



Cairns region workforce development plan

Aviation industry, and maritime and marine industry



**Jobs
Queensland**

Future skills. Future work. Future Queensland.

Acknowledgement of First Nations peoples

Jobs Queensland respectfully acknowledges the First Nations peoples in the state of Queensland, and acknowledges the cultural and spiritual connection that Aboriginal and Torres Strait Islander peoples have with the land and sea.

We respectfully acknowledge Aboriginal people and Torres Strait Islander people as two unique and diverse peoples, with their own rich and distinct cultures, resilience and strengths.

We specifically acknowledge the unique history and cultural heritage of Aboriginal and Torres Strait Islander peoples as the First Peoples of Australia. We pay our respects to Elders past and present.

We are dedicated to the inclusion of cultural knowledge and values as critical factors in the development, implementation and evaluation of strategies and actions to support First Nations peoples.

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Thank you

Jobs Queensland would like to acknowledge the valuable input of the Project Champion Groups of the aviation, maritime and marine industries in Cairns.

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Contents

Introduction	4
Overview	6
Region and industry context	7
Megatrends influencing the Cairns labour market	9
Future opportunities	12
Leadership and management capability	12
Workforce diversification	13
Cairns aviation industry	17
Current workforce data	20
Looking ahead – future workforce needs	21
Challenges and opportunities	22
Training system to bridge the gap	24
Cairns aviation industry workforce plan strategies	25
Cairns maritime and marine industry	31
Current workforce data	33
Looking ahead – future workforce needs	35
Challenges and opportunities	36
Training system to bridge the gap	38
Cairns maritime and marine workforce plan strategies	39
Combined aviation, and maritime and marine workforce strategies	47
Appendix 1	51

Introduction

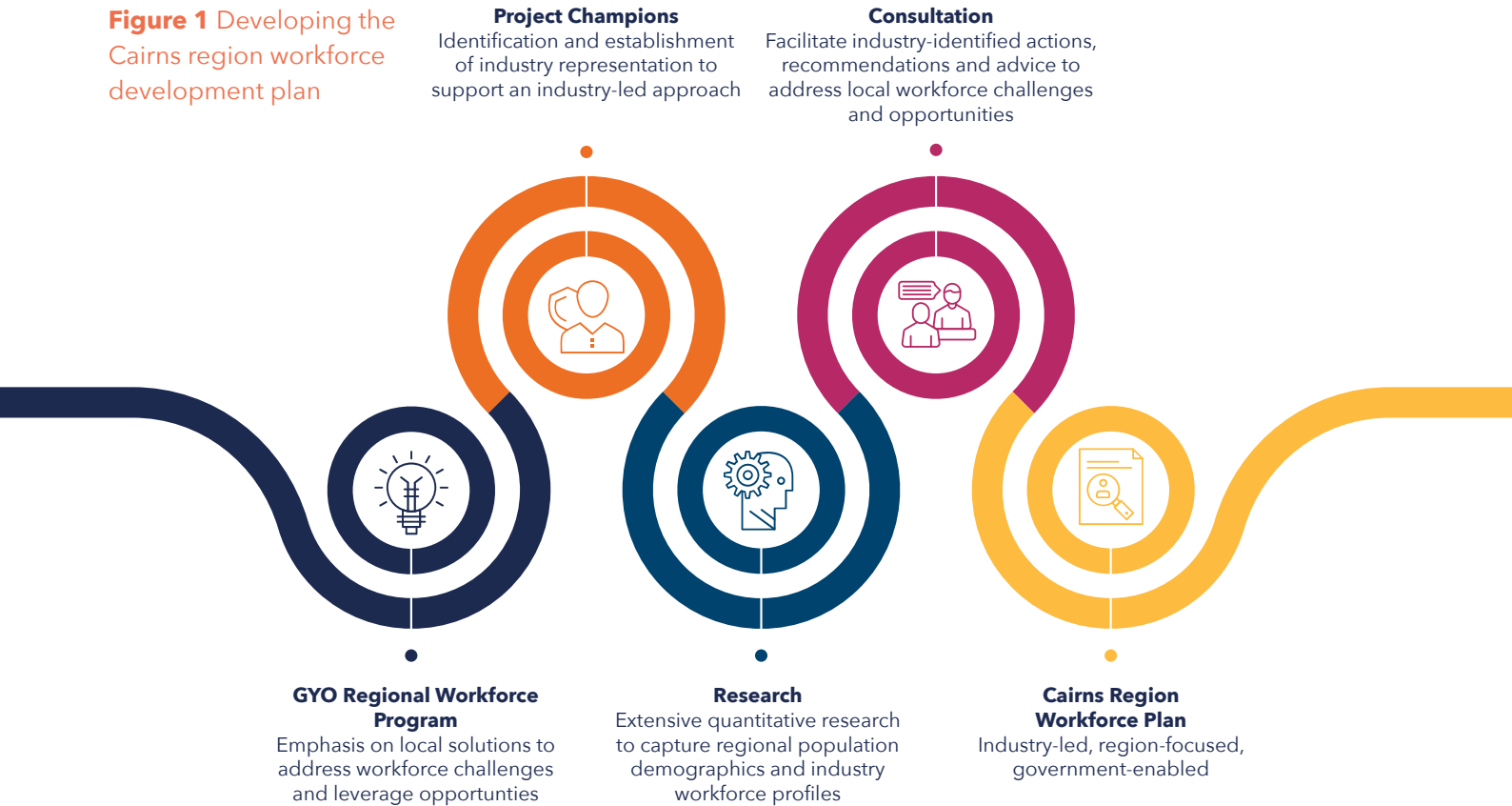
As an action from the *Good people. Good jobs: Queensland Workforce Strategy 2022-2032*¹ (QWS) under the ‘local solutions’ focus area, the ‘Grow Your Own’ (GYO) Regional Workforce Program enables key local stakeholders and industry representatives to identify workforce needs. It also allows them to plan for the skills required to meet the needs of their sector and support their region’s economic goals.

