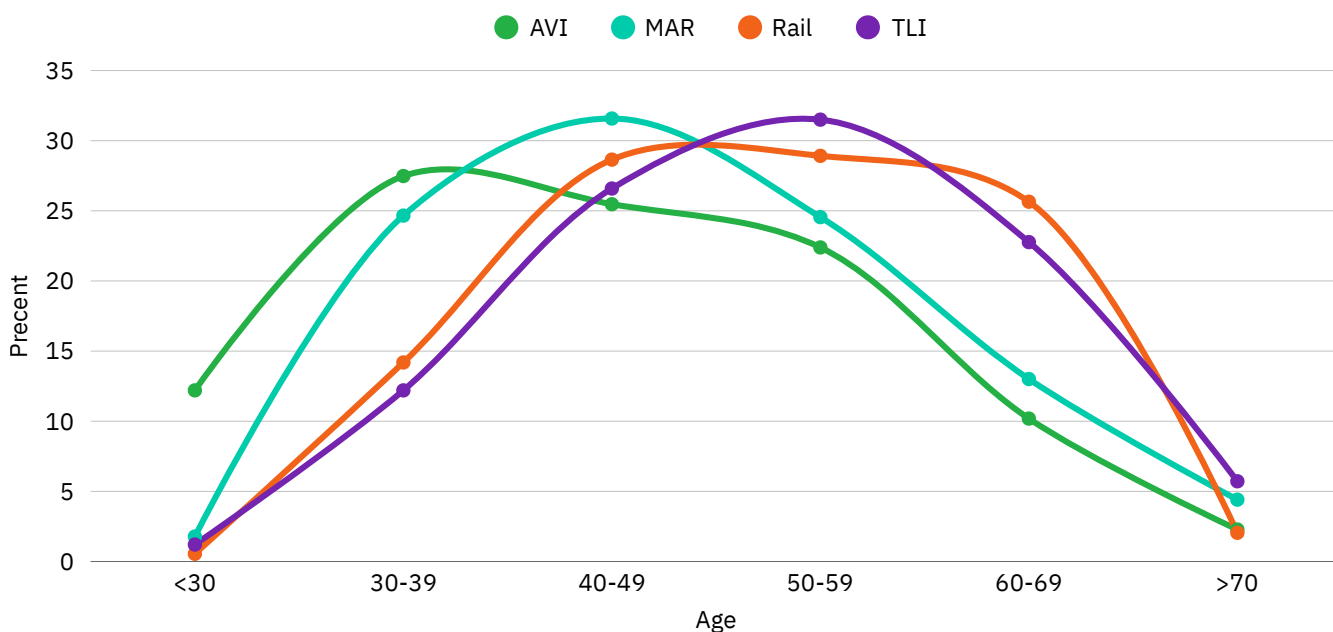
Age profile and career pathways

The average age of Teach, Train and Assess workers varies substantially across the TSC Industries. With an average age of 43 years, Aviation has the youngest workforce, while Maritime, Rail, and Transport and Logistics report average ages of 47, 52, and 53 years, respectively (Table 1). NCVER data yields similar results (Figure 2).

The national average is 44, suggesting that Maritime, Rail, and T&L have an ageing workforce, compared to the VET Aviation workforce, which is about seven years younger than the overall TSC Industries average of 50 years.

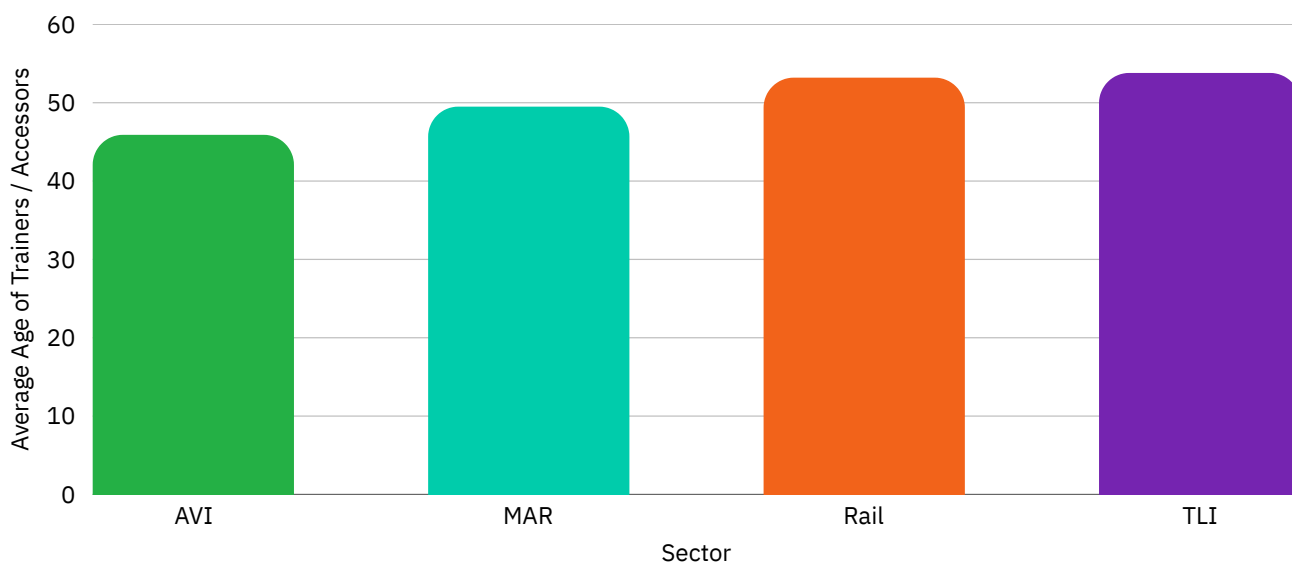
These differences reflect that the four TSC domains each have their own career pathways into the VET workforce. In Aviation, younger professionals often take on training roles to maintain their flight hours and remain actively engaged in the industry. Sectors such as Maritime, Rail and T&L meanwhile, tend to attract older professionals who transition into training roles later in their careers. This trend is illustrated in **Figure 1**, which shows the age distribution of Teach, Train and Assess professionals across TSC sectors, showing the low proportion of trainers under the age of 30 and the increasing numbers in older age brackets.

Figure 1: Age profile of Teach, Train and Assess professionals in ISA sectors



Source: NCVET, National VET Provider Collection 2024 (de-identified unit record file data)

Figure 2: Average age of Teach, Train and Assess professionals by sector



Source: NCVET, National VET Provider Collection 2024 (de-identified unit record file data)

The reliance on older professionals is evident in the Maritime, Rail and T&L sectors. One Maritime RTO representative admitted that recruiting a VET workforce is challenging.

“Getting a VET workforce in Maritime is extremely difficult,” the manager said. “The trend is older mariners who want to come onshore. They come to us asking if we’ve got a role for trainers”

Survey data supports this observation. It shows that many Aviation sector Teach, Train and Assess professionals enter the VET workforce after only a short period in the industry. In the Maritime sector, however, individuals typically do not transition into training roles until they have accrued roughly five years of industry experience. This might be due to occupational licensing and regulatory requirements, as seen in **Figure 3**. This difference in career trajectory is a key factor that contributes to the variation in average age across the TSC Industries.

A note about the ISA survey data

The ISA Survey was developed to collect key demographic information from the VET workforce in the TSC Industries. ISA also collected “gap” data, which was identified while analysing NCVET data.

The Survey provided additional insights into the demographic composition of Teach, Train and Assess professionals.

Of the **124 survey respondents**, 39.7% were employed in private RTOs, 29.4% in enterprise RTOs (non-government), 21.4% in TAFEs, and 7.9% in enterprise RTOs (government). Among these, 63 respondents identified as Trainers and Assessors (aka Teach, Train and Assess professionals), including 16 from TAFEs, 24 from private RTOs, 21 from non-government enterprise RTOs and two from government enterprise RTOs.

The ISA Survey provided additional insights into the demographic composition of Teach, Train and Assess professionals.

