Student Pathways to In-Demand Industries

A Submission to the Victorian Legislative Assembly Economy and Infrastructure Committee

Friday,1st August 2025

Table of Contents

1.Introduction

The Australian Logistics Council (ALC) welcomes this Inquiry, which rightly directs attention to the critical workforce foundations supporting Australia's economy. As the peak national body representing the country's largest end-to-end supply chain companies, ALC advocates for nationally consistent policies that enhance productivity, safety, sustainability, and resilience across all freight modes—including road, rail, sea, air, and intermodal transport.

The freight and logistics sector is a vital economic pillar, facilitating approximately $1.2 trillion in goods movement annually[1]and employing over 750,000 Australians, accounting for 5.1% of the national workforce[2]. In Victoria alone, the sector contributes in excess of $20 billion to the state economy[3]. It supports a broad array of supply chain activities across ports, intermodal hubs, regional freight corridors, e-commerce and retail, construction, agriculture, and advanced manufacturing. Despite this significance, the sector's workforce development remains fragmented and misaligned.

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[1] https://www.propertycouncil.com.au/wp-content/uploads/2024/02/The-value-of-goods-through-Australias-industrial-assets.pdf

[2] https://www.jobsandskills.gov.au/data/occupation-and-industry-profiles/industries/transport-postal-and-warehousing

[3] https://www.vic.gov.au/sites/default/files/2022-10/Transport%2C-postal-and-warehousing-industry-Final.pdf

Awareness of freight careers among students is low, and education and training pathways lack coherence with industry needs. This gap is increasingly concerning given the ageing workforce—where the average age is in the mid-40s[4]—and the growing technological complexity of logistics roles. Concurrently, freight volumes and operational demands are rising steadily. A future-ready logistics workforce is essential to national resilience, decarbonisation, and sovereign capability. However, current education and training systems remain misaligned with the sector's evolving complexity and scale. The Victorian Government is well positioned to address this disconnect through strategic reforms spanning education, planning, and workforce investment.

This submission identifies structural barriers to attracting and retaining skilled talent and proposes clear, practical recommendations to realign vocational education and training (VET), higher education, and school-based pathways with the needs of a modern, technology-enabled logistics industry. Developing a future-ready freight workforce is essential—not only to safeguard Victoria's economic competitiveness and meet net-zero targets but also to enhance the state's capacity to manage supply chain disruptions and global shocks.

2. Summary of Recommendations

1. Rebuild foundational logistics training capacity across the education system, with targeted investment in TAFEs and dual-sector universities—particularly in regional and urban areas adjacent to key freight corridors.

2. Establish clear, end-to-end pathways from school to employment, embedding freight and logistics in secondary education, vocational training, tertiary study, and structured workplace learning programs.

3. Strengthen the visibility and positioning of logistics careers within government career guidance infrastructure, including digital tools, school programs, and STEM and equity initiatives.

4. Embed and expand proven, industry-led workforce programs such as Wayfinder through sustainable government funding and formal integration into state training and employment strategies.

5. Develop a coordinated Victorian Supply Chain Skills Strategy, aligning workforce planning with infrastructure, clean energy, regional development, and freight policy to support long-term industry capability.

6. Support the development of modular, fast-track training programs—including micro-credentials and RPL mechanisms—for underemployed and transitioning workers.

7. Incentivise SME and social enterprise participation in inclusive workforce development through precinct-based procurement and targeted grant programs.

3. Reframing Supply Chain, Freight and Logistics as a Modern, High-Demand and High-Value Industry

Government and public understanding of the freight and logistics sector remains overly narrow, typically reduced to outdated images of truck drivers, warehouse workers, and forklift operators. This limited perspective fails to reflect the scale, complexity, and strategic importance of modern supply chains, which encompass over 150 distinct occupational categories spanning data science, automation, procurement, cyber security, systems planning, compliance, and artificial intelligence. These roles underpin freight network productivity and are fundamental to sovereign capability, digital innovation, and economic security.