Jobs Queensland (JQ) research has revealed that connection to a community or region is a strong motivator to remain living locally. When people, particularly families, are settled with access to local services, partners have local jobs, and children are settled in local schools, there is a reluctance to move to a new region.² This provides a strong foundation for the GYO Regional Workforce Program model,

where regions are encouraged to build the skills and capabilities of the local population to address local industries’ current and future skills needs.

In response to an announcement from the Queensland Premier, local advocacy and in alignment with the region’s economic development goals, JQ partnered with the Cairns aviation, and maritime and marine industries to develop a workforce development plan. The plan focuses on industry-led, community-centred and government-enabled strategies to address workforce challenges. Its development marks an important step in ensuring both the region and focus industries remain competitive and local workers have access to the training and resources to live and work locally.

Figure 1 Developing the Cairns region workforce development plan



1. Queensland Government, 2022. *Good people Good Jobs: Queensland Workforce Strategy 2022-2032*. Brisbane: Queensland Government. https://www.publications.qld.gov.au/ckan-publications-attachments-prod/resources/ff453627-3e2a-4dc5-96c5-a3e7bdf963fa/final-queensland-workforce-strategy_2022-2032.pdf?ETag=01bfdc37789b9d96bf8baeda54b32273

2. Jobs Queensland, 2023. *Supporting individuals in the transition to future work framework*. Ipswich: Queensland Government. <https://jobsqueensland.qld.gov.au/wp-content/uploads/2023/12/supporting-individual-transition.pdf>

Figure 2

Five key themes common to the aviation industry, and maritime and marine industry



To facilitate consultation activities, the maritime and marine industry requested that JQ undertake an environmental scan to better understand a range of region and industry-specific data. This included population demographics, education and training systems and a comprehensive industry profile.³ The Cairns aviation industry endorsed using the Cairns Regional Council's existing research as an evidence base for industry consultation activities.⁴

Jobs Queensland worked extensively with local stakeholders to develop the *Cairns region workforce development plan*. This plan details the workforce challenges, opportunities and strategies identified by industry representatives as priorities for shaping the future workforce.

A consistent and clear message emerged throughout the consultation process: a desire and willingness to enhance local collaboration. The region wanted actionable and achievable recommendations that would be industry-led, region-focused and supported by Government.

This plan delivers 37 industry-led strategies focused across five key themes (Figure 2). The development of this plan reflects the voices of both industries. Through their collective expertise, collaborative approach and willingness to embrace new and innovative workforce planning ideas and approaches, this plan lays the foundation for a brighter future.