Table 2 summarises key findings:

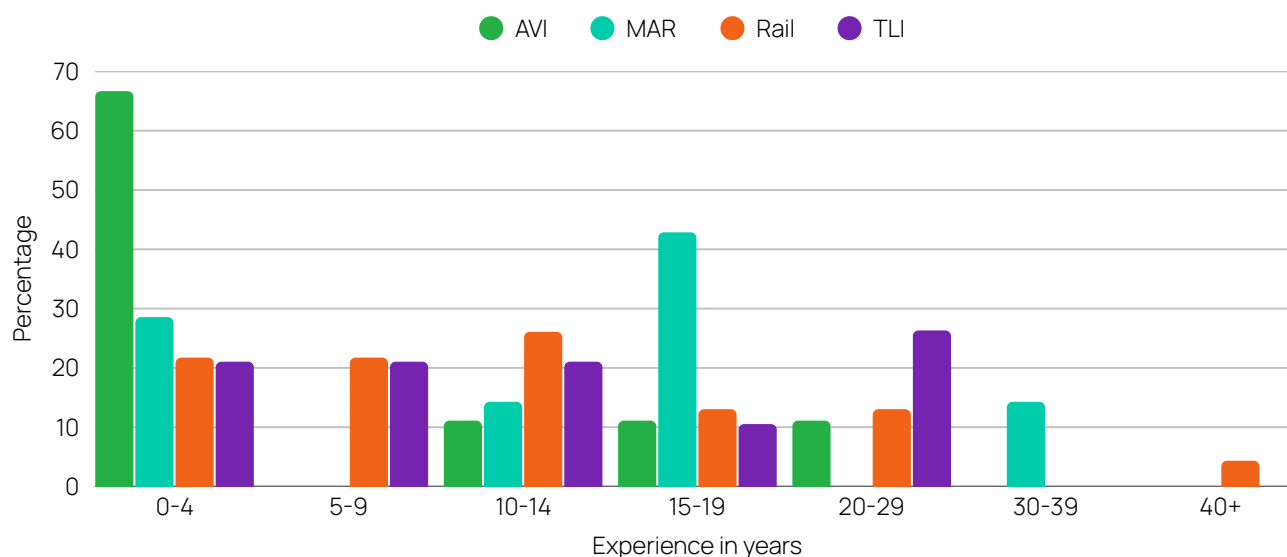
Table 2: ISA VET Workforce Survey – Teach, Train and Assess Worker Demographics

	Female (%)	Average age	First Nations (%)	Living with disability (%)	Born overseas (%)	Linguistic diversity (%)
ISA VET Workforce Survey (Teach, Train and Assess professionals)	14.2	52.2	1.6	4.8	25.4	15.9

Source: ISA VET Workforce Survey, 2025

The ISA Survey data aligns closely with NCVET findings in terms of gender and age but reports higher levels of disability and cultural diversity. This suggests that national datasets may underrepresent certain groups, particularly those with non-visible or self-identified characteristics.

Figure 3: Teach, Train and Assess Professionals experience by sector



Source: ISA VET Workforce Survey, 2025

Diversity and inclusion

Representation of First Nations Teach, Train and Assess professionals

Representation of First Nations Teach, Train and Assess professionals is highest in the Rail sector at 9.2%, followed by Maritime at 4.5% (Table 1). These figures are above the national VET workforce average of 3.9%. However, the ISA Survey (Table 2) reports a lower overall figure of 1.6%, suggesting either underrepresentation in the ISA Survey sample or a concentration of First Nations Teach, Train and Assess professionals in specific sectors. According to data from the Australian Bureau of Statistics, 3.8% of Australians identify as Indigenous.

Inclusion of people with disability

Inclusion of individuals living with disability remains limited across the TSC Industries VET workforce. According to NCVET data (Table 1), 1.2% to 1.9% of Teach, Train and Assess professionals in these sectors identify as living with a disability. This is below the national VET workforce average of 4.9%. The ISA Survey (Table 2) reports a higher rate of 4.8%, suggesting that the ISA Survey data is representative of the TSC Industries VET workforce. Despite this, the figures indicate that there is considerable room to improve accessibility and inclusion for people with disability in the TSC Industries VET workforce.

Cultural and linguistic diversity

Cultural and linguistic diversity of the VET workforce is more prominent in certain TSC Industries sectors. Aviation and T&L report the highest proportions of Teach, Train and Assess professionals born overseas, at 25.7% and 33.6%, respectively. These sectors also show higher levels of language diversity, with 6.3% and 13.8% of workers speaking a language other than English at home. The ISA Survey supports these findings, reporting that 25.4% of respondents were born overseas and 15.9% speak a language other than English at home. These figures exceed the TSC Industries VET workforce totals, suggesting that cultural diversity is more concentrated in sectors that have strong international linkages.

Educational attainment of the TSC Industries VET Workforce

Overview of educational attainment

Educational attainment among Teach, Train and Assess professionals in the TSC Industries VET workforce varies considerably across sectors and demographic groups. According to NCVER data, 19.5% of the TSC Industries VET workforce holds a bachelor's degree or higher. In comparison, the ISA Survey reports that 33.2% of respondents hold a bachelor's degree or higher. Also, 95.2% of respondents reported holding a Certificate IV in Training and Assessment, the standard credential required for VET teaching roles.

The JSA Study notes that 74.2% of the Teach, Train and Assess segment of the national VET workforce holds qualifications at Diploma level or above, encompassing both educational and industry-specific qualifications. However, the ISA Survey also highlights a key limitation in Census data, which often fails to capture the dual qualifications held by many VET professionals. Within the TSC Industries VET workforce, 38% of those in Teach, Train and Assess roles hold qualifications at Diploma level or higher, as shown in **Table 3**. This points to a lower rate of advanced qualifications compared to the national VET teaching workforce.

Sector and demographic disparities

There are notable disparities in qualification levels across sectors and demographic groups. Table 3 presents the proportion of the TSC Industries VET workforce holding a Diploma or higher qualification, broken down by sector and key demographic indicators.



Image courtesy of Airflight College

Table 3: Proportion of TSC Industries VET Workforce Holding Diploma or Above

Teach, Trainers and Assess professionals in the TSC Industries VET Workforce	Diploma level qualification or above (%)
Aviation	52
Maritime	44
Rail	21
Transport and Logistics	34
TSC Industries Total	38
Female	17
Male	83
First Nations	2.7
People living with disability	2.2
People living in major cities	63
People living in regional	33
People living in remote or very remote locations	4

Source: ISA VET Workforce Survey, 2025

The data reveals significant gender and geographic disparities. Only 17% of female Teach, Train and Assess workers hold a Diploma or higher, compared to 83% of males. Similarly, only 4% of those living in remote or very remote areas hold such qualifications, compared to 63% in major cities.

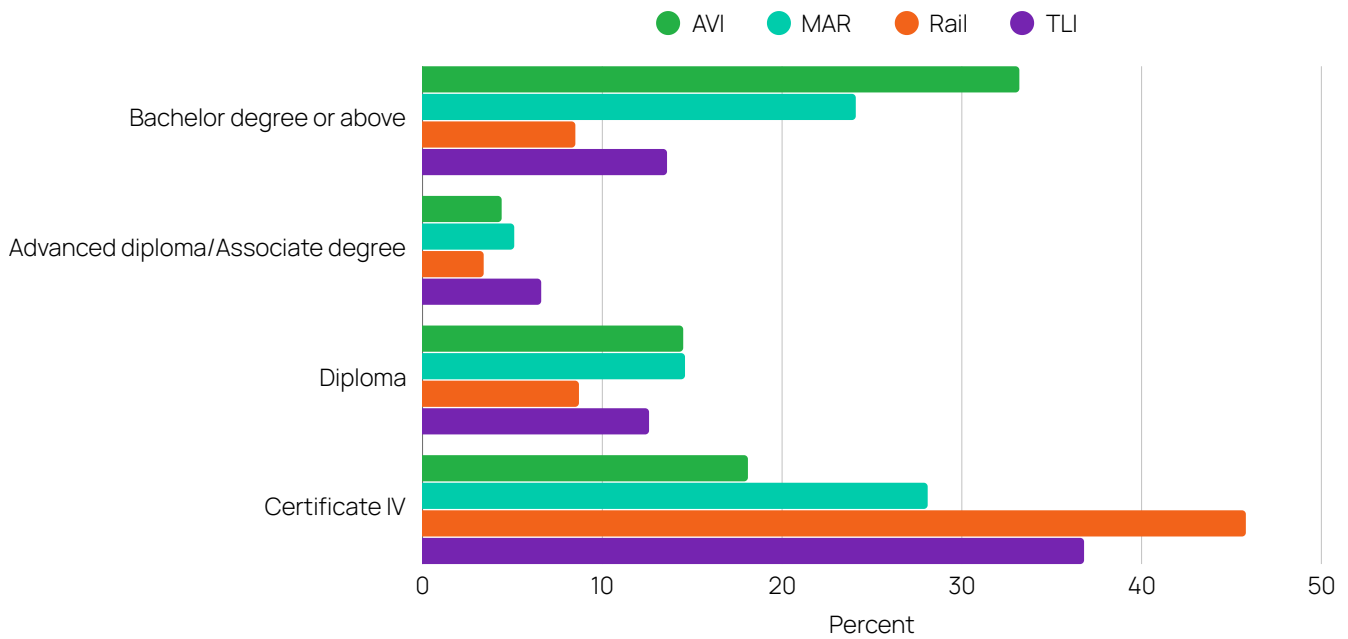
Certificate-Level qualifications and disability

Using NCVET data, the ISA findings show that 42% of the overall TSC Industries Teach, Train and Assess segment reported Certificate III or IV as their highest qualification. Among those identifying as living with disability, this figure rises to 52%, reinforcing a trend observed in the JSA Study. The JSA Study also found that individuals with disabilities are less likely than those in the general population to hold a bachelor's degree or higher (18.4% compared to 32.8%).

Sector-specific qualification trends

Analysis of sector-specific data reveals distinct patterns in qualification levels. Figure 5 shows the highest qualifications held by Teach, Train and Assess professionals from NCVET data across the four main TSC industries. These patterns are further detailed in Table 4, which presents the highest level of education reported by Teach, Train and Assess professionals in each TSC Industry sector, based on survey responses.