Emerging logistics precincts require an even broader range of support roles, including sustainability analysts, ESG compliance officers, community engagement practitioners, and wellbeing professionals. These roles are vital to precinct operation and social licence and form part of a wider employment environment, and therefore they should be fully incorporated into logistics career maps, school outreach, and training pathways. Yet despite this evolution, logistics careers remain largely absent from national digital career guidance platforms such as My Future[5] and VET pathways mapping tools. This lack of visibility contributes to persistent workforce shortages across both operational and professional streams[6].

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[4] https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed-quarterly/latest-release

[5] https://myfuture.edu.au

[6] https://www.jobsandskills.gov.au/publications/towards-national-jobs-and-skills-roadmap-summary/current-skills-shortages

Improving the sector's profile must go hand in hand with reforms that recognise and promote diverse entry points. Portable recognition frameworks should be developed to formally accredit skills gained through internal workplace training, enabling mobility across employers, regions, and roles. These reforms would broaden the candidate pool, improve job matching, and elevate the sector's attractiveness to a wider range of jobseekers.

The Australian Logistics Council's *Wayfinder: Supply Chain Careers Map*[7] and independent labour market analysis confirm the sector's critical alignment with national workforce priorities, including digital literacy, sustainability, and critical infrastructure protection. Strengthening visibility and access to this full spectrum of careers is essential to building a resilient, future-ready workforce for Australia's evolving freight economy.

4. Misalignment Between Industry Demand and Education Pathways

4.1 VET AND HIGHER EDUCATION DISCONNECTION

Australia's logistics training pipeline lacks strategic coherence. Fragmented delivery across VET and higher education has weakened the sector's ability to respond to shifting workforce needs. In the VET sector, enrolments in logistics-related qualifications have declined sharply, with once-strong programs at institutions such as RMIT, Victoria University, and GOTAFE discontinued. Nationally, non-trade apprenticeships—including logistics—have consistently declined in the past decade, eroding foundational training capacity. At the university level, logistics is often absorbed into generalist business degrees, diminishing its technical relevance and industry focus.

This erosion has been compounded by broader funding dynamics in the tertiary sector. Many universities have shifted their strategic priorities toward international enrolments, which offer significantly higher margins than domestic places. In 2022, for example, the University of Sydney derived 44% of its total revenue from international student fees, while the University of Queensland generated 72.5% of its student-related income from overseas students—despite international students comprising a smaller share of overall enrolments[8]. This financial dependency has constrained institutional appetite to develop or maintain specialised, low-enrolment programs—particularly those serving domestic workforce needs in sectors like freight and supply chain.

Dual-sector universities, especially in Victoria, are well-positioned to deliver integrated, work-aligned qualifications spanning secondary, VET and higher education. However, they remain under-leveraged. Without stronger policy alignment and clearer pathways, the sector will continue to face a constrained and disjointed workforce pipeline.

4.2 CROSS-SKILLING AND RECOGNITION OF PRIOR LEARNING

There is a significant opportunity to develop recognition of prior learning (RPL) and cross-skilling pathways for underemployed populations with relevant experience. This includes migrants with international qualifications, veterans with defence logistics backgrounds, and workers transitioning from adjacent sectors such as construction or manufacturing. Structured fast-tracking models, supported by modular or micro-credential training, can help unlock this latent workforce potential. Logistics workforce development must shift towards modular, flexible delivery modes that reflect real-world job requirements.

4.3 MODULAR AND FLEXIBLE LEARNING PATHWAYS

Co-designed micro-credentials—particularly those developed with equipment manufacturers and intermodal operators—can support rapid upskilling in automation, ESG reporting, digital fleet management, and other emerging competencies. These approaches are essential for responsive, scalable workforce training that aligns with future freight precinct demands.