3. Jobs Queensland. (2023). *Grow Your Own Workforce: Region and industry environmental scan*. Ipswich: Queensland Government. <https://www.jobsqueensland.qld.gov.au/wp-content/uploads/2024/02/GYO-Cairns-maritime-and-marine-e-Scan.pdf>

4. Cairns Regional Council. (n.d.). *Aviation industry, 2021/22*. Cairns: Cairns Regional Council. https://www.cairns.qld.gov.au/_data/assets/pdf_file/0006/561957/Aviation.pdf

Overview



The aviation, and maritime and marine industries in Cairns are integral to the regional economy and a vital hub for access to goods, services and support for Far North Queensland and the wider Pacific region. Both industries are embedded in Cairns tourism, providing transportation for visitors into and throughout the region and contributing to the visitor experience via on-water and in-air activities, such as reef viewing and scenic flights.

They are also key components of the logistics and defence industries, providing services within the Cairns region and across Far North Queensland, the Torres Strait Islands and other offshore communities. The Port of Cairns is Queensland's most northern deepwater port and is a leading maintenance, repair and overhaul (MRO) service centre for defence, commercial and recreational vessels.

Cairns Airport is home to Australia's only heavy maintenance facility, which provides services for jet-powered commercial aircraft from around the Asia-Pacific region. The largest avionics workshop in the southern hemisphere is also at Cairns Airport.⁵ The opening of the Regional Trade Distribution Centre at Cairns Airport provides local fresh food producers with access to lucrative Asian markets.⁶

The importance of the aviation, and maritime and marine industries to the Queensland economy has been recognised by the Queensland Government through the *Queensland Defence, Maritime, Aerospace and Space Industry Skills Plan*.⁷ Both industries in Cairns are key to meeting the goals of the Skills Plan.

The Great Barrier Reef International Marine College (GBRIMC), the Cairns Aviation Skills Centre (CASC) and Aviation Australia provide vital education and training services. Additionally, there are two universities with campuses in the region – Central Queensland University (CQU) and James Cook University (JCU). Both provide courses relevant to each industry.

Both industries are expanding to take advantage of emerging opportunities, such as super yachts and the demand for Australia's quality fresh produce by Asian markets. To optimise these opportunities, the region needs a skilled and capable workforce.



5. Choose Cairns. (n.d.) *Key industries in Cairns*. Cairns: Cairns Regional Council. <https://choose.cairns.qld.gov.au/work/key-industries>

6. Queensland Treasury. (2023). *Regional Trade Distribution Centres*. Brisbane: Queensland Government. <https://www.treasury.qld.gov.au/investment/investment-growth-stories/regional-trade-distribution-centres/>

7. Department of State Development and Infrastructure. (2021). *Queensland Defence, Maritime, Aerospace and Space Industry Skills Plan*. Brisbane: Queensland Government. https://www.statedevelopment.qld.gov.au/_data/assets/pdf_file/0017/62504/queensland-defence-maritime-aerospace-and-space-industry-skills-plan.pdf

Region and industry context

The Cairns Statistical Area Level 4 (SA4) encompasses the SA3s of:

- Cairns - North
- Cairns - South
- Innisfail - Cassowary Coast
- Port Douglas - Daintree
- Tablelands (East) - Kuranda.