Figure 4: Highest level of education – Certificate IV and above



Source: NCVET, National VET Provider Collection 2024 (de-identified unit record file data)

Table 4: Highest level of education in specific industry field

Level of Education	AVI	MAR	Rail	TLI
Doctor of Philosophy Degree (PhD)				5.30%
Bachelor’s Degree		14.30%		15.80%
Advanced Diploma				10.50%
Graduate Diploma/ Graduate Certificate	11.10%	14.30%		5.30%
Diploma	55.60%	14.30%		31.60%
Certificate IV	22.20%	42.90%	91.30%	26.30%
Certificate III	11.10%	14.30%	4.30%	
Individual units only			4.30%	5.30%

Source: ISA VET Workforce Survey, 2025

Rail has the highest proportion of Teach, Train and Assess professionals whose highest qualification is Certificate IV (91.3%), followed by T&L (26.3%).

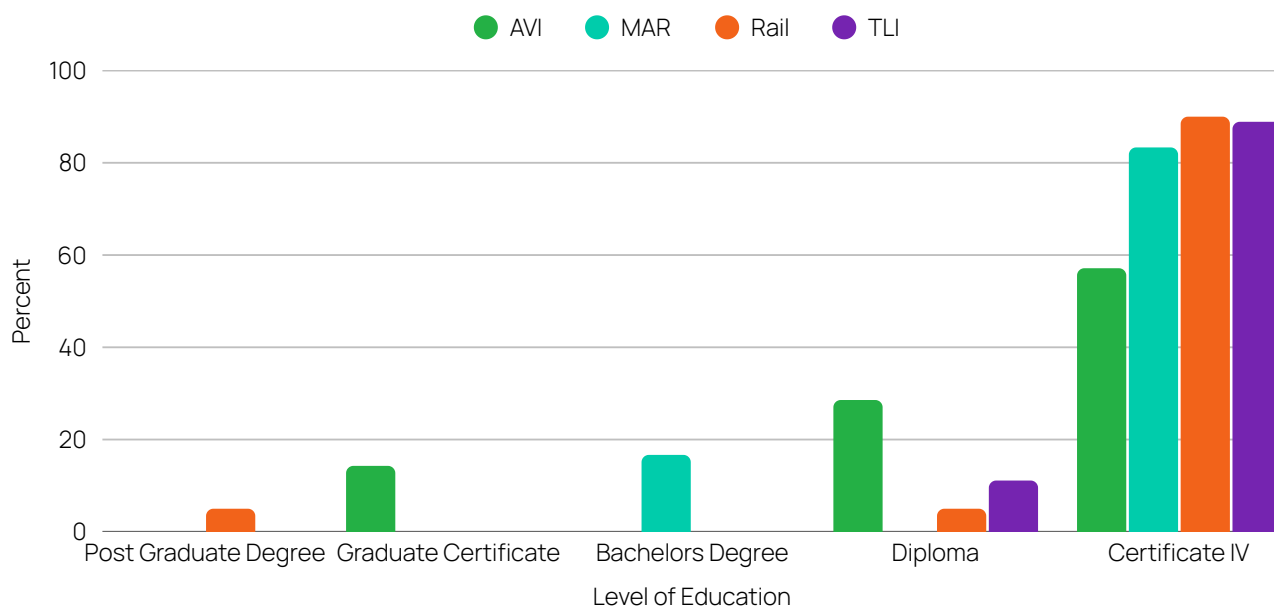
The Aviation and Maritime domains show higher proportions of Teach, Train and Assess professionals with bachelor's degrees (33.2% and 24.1%, respectively), likely reflecting the technical demands of these industries.

Of note is that 18% of Teach, Train and Assess professionals in Aviation report Year 12 as their highest qualification, a surprisingly disproportionately high figure given the sector's technical nature.

These insights are based on survey data summarised in **Figure 4** and further visualised in **Table 4**.

Although the JSA Study did not provide industry-specific breakdowns, and the NCVET data has limitations, the ISA Survey addressed this absence by collecting data on the highest teaching credential (Figure 5) of respondents.

Figure 5: Highest level of teaching credential by Industry



Source: ISA VET Workforce Survey, 2025

Institutional differences

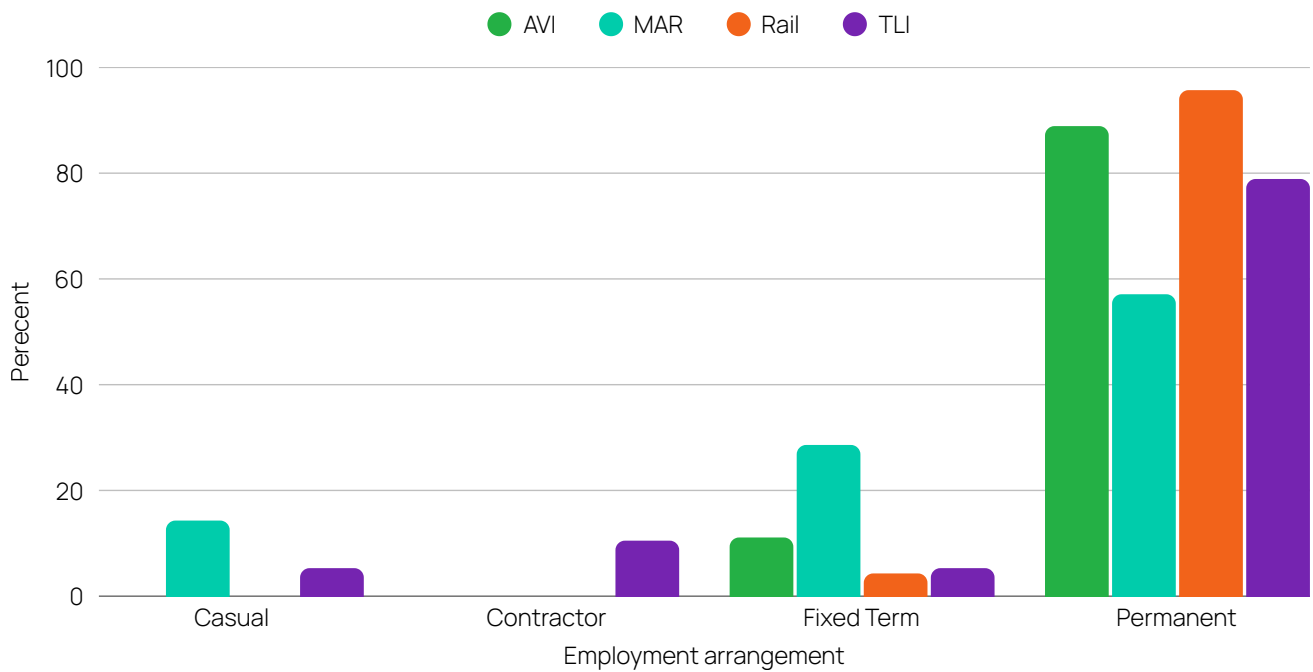
The ISA Survey found that Teach, Train and Assess professionals from private RTOs and TAFEs were as likely to hold a Certificate IV in Training and Assessment as a Diploma Qualification. By comparison, TAFE Teach, Train and Assess professionals were more likely to hold a Graduate Diploma and Graduate Certificates.

Employment characteristics

Employment type and organisation

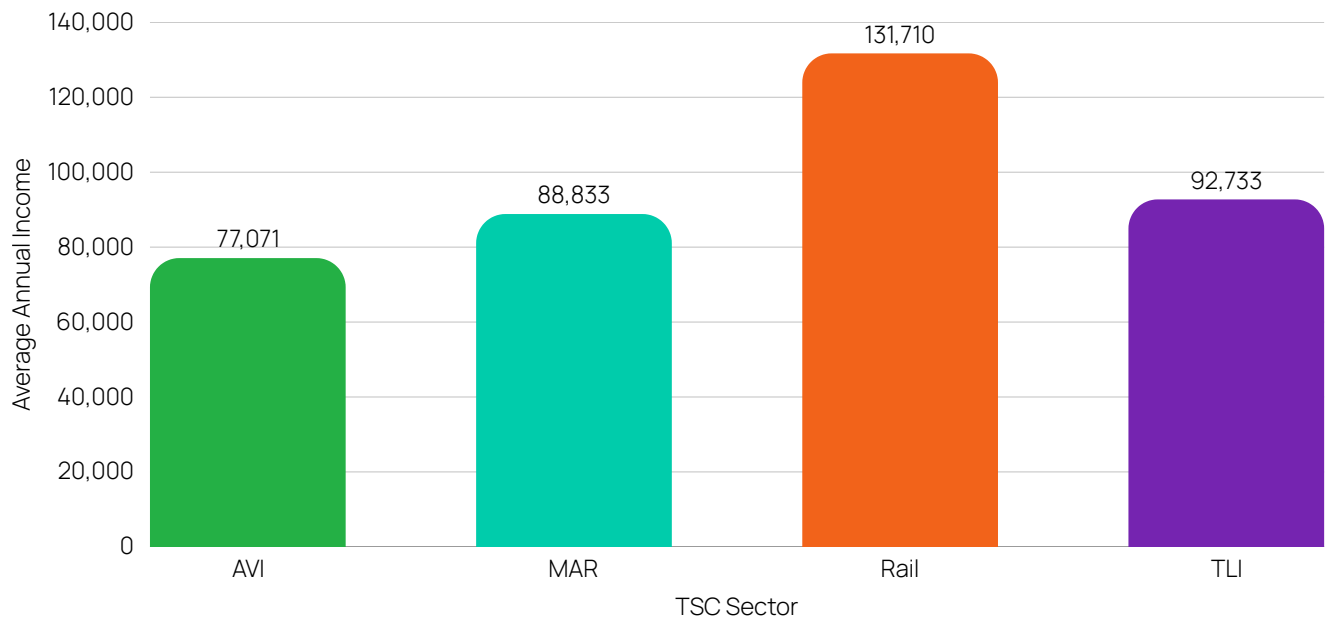
The JSA Study found that the VET workforce is generally more casualised, slightly higher paid and less reliant on Industrial Awards than the broader Australian workforce. To explore these dynamics within the TSC Industries, the ISA Survey collected data on employment characteristics from Teach, Train and Assess professionals across various training organisations.