5. Career Awareness, Guidance Deficits and Digital Access

Career education in Victorian secondary schools has become increasingly marginalised in both policy and practice. What was once a dedicated advisory function is now frequently absorbed into general teaching responsibilities. Many career

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[7] Supply Chain And Logistics Careers For Women | Wayfinder

[8] https://www.abc.net.au/news/2024-05-16/group-of-8-universities-third-of-income-international-students/103846352

practitioners are expected to support hundreds of students using limited tools, outdated labour market data, and minimal professional development[9]. This severely restricts the capacity of schools to provide informed, tailored advice on emerging career opportunities—particularly in high-demand sectors such as supply chain and logistics.

Raising student awareness must also include clearer promotion of trade-based roles across modern supply chains. The increasing automation of warehouses and distribution centres is driving strong demand for electricians, mechanics, and technicians—occupations traditionally associated with construction or residential services. Career guidance systems must actively challenge outdated assumptions about trade careers by showcasing how logistics environments are evolving into high-tech, regulated, and innovation-led workplaces.

International research confirms that students increasingly rely on peers, family, and digital platforms—not formal counsellors—when making post-school decisions[10]. Yet logistics remains poorly represented across career platforms, digital outreach tools, and national skills priority lists. This lack of visibility has real consequences. Without early exposure to the diversity of modern logistics roles, students are unlikely to pursue relevant training. The impact is especially pronounced in high-tech, specialist, and sustainability-related roles where industry faces critical skills shortages.

The Australian Logistics Council's *Wayfinder: Supply Chain Careers for Women* program is addressing part of this visibility gap. Wayfinder connects female secondary and tertiary students with industry mentors, facilitates structured site visits, and promotes the breadth of careers available in today's freight networks. By providing real-world exposure, Wayfinder helps shift perceptions and build informed interest in logistics as a viable, high-value career. However, such initiatives cannot reach sufficient scale without formal integration into Victoria's career education strategy. Embedding logistics into school platforms, digital resources, and regional engagement efforts is essential to improving visibility and access across the state.

6. Equity of Access and Inclusion Gaps

Equity of access continues to constrain the development of a diverse and skilled freight and logistics workforce in Victoria. Barriers persist across regional, gendered, and socioeconomically disadvantaged communities, particularly in areas with strong industry presence but limited access to training pathways.

6.1 REGIONAL DISADVANTAGE

The development of regional freight precincts presents a significant opportunity to enhance both freight efficiency and regional employment outcomes. Strategic investment in logistics infrastructure in regional areas can support the co-location of industry and education, positioning freight precincts as regional training hubs. This model offers cost-effective access to jobs for communities often excluded from metropolitan labour markets and supports the development of a locally skilled workforce aligned with industry demand.

However, despite regional Victoria hosting critical freight corridors and emerging logistics hubs—including the Hume, Goulburn Valley, and Gippsland corridors—access to logistics training remains limited. TAFEs in these regions have reduced logistics-related program offerings at the same rate as their metropolitan counterparts, despite growing demand and proximity to major employers. Wodonga TAFE has maintained a logistics training presence, largely due to Defence Force activity, but this remains the exception. Other providers—including GOTAFE, RMIT and Victoria University—have withdrawn logistics diplomas in response to funding and policy constraints, limiting opportunities for both students and industry. To address these gaps, the Victorian Government should embed workforce development objectives into infrastructure planning and land use strategies for regional freight hubs. Aligning precinct development with local training delivery will maximise the economic and social value of freight investments and build long-term regional workforce capability.

6.2 GENDER INEQUITY

Women remain significantly underrepresented across logistics and freight-related occupations, particularly in operations and leadership roles. Government-backed STEM equity programs focus largely on university pathways in science and engineering, often overlooking vocational sectors such as supply chain and logistics. This structural exclusion leaves a major talent pipeline untapped, especially as logistics roles increasingly require technical, digital, and compliance-based competencies.