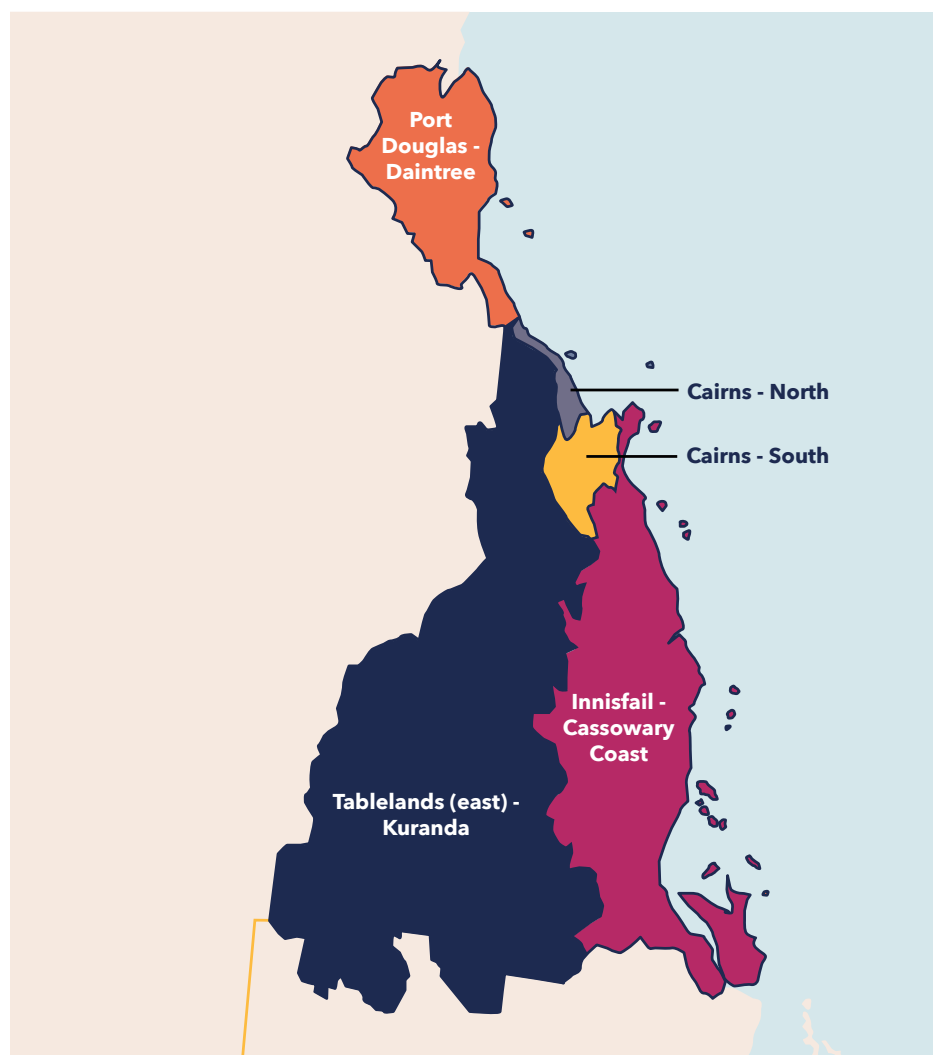
The region is a major tourism hub, providing access to the Wet Tropics rainforests and the northern Barrier Reef.⁸ It is also the major services hub for the Torres Strait Islands.

Through industry consultation in Cairns, industry representatives across both industries endorsed the industry classifications listed in Appendix 1 as the industry subsectors they use to define their respective industries, as listed within the Australian and New Zealand Statistical Industrial Classification (ANZSIC) 2006.

Figure 3

Map of Cairns Statistical Area Level 4

Queensland Government Statistician's Office,
24 April 2024, Queensland Statistical Areas,
Level 4 (SA4), 2021 - Cairns (ASGS Code 306)
<https://www.qgso.qld.gov.au/issues/10706/qld-saMap4-asgs-2021-cairns.pdf>



8. Jobs Queensland. (2018). *Tropical North Queensland Tourism Plan*. Ipswich: Queensland Government.
<https://jobsqueensland.qld.gov.au/wp-content/uploads/2018/10/tropical-north-qld-tourism-plan.pdf>