Figure 6: Employment arrangement (ISA VET Workforce Survey)



Source: ISA VET Workforce Survey, 2025

Figure 7: Average income of Teach, Train and Assess professionals



Source: NCVET, National VET Provider Collection 2024 (de-identified unit record file data)

Geographic distribution

An analysis of workforce distribution reveals the TSC Industries VET workforce is strongly concentrated in the major cities. This is likely due to the location of training institutions, industry hubs, and supporting infrastructure. Representation in regional and remote areas is substantially lower.

There is, however, variation between the TSC Industries. **Table 5** shows that the Maritime sector has the lowest concentration of Teach, Train and Assess professionals in major cities (49.8%) and a higher presence in outer regional (23.5%) and remote/very remote areas (8.3%). The Rail sector has a notable presence in inner regional (24.8%) and remote/very remote areas (5.7%).

Table 5: Geographic spread by sector

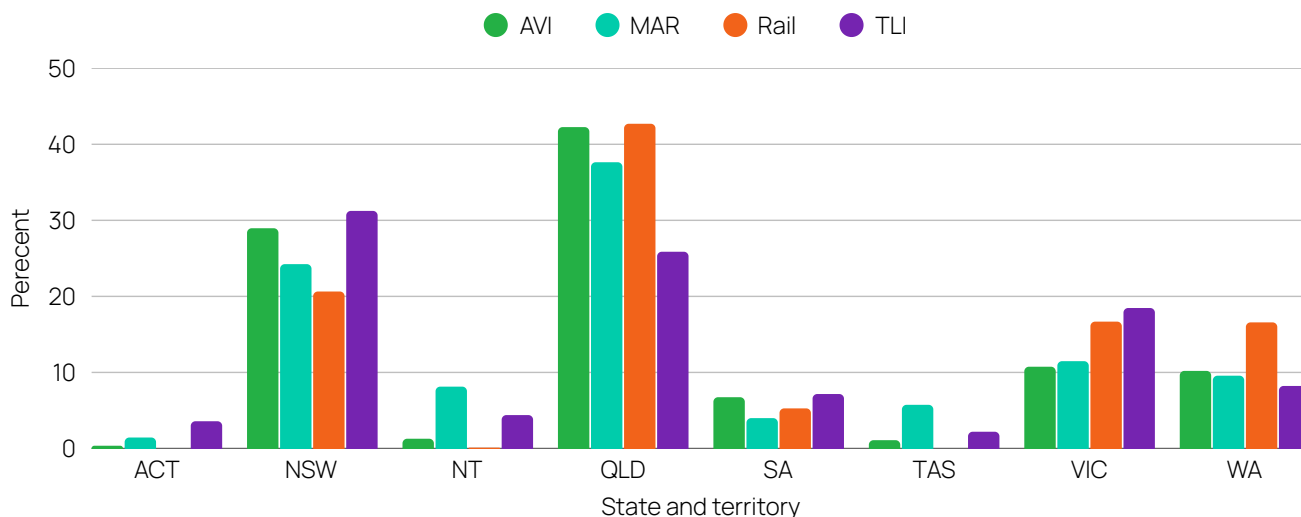
Sector	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote and very remote Australia
Aviation	67.80%	19.40%	10.40%	2.30%
Maritime	49.80%	18.40%	23.50%	8.30%
Rail	55.60%	24.80%	13.90%	5.70%
TLI	65.60%	19.40%	12.20%	2.80%

Source: NCVER, National VET Provider Collection 2024 (de-identified unit record file data)

State and territory distribution

Further geographic analysis by state and territory, shown in **Figure 8**, reveals that the majority of Teach, Train and Assess professionals in Aviation (42.3%), Maritime (37.6%), and Rail (42.7%) are located in Queensland. New South Wales has the highest concentration of Teach, Train and Assess professionals in T&L (31.2%).

Figure 8: State and territory distribution of VET Teach, Train and Assess professionals



Source: NCVER, National VET Provider Collection 2024 (de-identified unit record file data)

Findings and opportunities

This analysis shows that the VET workforce within the TSC Industries is ageing, male-dominated, and less diverse than the broader VET and Australian workforces. No surprises there. The reliance on older professionals transitioning into training roles later in their careers – particularly in Maritime and Rail – raises concerns about workforce sustainability and succession planning. At the same time, the underrepresentation of women, First Nations people and individuals with disability points to systemic barriers that could be addressed through targeted recruitment, support, and inclusion strategies.

Efforts to attract younger, more diverse entrants into the VET workforce, especially in sectors with ageing profiles, will be critical to ensure the long-term viability and relevance of training provision in the TSC Industries.

With the aim of gaining a comprehensive understanding of the prevailing trends and barriers affecting their VET workforce, ISA conducted interviews with RTO managers. These are discussed in this report's ensuing sections, providing valuable insights and clarity. To counter the barriers identified and ensure a reliable pipeline of Teach, Train and Assess workers, ISA will initiate pilot projects in the next streams to ensure effective measures are in place.



Image courtesy of Southpac Aerospace

Flight Plan

To gain an understanding of how rapidly the Aviation industry has progressed in a relatively short timeframe, it's worth noting that the Wright brothers staged the first powered flight of a heavier-than-air aircraft in 1903. By 1918 aviation had advanced to the point that Britain had established the Royal Air Force, among whose number was Australian aviation pioneer Sir Charles Kingsford Smith. Qantas was founded in 1920, making it one of the world's oldest airlines still operating. Today, general aviation (GA) activities support a wide range of other industries and create a variety of opportunities for employment in the Australian Aviation industry.

A pivotal component of Australia's transport supply chain (TSC), Aviation delivers passengers and freight across the country, including to Australia's 160 airports. Its workforce of more than 70,000 is spread across almost 2,500 businesses.

“Probably the biggest emerging roles are going to be around student support and wellbeing”

Current and emerging VET workforce trends

Current VET workforce trends

Australia's VET workforce in the TSC Industries is navigating complex regulatory demands, rapid technological change and demographic shifts. Aviation is not immune from any of these impacts. In fact, rapid technological change has been a defining feature of the industry throughout its relatively brief history – and continues to be. The emergence of new pilotless aircraft and the increasing use of remotely piloted aircraft systems are recently observed trends. A doubling of the number of Remote Pilot Licence (RePL) holders over the past five years reflects this shift.

The VET workforce that serves Aviation is being impacted by two prominent trends: an increasing regulatory compliance burden and the influence of technological advancements.

Compliance with the Aviation regulatory body, the Civil Aviation Safety Authority (CASA) and VET Regulators – such as the Australian Skills Quality Authority (ASQA) – remains a formidable challenge for the Aviation VET sector. True, improvements in the working arrangements with these regulators has been observed. Yet the two-pronged accreditation requirement doesn't simply rankle, it also imposes a substantial and onerous administrative burden on RTOs.

Embracing digital tools and technologies for training purposes has been a noted and growing trend in Aviation. Training delivery has shifted towards a blend of in-person and digital modes, with a heavy reliance on online management systems and digital teaching tools.

Although the COVID-19 pandemic accelerated the adoption of online courses covering theory, the hands-on nature of Aviation training means that the majority of courses are still undertaken face to face. The use of advanced technology in training environments such as glass cockpits and digital devices requires Teach, Train and Assess professionals to possess digital literacy – to have robust computer and automation skills.

“For flight instructors operating in a glass-cockpit environment, it’s more about using a computer and tablets and less about pen and paper,” one RTO manager said, adding that because of these demands, computer prowess and skills in automation of operations are a must-have for trainers.

Emerging VET Aviation workforce trends

When it comes to adopting new technology, it’s fair to say the Aviation domain has been change-ready – even enthusiastic – over the course of its history. Newer, bigger, faster, safer and more efficient aircraft can shave time from journeys and costs of fares and freight charges while adding to passenger amenity.

Technological advancements and simulation-based training are considered no-brainers across the industry; they are emerging VET workforce trends being taken on board. The integration of mental health awareness and soft skills development, however, has been less warmly embraced.

Evidence highlights a persistent under-prioritising of soft skills and mental health within the Aviation VET sector, whereby such competencies are often dismissed as burdensome rather than as a conduit to support learner success. Compounding these issues is the generational divide, with younger trainers entering the workforce sometimes facing resistance from their older trainees.