[9] https://www.theaustralian.com.au/higher-education/confused-students-are-choosing-the-wrong-university-degrees-research-shows/news-story/f6785d52e8134813486706cbff37b6d8

[10] https://time.com/7301613/gen-z-hungry-for-career-advice

The absence of targeted recruitment, mentorship, or career awareness programs for women in vocational logistics settings perpetuates industry imbalance and slows workforce growth. Current government investment in women's participation in trades and manufacturing offers a useful precedent but has not been extended to logistics.

6.3 SOCIOECONOMIC EXCLUSION

Melbourne's outer suburban freight hubs—such as Truganina, Epping, and Dandenong—are experiencing high population growth, increasing industrial activity, and strong demand for supply chain workers. Yet these urban fringe communities often lack sufficient access to logistics-specific TAFE training, career outreach, or wraparound supports. This disconnect results in poor visibility of freight and logistics careers, limited school-to-industry transitions, and underemployment of local populations despite nearby job opportunities.

Social enterprises, Indigenous-led logistics providers, and community-based organisations play a critical role as trusted intermediaries in addressing these barriers. Their deep community ties and tailored support models position them to assist jobseekers who face structural disadvantages. These entities should be actively integrated into workforce planning, precinct-level procurement frameworks, and government training partnerships to strengthen local employment pipelines and advance inclusive workforce participation across the sector.

7. Industry Case Studies: Human Capital Loss

The human capital loss caused by Australia's fragmented training system is stark. Toll Group's investment in graduate optimisation planners was quickly undermined when top consulting firms offered unsustainable salaries—up to $200,000 annually—to poach this essential talent. Similarly, Coca-Cola Europacific Partners employs over 400 skilled workers from Poland in manufacturing roles due to the lack of trained Australians. These cases highlight a significant failure in connecting education pathways to industry workforce needs. Without reform, Australia will continue to lose talent to overseas markets and higher-paying sectors—undermining our capacity to build sovereign, resilient supply chains.

7.1 ROLE OF SME'S IN WORKFORCE DEVELOPMENT

While major logistics employers play a critical role in training and employment, small and medium enterprises (SMEs) are often more agile in adopting inclusive hiring practices. Their flexibility enables innovation in workforce models, including trialling part-time apprenticeships, family-friendly rosters, or community recruitment initiatives. Workforce strategies should account for and support the distinct needs of SMEs within freight precincts and regional logistics networks.

8. Strategic Importance of Workforce to Industry Resilience

Every major ALC member identifies workforce capability as their number one strategic risk. Australia's ageing population, shrinking working-age cohort, and growing freight task require an urgent reimagining of how we develop and retain supply chain talent. Countries like Singapore, France, and Japan align education systems directly with national capability needs. Australia must follow suit, linking logistics education with infrastructure, decarbonisation, and resilience policy to prevent fragmented delivery and policy failure. Workforce planning must be integrated with economic forecasting and national security strategy. Without it, we risk losing control over critical systems of national importance.

9. Conclusion

Australia's supply chain and logistics workforce challenges are structural, immediate, and intensifying. Without targeted reform, the sector will continue to face persistent skills shortages, increased reliance on overseas labour, and reduced capacity to support national resilience and economic growth. As the freight task expands and operations become more technologically advanced, these gaps will widen. Targeted action in Victoria—through the restoration of logistics training capacity, integrated pathways from education to employment, improved career visibility, and stronger inclusion measures—can establish a leading example of how to build a modern, high-performing freight workforce. These efforts are essential to meeting the demands of a decarbonised, digitised, and globally integrated supply chain economy. Complementing these reforms, the development of a unified, nationally recognised logistics training system—with modular, standardised content that supports flexible delivery—would reduce duplication, clarify progression pathways, and improve qualification portability. It would also streamline employer engagement and enable the co-design of micro credentials that reflect evolving industry needs.

The Australian Logistics Council stands ready to support the Victorian Government in delivering these outcomes. A nationally consistent, future-ready logistics workforce is not only a workforce development priority—it is critical to ensuring Victoria's economic competitiveness and long-term supply chain resilience.