Population snapshot

Estimated total population June 2023⁹

260,649
persons

as of 30 June 2022



Population growth
from
30 June 2017



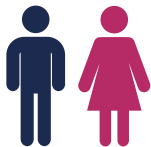
Projected
population growth
to 2026



Projected population
growth



4.6% is below the
projected state
population growth of
8.5%



Median age
43.2 years



This is above the state
average

In 2021 there was an estimated

47,175 aged 65 and older
persons in the Cairns region

18.1%
population



By 2026

54,151 persons

19.9%
population



By 2031

61,986 persons

21.5%
population



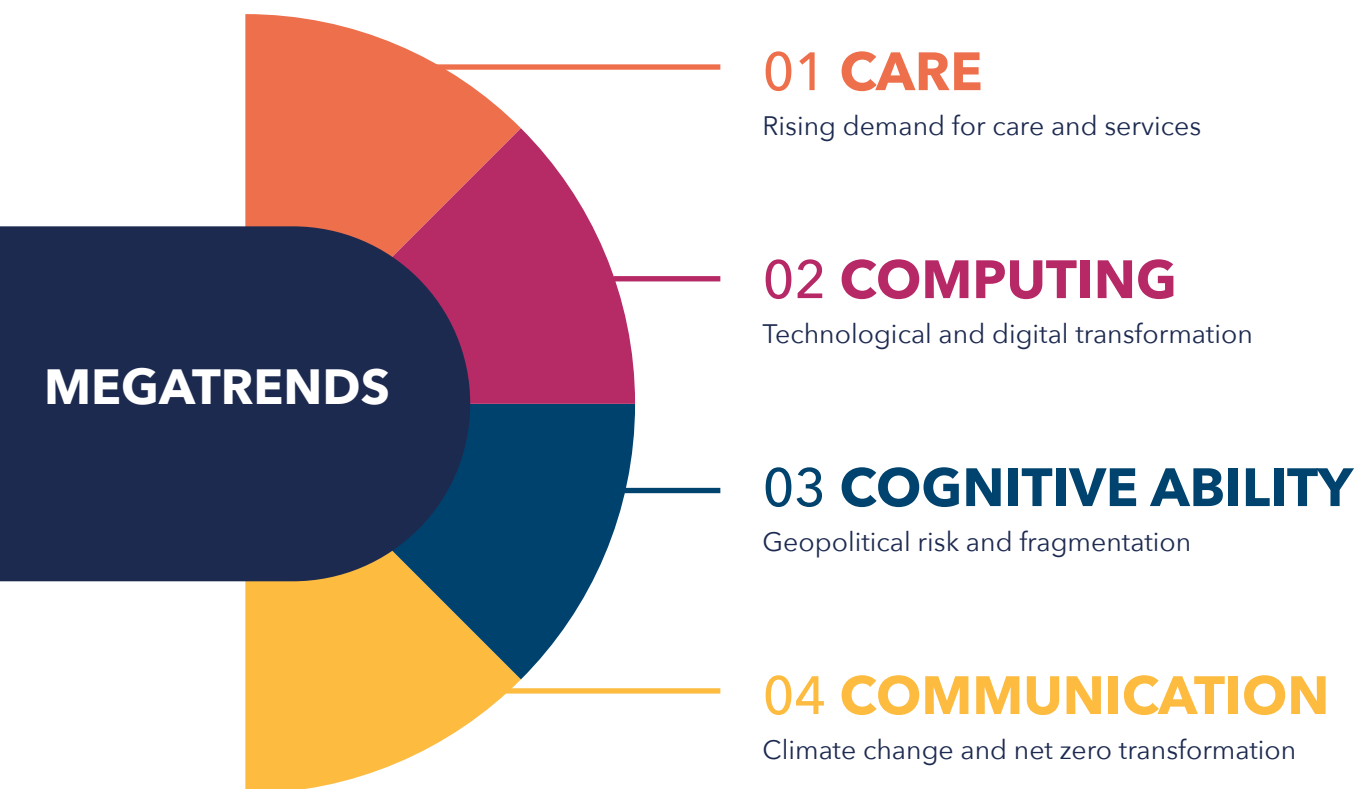
Source: QSGO Population Projections. (2023). *Population projections - Regions*. Brisbane: Queensland Government.
<https://www.qsgo.qld.gov.au/statistics/theme/population/population-projections/regions>

9. Population totals are estimated between Australian census, when a more accurate figure is obtained.

Megatrends influencing the Cairns labour market

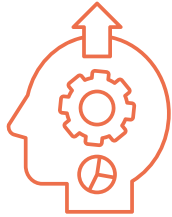
Four megatrends will influence the labour market and affect labour supply within the Cairns region. An ageing population will drive increasing demand for care and related services. Health care and social assistance is the largest employing industry in the region, employing 26,782 people in May 2023. By 2025-26, a further 3220 new jobs will have been created in this industry.¹⁰ This will further tighten an already constrained labour market. With a large proportion of health care and social assistance workers working part-time, there is an opportunity for other growth industries (such as the aviation, and maritime and marine industries) to offer full-time, stable employment options as a financial incentive for skilled workers to transition.¹¹

Figure 4 Megatrends influencing the Cairns labour market



10. Jobs Queensland. (2023). *Anticipating Future Skills series 4*. Ipswich: Queensland Government. <https://jobsqueensland.qld.gov.au/anticipating-future-skills/>

11. Jobs and Skills Australia. (2023). *Jobs and Skills Australia, Health Care and Social Assistance overview*. Canberra: Australian Government. <https://www.jobsandskills.gov.au/data/labour-market-insights/industries/health-care-and-social-assistance>



Opportunities for upskilling and reskilling will become an important tool in attracting and retaining a skilled workforce.

Transformative technology has often significantly impacted workforce transition. In the past, automation and technological change tended to impact blue-collar jobs. However, the rapid uptake of technologies like artificial intelligence (AI) is also beginning to transform the jobs of many white-collar workers. The adoption of current and emerging technologies and increasing digitisation of processes and services, partly driven by geopolitical and policy influences, are transforming industries and workplaces. This is changing the skills needed by workers to gain and retain employment.