“Aviation is very slow to change its attitude towards mental health,” noted one RTO manager. “In terms of soft skills [development], there is a lack of psychosocial safety/mental health training for trainers.”

Drone use has grown exponentially over the past little while, serving a wide variety of needs, from photography and videography to fast food delivery. There are in fact 28,545 registered drones in Australia, with 37,441 Remote Pilot Licence (RePL) Holders (in 2024).

Operating these types of aircraft and remote systems in a range of environments requires advanced technical skills and a thorough understanding of the regulatory landscape and physical terrain.

The new tech such as autonomous vehicles and the regulatory mechanisms underpinning it are reshaping Aviation training, which will require new instructional approaches.

“We’re talking about drones and about other types of technologies that could impact the way we teach,” said an Aviation RTO manager. “We need to then follow that skill set.”

New and emerging roles

Insights gathered from the interviews ISA conducted with RTO managers have contributed to identifying new and emerging roles, as well as future training needs.

In the VET Aviation sector, new positions can be found in the areas of administration, compliance and student support roles. As the learner demographic becomes more diverse – with a wider variety of requirements – there is a rising demand for roles that support students who have additional needs, especially in literacy and numeracy. Another skill increasingly being required for Teach, Train and Assess professionals is the ability to offer mental health and well-being support.

“Probably the biggest emerging roles are going to be around student support and wellbeing,” explained an RTO manager.

Attracting and retaining the VET workforce: delays and turbulence

Delay: Workforce competition and poaching

A phenomenon that plays out within Australia's Aviation domain is that larger organisations tend to attract instructors away from smaller RTOs. The flipside of this is that ambitious individuals leverage the Teach, Train and Assess role at smaller RTOs to build flight hours, so that they are more appealing to larger airlines.

“Most pilots and trainers go to larger airlines,” an RTO manager explained. “It's job poaching from smaller flight companies. Airlines are recruiting, and RTOs cannot get enough applicants.”

It's not all bad news, however, with some RTOs anticipating this move and have adjusted their business models to counter this trend.

Turbulence: Career stagnation and limited upskilling

Retention in the VET Aviation workforce is impacted by career stagnation and limited upskilling opportunities. If the high costs of retention and administrative imposts are included, it becomes even more difficult to attract and keep qualified instructors.

Many Aviation Teach, Train and Assess professionals view their roles as temporary, with limited long-term growth. And the lack of structured career pathways contributes to high turnover and low retention. Career growth is often hindered by prohibitive costs, limited upskilling, and a lack of transferable skills.

“People would like to grow as an instructor and improve their skills,” an RTO manager said. “But it is expensive.”

The VET Aviation workforce in rural, regional and remote areas

Despite the many benefits of residing in thriving country areas, ISA Survey respondents said that it's difficult to attract Aviation trainers and assessors to rural, regional and remote locales.

In addition to the systemic challenges that exists across the TSC Industries – financial constraints, limited infrastructure and lifestyle preferences – the VET Aviation sector is impacted by the considerable costs of compliance.

Although trainers are often willing to work in regional areas temporarily, long-term retention is a major challenge. The role is frequently viewed as a stepping stone – a means to an end rather than an end in itself.

"Trainers are willing to go to regional areas for a short time," said one RTO manager. "However, retention is a barrier."

Aviation VET sector training providers who are capable of sourcing local trainers and assessors in rural, regional and remote areas have reported that courses are being cancelled due to limited demand. The cost of compliance and upholding regulatory standards is considerably higher in regional areas than their metropolitan equivalent, placing added pressure on training providers. These businesses often serve smaller populations that have limited demand.

"We've got a trainer based in Townsville," explained an RTO manager. "We've had to cancel those courses [due to lack of demand]."

Preparing for take-off: Future Aviation VET workforce needs

Funding stability, digital integration and workforce development are among future VET workforce needs across the TSC Industries. For the VET Aviation sector, "better financial planning" and "flexible career pathways" can be added to the list.

The high cost of Aviation training, combined with the need for thorough financial planning, presents major impediments for prospective Aviation Teach, Train and Assess professionals. To address these challenges, it is essential to strengthen funding models and develop more effective incentive schemes.

"Governments changing funding models and incentive schemes has a large impact," an RTO manager said. "[A loss of] funding may mean the business is no longer sustainable."

Notable features of the VET Aviation sector workforce are its transient nature, the importance of flexible work arrangements, the limited but evolving career pathways and the emphasis on self-directed professional development. Due to these characteristics, establishing a long-term career as an Aviation Teach, Train and Assess professional is tricky, if not downright challenging.

"Job change is more frequent; Aviation is more of a transient workforce," one RTO manager explained, adding that a degree of flexibility and nimbleness are required to deal with the hybrid or portfolio nature of a career as an Aviation trainer.

"They would be flying for two to three days and instructing for the rest of the week."

Another RTO manager underlined the importance of PD in the Aviation VET workforce.

"Professional development is one of the most important factors," the manager said. "The team decides their own training needs."

Like to know more?

The 2025 Aviation Workforce Plans prepared by Industry Skills Australia are shaped by deep engagement with stakeholders and the latest data analysis. The Workforce Plan serves as a roadmap for collaboration between industry, government, and the national skills system. How is the Aviation sector being shaped by emerging challenges and opportunities? What does this mean for workforce development? Each individual Workforce Plan provides a deeper dive into sector-specific issues and identifies proposed actions and opportunities for consideration.



Image courtesy of Tristar Aviation



Sea Change

Given that ours is a country famously “girt by sea”, the history of Australia and the maritime industry that serves it are intimately entwined. Before federation, it was ocean-going vessels that facilitated our growth and connection with other rapidly industrialising nations. Transport elsewhere meant maritime travel. Out went raw goods such as wool, grain and gold. Key imports such as textiles and sophisticated machinery were sent the other way, helping the young nation establish economic foundations.

Today the Maritime sector is an essential component of our TSC Industries. It continues to provide Australian businesses with access to international markets while enabling the movements of passengers and freight into, out of and around the country. More than 99 per cent of Australia’s international trade is carried by sea.

“We are seeing increased use of technology, such as online delivery and simulators”

Navigating Maritime VET workforce trends

Current trends

Like other TSC Industry domains, the Maritime sector is dealing with complex regulatory demands, rapid technological change and demographic shifts. To support a contemporary diverse VET workforce, an eclectic mix of talents is required: soft skills, mental health awareness and flexible training pathways are the order of the day.

Two areas in which the VET Maritime workforce particularly struggles are integrating emerging tools – such as simulators and AI – and improving trainer shortages.

A declining workforce is seen as the Maritime domain’s most critical VET workforce issue, evidenced by a shrinking channel of new Teach, Train and Assess professionals. Due to the double negative of low incentives and considerable demands, the sector is challenged to attract and retain talent, especially when it comes to younger professionals.

“There are declining numbers of people willing to maintain their trainer and assessor qualifications,” admitted one RTO manager.

Training is also expensive. To deliver training that meets the requirements of AMSA and/or the International Maritime Organization (IMO), training providers must make a substantial investment in training delivery and assessment equipment, processes and capability.

Floating new ideas: emerging trends

Emerging trends such as increased technology integration and the growing use of AI are reshaping training approaches in the VET Maritime sector.

“We are seeing increased use of technology, such as online delivery and simulators,” noted one RTO manager. Indeed, technological change is a prominent trend, reflecting a sector-wide shift in the VET Maritime sector towards digital tools such as simulators, AI, mobile learning, and remote delivery. This represents a transformation in how training is delivered and accessed.

Although AI and simulation technologies offer exciting training possibilities, their practical implementation – especially in hands-on training – remains something of a challenge. The sector must ensure these tools are used effectively and responsibly.

“Trainers need to understand how to effectively prompt and validate AI outputs,” an RTO manager asserted.

Attracting and retaining the VET workforce: squalls and doldrums

Key factors affecting retention in the VET Maritime sector include financial pressures and challenges in training and compliance.

Respondents to the ISA Survey and interviews with Maritime VET practitioners cited resistance to qualification upgrades, leading to higher dropout rates during training, and a general lack of enthusiasm for earning assessor qualifications. Perhaps this indicates a need for reform in how training for VET Maritime professionals is delivered and supported.

An RTO manager explained that in general there are challenges in marking assessments and a preference for practical training.



Image courtesy of ERGT

New and emerging roles in Maritime's VET workforce

Insights gathered from the ISA Survey and interviews with RTO managers have contributed to identifying new and emerging roles, as well as future training needs. This analysis helps anticipate workforce requirements and informs strategies to support development in these areas.

The VET Maritime domain is seeing roles with technology integration and compliance starting to emerge. This reflects the sector's shift toward digital delivery, simulation, and automation. Teach, Train and Assess professionals are increasingly expected to work with online platforms, simulator-based instruction, and automated assessment tools.

According to the Maritime Workforce Plan prepared by ISA, the uptake and viability of new technologies is complex due to uncertainty around timeframes for commercialisation and implementation. The national skills system, however, will have a critical role in supporting the VET Maritime workforce development and skills transition required to implement the industry's automation and digitalisation.