The COVID-19 pandemic highlighted global markets' interconnectivity and their susceptibility to disruption. Current geopolitical tensions worldwide continue to disrupt markets, increasing the need for industries and regions to develop their sovereign capabilities, decrease risk and improve resilience to future disruption.

While growing the skills and capabilities of the local workforce is a strategy to manage such disruption, the pandemic provided clear evidence that a lack of digital skills negatively impacts workforce participation, which is especially experienced by underutilised cohorts.¹² Consideration of additional and localised support mechanisms to assist with attraction and retention measures would benefit their transition.

Cybersecurity will be increasingly important for both industries, especially as they continue their digital transformation. Small to medium-sized enterprises (SMEs) reported feeling particularly vulnerable and needed support and strategies to combat potential cyber-attacks.¹³ To address the need, North Queensland TAFE is delivering cyber security training to enhance the regions cyber defence workforce capabilities.¹⁴

Despite promoting the variety of free digital skills training opportunities offered by Business Queensland and Business Chamber Queensland, during consultation, SMEs stated they were largely unaware of what was available. Understanding SMEs' preferred communication channels may assist in the engagement and uptake of offerings.¹⁵

12. Jobs Queensland. (2022). *The Digital Literacies Imperative for Queensland Businesses*. Ipswich: Queensland Government. <https://jobsqueensland.qld.gov.au/wp-content/uploads/2023-digital-literacies-imperative.pdf>

13. Jobs Queensland. (2022). *The Digital Literacies Imperative for Queensland Businesses*. Ipswich: Queensland Government. <https://jobsqueensland.qld.gov.au/wp-content/uploads/2023-digital-literacies-imperative.pdf>

14. Queensland Government. (2023). *Media Statement. Cyber defence goes viral at new Cyber Security Training Centre at South Bank TAFE*. Published 10 February, 2023. <https://statements.qld.gov.au/statements/97140>

15. Business Queensland. (2024). *Digital Business and IT*. Brisbane: Queensland Government. <https://www.business.qld.gov.au/running-business/digital-business>

Increasingly, governments at all levels are introducing policies to limit the impacts of climate change on communities and industries. The Queensland Government has committed to a 75 per cent emissions reduction target by 2035.¹⁶ Sustainability of the environment and natural resources is a key driver of these policies. At an industry and enterprise level, digitalisation and technology will be integral to meeting net-zero targets. While the aviation industry is well advanced in this area, considerable work needs to be done in this space for the maritime and marine industry.¹⁷ The industry needs to adopt a digital culture and increase digital skills and literacies across the whole industry.¹⁸

The Port of Cairns handles a significant portion of Australian and international ships, highlighting the region's maritime prominence. The growing manufacturing and MRO sectors, influenced by local industries like defence, fishing, tourism and freight, drive skills demand and economic growth. RMC North East, established under Plan Galileo, further enhances the maritime workforce. Increasing superyacht services and technology integration also amplify the need for skilled workers, fuelling the region's economic potential and the marine industry.

Cairns Airport is the seventh busiest airport in Australia, servicing almost five million passengers annually pre-COVID.¹⁹ Passenger numbers were severely impacted during the pandemic, particularly international passengers, falling from 685,980 in the 2019 financial year to 5288 in the 2021 financial year. In the 2023 financial year, numbers had returned to approximately half the 2019 numbers.²⁰ The airport is home to major aircraft maintenance facilities that provide fixed and rotary wing service. Major companies include global players such as Jet Aviation and local players such as Skytek. Due to its location near highly populated countries in Asia, the airport supports tourism and potential international air freight opportunities. Before COVID-19, Cairns was directly connected to 10 international airports.²¹