The Maritime VET workforce in rural, regional and remote areas

You might think that the combination of sea air, coastal locales and the many attractions of regional living would be a powerful drawcard for the VET Maritime workforce. The fact is, however, all four TSC Industry sectors face difficulties when it comes to attracting and retaining their VET workforce in rural, regional, and remote areas. Although they're happy to accept highly rewarded short-term roles, Teach, Train and Assess professionals are less likely to make a long-term commitment due to financial constraints, limited infrastructure, and lifestyle preferences. As with the Aviation sector, in Maritime, high compliance costs also impact retention.

A frequently cited barrier for the VET Maritime workforce to live in the regions is that these areas often lack the infrastructure – such as accommodation and reliable transport – to support visiting Teach, Train and Assess professionals. The transient population of some regional areas also adds to the instability, increasing the challenge of planning and delivering consistent training.

"There isn't enough work to keep them in that area," one RTO manager said of Maritime Teach, Train and Assess professionals. "Then the logistics transport cost to move assets and to move themselves is really expensive and is a cost-prohibitor a lot of the time."

Future trends: Predicting the tides

Across transport sectors funding stability, digital integration and workforce development must be factored into future VET workforce needs. In the Maritime domain, the VET sector requires better integration with technology such as simulation. Teach, Train and Assess professionals must be across compliance, and embrace adaptability in order to deliver new qualifications that match future industry needs.

Integration of technology and simulation is the most frequently cited need in the ISA Survey, underscoring the growing importance of AI, simulators, and virtual reality (VR) in delivering realistic, high-quality training.

"Simulation is becoming essential, especially for replicating challenging conditions – for example, rough weather," an RTO manager said.

"Trainers need to adapt to using simulators and understand their value," another RTO manager opined.

One RTO manager said that an "important skill for trainers and assessors" now and into the future is utilisation of simulators and training vessels to meet AMSA requirements.

There is no doubt that as industry standards evolve, it's essential that Maritime VET Teach, Train and Assess professionals stay abreast of compliance requirements and be adequately equipped to deliver new qualifications.

"If industry changes the qualifications, the RTO has got to adapt and we're not just talking about compliance things," an RTO manager said, adding that Teach, Train and Assess professionals must be across units of competency should they change.

Like to know more?

The **2025 Maritime Workforce Plans** prepared by Industry Skills Australia are shaped by deep engagement with stakeholders and the latest data analysis. The Workforce Plan serves as a roadmap for collaboration between industry, government, and the national skills system. How is the Maritime sector being shaped by emerging challenges and opportunities? What does this mean for workforce development? Each individual Workforce Plan provides a deeper dive into sector-specific issues and identifies proposed actions and opportunities for consideration.

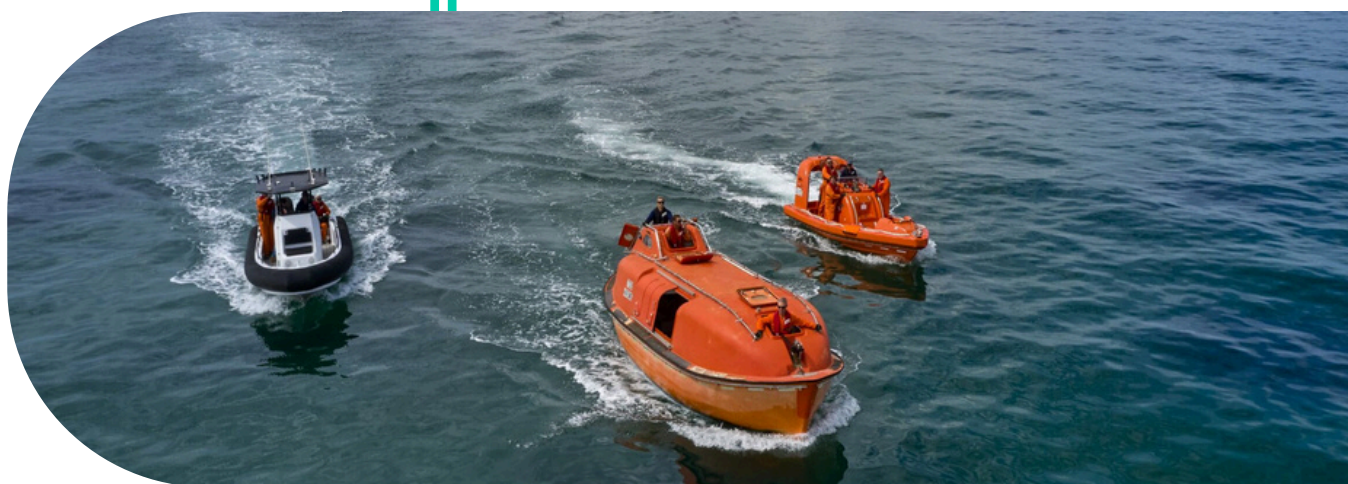


Image courtesy of ERGT

Track Changes

Australia's rail industry boasts a storied, even romantic history. In a country of vast distances and yawning empty spaces, rail was essential in helping to facilitate Australia's growth from colonial outpost to thriving industrial economy. In the Steam Age before federation, this took place despite discrepancies in gauge width between states, and a lack of regulation over competing private enterprises.

Today Rail has never been a more important component of the country's transport infrastructure. More than 31,000km of track provides mobility to legions of passengers and essential freight services across the country. This despite 18 separate rail networks, 11 different signalling systems and more than 50 rail operators.

Tracking VET workforce current and emerging trends in Rail

Current workforce trends

Two major tendencies are impacting the Rail VET sector: shifting workforce demographics and notable limitations in trainer capabilities. In this, Rail is not so very different from some other industries and professions. How it navigates these dual challenges will go a long way in helping to determine the health and sustainability of the VET Rail sector for years to come.

Fact: a third of Rail Teach, Train and Assess workers are aged over 55, with 17.2 per cent aged over 60 (as references in the ISA Workforce Plan). With a sizeable portion of its workforce nearing or entering retirement, the Rail sector is confronting a demographic shift. This "retirement cliff", however, represents both a challenge and an opportunity for the VET Rail sector. The challenge takes the form of losing experienced trainers. But their departure just might open pathways for those looking for a lifestyle change and therefore to transition into Teach, Train and Assess roles.

Strategic succession planning and mentorship programs will be essential over the coming years to retain institutional knowledge and ensure continuity.

"We've got an ageing workforce; we've got very experienced workers that are technical trainers," said one Rail RTO manager. "As they're starting to retire, we are really struggling to find other people within our organisation to step up to be in that technical training space."

Trainer capability deficit

The ISA Survey interview data reveals a substantial capability deficiency within the VET trainer workforce, especially in areas considered critical to contemporary training delivery.

Although many trainers have considerable industry experience, they are often missing essential skills in digital literacy, instructional design and learner engagement. The absence of such expertise is more problematic as training becomes technologically integrated and learner centred, which is increasingly the case. In scenarios such as this, trainers can struggle to develop adequate learning materials, adapt to digital platforms and meet evolving regulatory standards. This can lead to a reliance on (often expensive) external resource developers and inconsistent training quality.

Underdeveloped soft skills and an absence of psychosocial awareness (i.e., involving both psychological and social aspects) can also affect the ability and effectiveness of trainers to support diverse learner needs.

“There is a need for trainers and assessors with natural soft skills, and psychosocial knowledge,” one RTO manager said. Another ISA survey participant described the frustrations arising from employing Teach, Train and Assess professionals who boast respectable at-the-coalface industry experience, but not the digital prowess expected of today’s VET workforce.

“We struggle in developing resources and mapping because the industry-experienced people know how to train, but they’re very slow on the computer,” the RTO manager said. “And so, we’ve actually had to engage a resource developer.”

Coming on board: emerging VET workforce trends

The VET Rail environment is being impacted by its changing demographic and a general lack of compliance knowledge in its VET sector. In short, the VET Rail workforce is becoming more diverse, with more women and younger individuals entering Teach, Train and Assess roles. Because many of these new entrants have specific TAE skillsets (rather than the full qualification), there is increasingly a need for flexible pathways to attain full certification, and for continuing support.

It’s one thing to know how to propel a train down the tracks, to ensure that the system runs safely and on time, or that tracks are properly laid and maintained. But it’s quite another to effectively instruct those entering the industry and do so with a full working knowledge of legal, practical and safety ramifications.

Gaps in the skills of some emerging Teach, Train and Assess professionals are reason for concern. Many lack compliance knowledge, for instance. Soft skills and technical prowess – essential attributes for trainers – are often not as strong as training providers would prefer.

“The biggest shortfall for our trainers is lack of understanding compliance and legal implications of outcomes,” one RTO manager said.

Adequately addressing and dealing with these deficiencies is critical in maintaining the quality and integrity of training delivery and assessment.

Coming down the track: emerging VET workforce trends

New and emerging roles in the VET Rail workforce reflect growing regulatory demands, digital transformation, and evolving learner needs. In the VET Rail sector, new roles are opening up in administration and resource development.

“So, where we struggle is developing the resources and the mapping, because industry-experienced people know how to train, but they’re very slow on the computer and we’ve actually had to engage a specialist – we’ve got a resource developer,” explained a Rail RTO manager.