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16. Department of Housing, Local Government, Planning and Public Works. (2024). *Queensland's 2035 Clean Economy Pathway: 75% by 2035*. Brisbane: Queensland Government. https://www.hpw.qld.gov.au/_data/assets/pdf_file/0028/48493/queensland-2035-clean-economy-pathway.pdf
 17. Creeden, P. (2023). Charting the Digital Waters: Navigating the Digitalization Curve, *Keynote at Australian Maritime and Logistics Research Network (AMLRN) 2023 Symposium*, November 28 2023. Gold Coast: Griffith University.
 18. Thai, V. (2023). Global challenges and sustainable prospects of the maritime industry, *Presentation, Australian Maritime and Logistics Research Network (AMLRN) 2023 Symposium*, November 28 2023. Gold Coast: Griffith University.
 19. Cairns Regional Council. (n.d.) *Aviation industry, 2021/22*. Cairns: Cairns Regional Council. https://www.cairns.qld.gov.au/_data/assets/pdf_file/0006/561957/Aviation.pdf
 20. Cairns Airport. (2023). *Cairns Airport financial year passenger totals*. Cairns: Cairns Airport. <https://www.cairnsairport.com.au/assets/FlightSchedules/Financial-year-passenger-totals-for-website.pdf>
 21. Cairns Regional Council. (n.d.) *Aviation industry, 2021/22*. Cairns: Cairns Regional Council. https://www.cairns.qld.gov.au/_data/assets/pdf_file/0006/561957/Aviation.pdf

Future opportunities

Both industries are undertaking significant expansion activities that will increase employment and demand for skills. Expanding the Cairns Marine Precinct (CMP) and developing the Common Usage Facility (CUF) will increase the industry's capacity to service larger and more complex vessels. Cairns Airport also plans to expand its capacity by developing a dedicated aeromedical and emergency facility and a specific helicopter precinct. The proposal for an advanced fibre composites maintenance and repair facility will further expand the specialist services offered at the airport.²²

This will drive demand for a larger and more highly skilled workforce, increasing local job opportunities and career pathways for existing workers. It will also increase the need for more trade and technical trainers and provide mentoring opportunities for mature, skilled workers.

Decarbonising both industries and the increasing adoption of technologies as part of this process will increase employers' opportunities to attract and retain a more diverse and higher-skilled workforce. This will support workforce renewal and enterprise succession planning.

Leadership and management capability

Effective leaders and managers are generally more productive and innovative, and deliver better financial returns. Building the two sectors' leadership and management skills and capabilities can create a competitive advantage for the local economy, as both industries are globally connected.

To fully realise this potential, a much wider focus on developing leadership and management skills and capabilities across the local economy and labour market is required. The demand for an uplift of leadership and management capability is especially acute in small businesses where the owner or manager's formal skills development is in a technical area relevant to their product or service rather than the core skills needed to run a business successfully.²³

Leaders require skills in areas such as:

- strategic and operational planning (business planning, workforce planning)
- human resource management, including performance management
- coaching and mentoring
- entrepreneurship, innovation and design – moving ideas to reality.

Business support and enabling agencies are best placed to provide support in these areas. To maximise participation rates, support programs are offered locally, flexibly, and online.

22. Ibid

23 Jobs Queensland. (2021). Future work for small business. Ipswich: Queensland Government.
<https://jobsqueensland.qld.gov.au/wp-content/uploads/2021/05/future-work-small-business-web.pdf>

Workforce diversification

Both industries expressed a willingness and commitment to improve the diversity of their respective industry. In addition to industry-led strategies, JQ's research within the publication *Supporting individuals in the transition to future work framework* provides the following information for consideration.²⁴

Priority and underutilised cohorts include women, First Nations peoples, culturally and linguistically diverse (CALD), people with disability, mature-age workers and veterans.

Women

Women are more likely to consider the impact of career choice or employment opportunities on their family, as transitioning into a new role may require detrimental lifestyle changes. To overcome some of the identified barriers women face, a diverse support network is important in providing women with access to the 'full range of resources information, career development and psychosocial support needed to make a successful career transition'.²⁵ Employers can assist by linking new employees with other female staff who can mentor or provide opportunities for social inclusion.

First Nations peoples

Queensland is home to the nation's second-largest Aboriginal and Torres Strait Islander population. Over 10 per cent of the Cairns region is made up of Aboriginal peoples and Torres Strait Islander peoples.²⁶ The Queensland Government is working in partnership with Aboriginal peoples and Torres Strait Islander peoples through their representatives, at the national, state and local level, to ensure a focus on achieving long-term social and economic outcomes for Queensland's First Nations peoples.²⁷

The Queensland Government is committed to building stronger relationships with Aboriginal peoples and Torres Strait Islander peoples through whole-of-government initiatives like *Paving the Way – the First Nations Training Strategy*, which emphasises the importance of building cultural capability within businesses as an ongoing process encompassing awareness, competence and safety.²⁸

Jobs Queensland's research also identified a need to recognise the different contexts, such as remoteness, circumstances and disability of First Nations peoples to enable support to be tailored and personalised. Unique issues First Nations peoples face when transitioning into, across, or out of the workforce include:

- Higher rates of chronic disease, disability and other health challenges that can impact their ability to enjoy a fulfilling work life. They may also have cultural perspectives on health and wellness that differ from non-Indigenous approaches that guide mainstream services.
- Because cultures are often central to individuals' identities, workforce changes can present challenges in maintaining cultural traditions and connections to the community.