Opportunities exist for digitally savvy administratively minded Rail Teach, Train and Assess professionals. The talents of such individuals will doubtless be in demand. They have a ticket to ride.

Barriers and burdens in attraction and retention

Understanding training delivery

The VET Rail sector continues to be confronted by challenges. One of these is simply a lack of awareness surrounding the VET sector in general.

RTO managers say there is a shortfall in understanding about the types of providers and opportunities within the VET sector, especially among those who are unfamiliar with private RTOs.

“Many people confuse VET with TAFE unless they have had personal experience,” one RTO manager said. “This confusion limits the potential talent pool.”

On the one hand there’s a general lack of curiosity from Rail workers in roles that are less remuneratively rewarding than operational positions. On the other, there is a lack of awareness such roles even exist.

“Unless they’ve come through a VET pathway themselves in their first career, I just think most people don’t know what a private RTO is,” an RTO manager said. “It is a barrier, as they just don’t know the opportunity exists in a lot of cases.”



Image courtesy of Iron Training & Consulting

Keeping the VET Rail workforce on track

Several challenges are influencing retention in the Rail VET workforce: maintaining industry currency; an ageing workforce; and the impending retirement of a sizeable percentage of the workforce.

Staying up to date with technology that is rapidly changing remains a major and continuing problem for the TSC Industries' VET workforce. This is particularly the case in sectors experiencing rapid technological and regulatory change, such as Rail. Without wishing to use a stereotype, it's often the case that health issues or a reluctance to adapt to evolving standards can mean older trainers struggle to stay current. Meanwhile financial and operational constraints prevent many RTOs from releasing staff for meaningful industry engagement.

"Keeping trainers current is difficult," observed an RTO manager. "It means spending money to release trainers to work in industry and building relationships with industry to get meaningful placement."

A Rail VET Teach, Train and Assess workforce where substantial numbers are poised to retire only serves to underline the urgent need for succession planning and strategies to retain knowledge within the sector.

"We're just struggling to recruit to replace our ageing workforce," a Rail RTO manager admitted.

Rail VET workforce in rural, regional and remote areas

You would think that life away from Australia's bigger metropolitan areas and their traffic snarls, exorbitant real estate prices and hectic pace would prove to be appealing, but attracting and retaining the VET workforce in rural, regional, and remote areas presents persistent challenges across TSC Industries.

To a degree this is also understandable, given that Australia is after all, a country whose population is for the most part based in cities and their suburbs. In the 2021 census, 66.9 per cent of people counted lived in greater capital cities, with 33.1 per cent in the rest of Australia.

Short-term roles in rural, regional and remote areas are regularly available in the VET Rail workforce, but those who opt for them are often unable or unwilling to make long-term commitments due to a variety of factors: financial constraints, limited infrastructure, and lifestyle preferences.

Confronting a paucity of qualified Teach, Train and Assess professionals, the VET Rail workforce also lacks accredited pathways to build local capacity.

The limited pool of qualified Teach, Train and Assess professionals in regional areas presents a major barrier to training and assessment in these locations. Not only does the smaller population base reduce the likelihood of finding individuals with the necessary credentials (e.g., TAE), the absence of accredited training pathways in the VET Rail sector exacerbates the issue because it limits the development of local talent.

A Rail RTO manager put it succinctly: “We struggle to recruit in remote and regional locations, as [the] population in the area don’t have the skills.”

“Lifestyle choices” is one of those nebulous terms that can mean just about anything, but for the purposes of the ISA VET Workforce Project it translates to proximity and stability.

Simply put, lifestyle choices impact trainer availability. Many trainers prefer stability, proximity to family or the availability of urban amenities, meaning they are reluctant to relocate or travel to remote areas. This is especially the case for those nearing retirement (often prime candidates for transitioning to Teach, Train and Assess roles) or starting families.

What’s coming down the track: future needs

Funding stability, digital integration, and workforce development – these are the building blocks – or perhaps “sleepers and spikes” is a more apt term – of the future Rail VET workforce. The Rail sector’s requirements include better alignment of training standards with industry needs, trainer development and an efficient RTO network.

Like to know more?

The **2025 Rail Workforce Plans** prepared by Industry Skills Australia are shaped by deep engagement with stakeholders and the latest data analysis. The Workforce Plan serves as a roadmap for collaboration between industry, government, and the national skills system. How is the Rail sector being shaped by emerging challenges and opportunities? What does this mean for workforce development? Each individual Workforce Plan provides a deeper dive into sector-specific issues and identifies proposed actions and opportunities for consideration.





Moving Right Along

Integral to the national economy and essential to the operation of all Australian industry and communities, the Transport and Logistics (T&L) sector is an intrinsic component of the nation's Transport Supply Chain (TSC). Our social and economic wellbeing depend on it. As passengers, T&L is one of the modes we use to get around. Also, material of all descriptions – from livestock to vehicles, raw goods, food, minerals and clothing – can only reach its destination via the T&L Industry.

The T&L domain is comprised of the biggest workforce across the TSC Industries. With 580,000 individuals employed in over 200,000 businesses, it is more than twice the size of the other three TSC sectors combined. Yet scale offers no shield for T&L from the factors impacting across the TSC Industries VET workforce: complex regulatory requirements, demographic shifts and recruitment challenges.

“We get people who have done their turn as a driver but want to stay and give back to their industry. So, we actually assist them in becoming a qualified trainer and assessor as well”

When the rubber hits the road: T&L VET workforce trends

An ageing workforce and funding pressures are among factors affecting the T&L VET sector. A decent proportion of T&L Teach, Train and Assess workers are aged 50 and above, with some in their 70s, indicating a heavy reliance on senior employees and the potential difficulty for some individuals to complete the industry-required annual physical assessment.

A demographic that skews towards the over 50s presents challenges in workforce sustainability, particularly in terms of attracting younger individuals to the industry. This was noted in the ISA Survey and interviews via concerns about the average age of drivers and recruitment difficulties. However, the sector is showing signs of nimbleness and adaptability by offering pathways for older workers to remain engaged, such as by transitioning into Teach, Train and Assess roles.

“We get people who have done their turn as a driver but want to stay and give back to their industry,” one RTO manager said. “So, we actually assist them in becoming a qualified trainer and assessor as well.”

One RTO manager said that there is a pressing need for traineeships and apprenticeships. Despite this, however, the T&L Industry is “not on the skilled list at all” because “they don't consider it a strong enough need”.

“There are 26,000 job vacancies at the moment for drivers, and that won't be for one driver,” the RTO manager said. “That could be for 10 or 15 or 20 types of drivers.”

The road ahead: emerging T&L VET workforce trends

Emerging trends in the T&L VET sector – particularly those related to technology integration and knowledge loss – are impacting training delivery.

A stronger embrace of software, fatigue-monitoring systems and augmented reality are adding a layer of complexity to training requirements. Trainers and learners are finding that they have to adapt to rapid technological change, which requires continuing professional development and investment in digital infrastructure.

“Cab monitoring, the fatigue-management stuff – that’s definitely happening,” an RTO manager confirmed. With a substantial portion of the VET T&L workforce nearing retirement, a great deal of industry knowledge is at risk of being lost. An urgent need therefore exists for succession planning, mentorship programs and simplified pathways for experienced workers to become Teach, Train and Assess professionals.

“We’ve got three older employees, they’re nearing retirement,” an RTO manager said. “Their knowledge is going to walk out the door.”

New and emerging VET workforce roles

New and emerging roles in the VET workforce reflect growing regulatory demands, digital transformation, and evolving learner needs. Across the TSC Industries, there is increasing demand for compliance officers, digital learning specialists, student support staff, and resource developers. If the aim is to deliver contemporary technology-enabled training, support a diverse workplace and manage complex regulations, these are the kinds of personnel required.

Emerging roles in the T&L VET sector include digital curriculum developers, online learning specialists and compliance and quality assurance roles.

RTOs in the T&L sector still have some way to go towards digital transformation of the learning environment.



VET workforce retention and support: limits and roundabouts

Attracting a skilled VET workforce across TSC Industries is increasingly challenged by qualification barriers and a general limited awareness of the VET sector.

An RTO manager used the example of the licensed customs broker cohort to contextualise the difficulties of recruitment. Because licensed customs brokers represent a relatively small cohort (about 1,400 individuals), the pool for Teach, Train and Assess professionals is even smaller. Combined with the demands of completing trainer qualifications, the task of attracting people into Teach, Train and Assess roles becomes even more arduous.

“Attracting trainers has been really difficult,” an RTO manager said. “And it’s hard to get good-quality trainers.” Only a select few of us ever enjoy the administrative requirements that accompany the day-to-day performance of roles. Yet in the case of T&L, excessive administrative tasks and compliance requirements are causing fatigue and reducing job satisfaction among Teach, Train and Assess professionals.

“The administrative burden and digital skill requirements can be difficult for trainers who have come from operational roles,” an RTO manager said.

Another manager said that the ability to train and assess didn’t always translate to a sound grasp of compliance.

Outer roads: the challenges of rural, regional and remote areas

Like the other domains that make up the TSC Industries, T&L suffers from the tyranny of distance. Attracting and retaining the VET workforce in rural, regional, and remote areas presents persistent and difficult-to-overcome challenges.

Although short-term roles are an option favoured by Teach, Train and Assess professionals, a long-term commitment is a tougher sell. Financial constraints, limited infrastructure, and lifestyle preferences are the factors at play here. In the VET T&L sector, a low demand for training and a reliance on metropolitan-based trainers further complicate workforce sustainability in these regions.

“Our trainers are based in metro locations and either fly or drive to regional, rural [and] remote locations for delivery of training,” an RTO manager explained.

Compensation or lifestyle incentives often sweeten the deal for metropolitan trainers to make a limited-stay country sojourn. Another uncomfortable truth is that the volume of training required in regional, rural, and remote areas is often too low to justify hiring full-time trainers.

Like to know more?

The **2025 Transport and Logistics Workforce Plans** prepared by Industry Skills Australia are shaped by deep engagement with stakeholders and the latest data analysis. The Workforce Plan serves as a roadmap for collaboration between industry, government, and the national skills system. How is the T&L sector being shaped by emerging challenges and opportunities? What does this mean for workforce development? Each individual Workforce Plan provides a deeper dive into sector-specific issues and identifies proposed actions and opportunities for consideration.



The road ahead for the T&L VET workforce

Key requirements in the T&L VET sector in the near future include incorporating advanced training technologies, improved funding, and support for trainer qualifications.

The need for advanced training technologies reflects a growing interest in kit such as simulators, VR, video streaming, and AI-related tools. Yet it also underlines practical barriers such as cost, maintenance and infrastructure limitations.

"We have also used VR training in the past, which can be quite effective," said one RTO manager, "but it is expensive."

An RTO manager suggested that fees should be waived for students.

"Students are not completing their studies because they've got no investment in it, and they've already burned their one allocation of funding," the RTO manager said. "Then they come to me and say, 'I need more funding for this'."



On the Right Track

A specialist Western Australian Rail RTO has developed winning strategies for attracting and retaining its VET Teach, Train and Assess staff

- Iron Training & Consulting, a private Registered Training Organisation (RTO), delivers expert training solutions to the Rail sector across key regions in Australia.
- Established in 2015 and headquartered in Western Australia, the organisation operates with a tight-knit team of eight employees, supporting fewer than 100 students.
- ITC predominantly serves WA, with additional operations in Victoria, Queensland and New South Wales.

Led by CEO and part-owner Mark Shedlock, Iron Training & Consulting (ITC) has a team of eight staff. Although not a traditional family business in the sense of being owned and run by multiple family members, the company is predicated on a clear philosophy that prioritises flexibility, empathy and support for individuals' personal responsibilities. It is “family friendly” rather than “family run”.

Over the past five years, ITC's strategies prioritising its people have proven highly effective, resulting in impressive staff retention, minimal turnover, and a workplace culture where, as Mark puts it, “everyone's happy” and “no one's ever going to leave us on a bad note”.

ITC's approach to staff empowerment is based on simple, open communication.

“It's just about talking to people,” Mark explains, “and not saying, 'Do that, do this'.”

Flexibility is allowed – and extended – based on trust and tenure, such as when a valued coordinator was permitted to work remotely from Brisbane after relocating.



Image courtesy of Iron Training & Consulting

Attraction, retention, promotion

The company's attraction and retention strategies are multifaceted, combining equal parts cultural values with practical benefits. Financial incentives include above-industry pay and comprehensive packages that cover laptops, cars and phones. In regions where accommodation is expensive, such as Port Hedland, housing assistance is provided. Indeed, recognising the importance of reducing life stressors, ITC rents houses for staff. It's one less thing to worry about for ITC's people. Career development is supported through mentoring and internal promotion.

"I'll go to the two trainers there and ask them first before advertising externally," Mark says of the internal promotion policy. On the occasions when employees do leave the organisation, ITC endeavours to maintain a cordial relationship with them. The door is always open should circumstances change and the staff member wish to return.

As for a leadership philosophy, Mark's is based on valuing and supporting Teach, Train and Assess workers as the core of the organisation.



Image courtesy of Iron Training & Consulting

“Without trainers, you don’t have business,” he says, advocating for an approach that prioritises people over profit.

This is reflected in his willingness to invest in staff development. For Mark and ITC, helping staff become the best version of their professional selves is a no-brainer.

“I just said yep, book him in,” Mark says, recalling an occasion when he approved a \$4,000–\$5,000 professional development session following an email request.

Informal gestures, such as taking staff out for dinner, further reinforce the supportive culture.

Another key facet of ITC’s success to date has been a commitment to mentoring, with experienced Teach, Train and Assess professionals paired with younger staff to ensure valuable knowledge is passed on. This approach supports both professional growth and workforce continuity.

Broader industry challenges

Beyond the challenges of attracting and retaining staff, Mark says there is a pressing need for greater clarity in policy and funding frameworks within the VET sector. He says there is an inconsistency in compliance standards.

This lack of standardisation can create administrative burdens and confusion, especially when training durations are interpreted differently across providers. Mark calls for clearer, more consistent guidelines: “Step one to step 10,” he says. “Do not deviate from that.”

These reflections align with broader conversations in the sector, where some providers have expressed challenges navigating evolving and sometimes unclear regulatory expectations.

Lessons from Iron Training & Consulting

- Promote a positive work culture, with a philosophy based around prioritising family time.
- Use open communication to foster empowerment.
- Offer financial incentives, including above-industry pay and comprehensive packages that cover laptops, cars, phones and housing support in certain regions.
- Invest in career development through internal advancement opportunities, continuous professional development and structured mentoring.

Other Findings of Note

The ISA Survey and related interviews formed a major part of the research component of the ISA VET Workforce Study. In the course of this initiative, a considerable amount of information such as statistical data and feedback from RTO managers was collected, synthesised, validated, analysed and reviewed. Not all of the feedback we received, however, is actionable as part of ISA's work on this project. Yet this intelligence is undoubtedly of value to stakeholders within, beyond and impacted by the TSC. Although they lie beyond this project's scope, ISA has noted their importance, and where appropriate will continue to advocate for their improvement.

All our industries reflected that a barrier to attracting and retaining skilled VET TSC Industry workforce professionals is the salary disparity between operational staff and VET Teach, Train and Assess workers.

Stakeholders said that the lack of alignment in training syllabus between regulators further complicates compliance efforts, adding to the administrative burden for training providers.

The complexity and cost of the Certificate IV in Training and Assessment (TAE) was frequently cited as a barrier to contemplating the field of VET TSC Industry Teach, Train and Assess roles as a profession. According to ISA Survey respondents, the TAE should be aligned with the operational realities of industry, with respondents calling for simplification, relevance and customisation in training design and delivery. Some respondents said the TAE qualification is misaligned with industry needs.

An efficient RTO network requires improved collaboration among RTOs, stakeholders told us.

Maintaining Momentum

The ISA VET Workforce Study (ISA Study) focused on profiling the TSC Industries' VET Teach, Train and Assess professionals by observing trends, examining barriers and burdens in attraction, support and retention, and identifying pathways from the TSC Industries into their respective VET workforces.

We also looked at the TSC Industry VET professionals who are working for RTOs in regional, rural and remote (RRR) areas. Without doubt there are some continuing issues in recruiting to these areas. Yet it's also the case that some innovative RTOs located in these locales have looked beyond standard inducements to offer attractive incentives including some difficult-to-quantify intangible benefits.

The feedback and analysis from the four TSC domains revealed several key trends. Perhaps the most prominent of these is the ageing population of Teach, Train and Assess professionals, many of whom are nearing the end of their careers. This is the much-discussed so-called "retirement cliff", taking place across the TSC VET workforce, but perhaps particularly applicable to the Rail sector. The abrupt departure of these experienced VET professionals could lead to a substantial loss of industry expertise and training knowledge, potentially affecting the quality and viability of TSC Industry vocational education.

To ensure a resilient and future-ready VET workforce, each of the realms within the TSC Industries has its own requirements, and there are issues relevant across all four domains. In Aviation there is a need for flexible, future-focused career pathways. For the VET Maritime sector, accelerating the adoption of simulation technologies and better alignment with industry standards come to the fore. The VET Rail sector's requirements include better alignment of training standards with industry needs, trainer development and an efficient RTO network. Key needs in the T&L VET sector include incorporating advanced training technologies and support for trainer qualifications.

These points of need and focus suggest that the TSC Industry VET workforce requires both a suite of resources for its Teach, Train and Assess staff to ensure quality and relevance of training, and possible options for alternative pathways into the workforce to supply a continued pipeline of Teach, Train and Assess personnel.

ISA will conduct a deeper investigation into the workforce challenges and issues identified in Stream 1 listed below and further explore industry-led responses.

- Technology integration and training complexities
- Resource constraints
- Administrative and compliance burden (including in Regional, Rural and Remote (RRR) areas)
- Supply and demand in RRR areas
- Upskilling capabilities
- Trainer capability gaps
- Changing workforce demographics (including an ageing workforce).

We will also investigate potential pathways into the VET sector from TSCI operational roles.

By addressing these challenges in a coordinated way, the TSC Industries can build a highly valued and sustainable VET workforce, supporting both learners and the broader industry for the path ahead.





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