Connection to community and geographical location is particularly strong for First Nations peoples, providing Cairns with an opportunity to support this cohort into the workforce through a tailored and individualised approach.

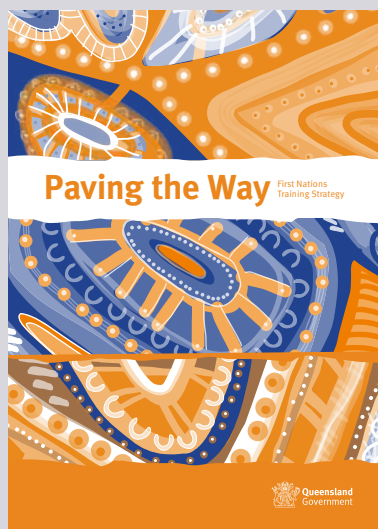
24. Jobs Queensland. (2023). *Supporting individuals in the transition to future work framework*. Ipswich: Queensland Government. <https://jobsqueensland.qld.gov.au/wp-content/uploads/2023/12/supporting-individual-transition.pdf>

25. TW and Kirk, A.F. (2022). Overcoming Barriers to Women's Career Transitions: A Systematic Review of Social Support Types and Providers. *Frontiers in Psychology*. Volume 13 - 2022. <https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2022.777110/full>

26. Jobs Queensland. (2023). Cairns Maritime and Marine Environmental Scan. Ipswich: Queensland Government. <https://jobsqueensland.qld.gov.au/wp-content/uploads/2024/02/GYO-Cairns-maritime-and-marine-eScan.pdf>

27. Department of Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities and the Arts. (2023) Closing the Gap. Brisbane: Queensland Government. <https://dsdsatsip.qld.gov.au/our-work/aboriginal-torres-strait-islander-partnerships/reconciliation-tracks-treaty/closing-gap>

28. Department of Employment, Small Business and Training. (2024). *First Nations Training Strategy*. Brisbane: Queensland Government. <https://desbt.qld.gov.au/training/docs-data/strategies/first-nations-training-strategy>



The Queensland Government is committed to building stronger relationships with Aboriginal and Torres Strait Islander peoples. *Paving the Way – the First Nations Training Strategy* emphasises the importance of building cultural capability within businesses as an ongoing process encompassing awareness, competence and safety. The strategy holds significant relevance in the context of workforce diversification, particularly concerning First Nations peoples. Employers can utilise a range of resources to create culturally safe workplaces to support First Nations employees, thereby positioning their business to effectively respond to both present and future workforce needs.

Culturally and linguistically diverse (CALD)

Research suggests that as skills demand shifts towards requiring higher level communication and social skills, some people from CALD backgrounds are disadvantaged compared to native-born people who have culturally specific ‘social competence and language skills’.

Australian research into career guidance for migrants and refugees in universities notes that it is not necessarily tailored or promoted to graduates from CALD backgrounds.²⁹ This allows the Cairns region to work closely with local training providers to promote local employment opportunities directly to graduates through a targeted campaign.



Multicultural Australia’s Culturability Accreditation ensures organisations reflect the communities they serve, promoting inclusivity and belonging. Accreditation includes five standards that assess organisational diversity and inclusion policies. Organisations wishing to become accredited must undertake an accreditation process to ensure they meet all requirements of the standards.³⁰

29. Newman, A., Baker, S., Due, C., and Dunwoodie, K. (2022). *Career Guidance for Culturally and Linguistically Diverse Migrants and/or Refugees*. Perth: National Centre for Student Equity in Higher Education, Curtin University.
<https://www.ncsehe.edu.au/publications/career-guidance-culturally-linguistically-diverse-migrants-refugees/>

30. Multicultural Australia. (2024). Culturability Accreditation. <https://culturability.com.au/>

People with disability

People living with disability are underemployed compared with those without disability, and much of the current literature deals with overcoming barriers to employment. Access to workplace modifications and adaptive technology can support transitioning into a work environment or hybrid employment.

The Cairns region may attract and retain skilled labour from this under-utilised cohort by implementing flexible career development measures such as work-based learning and skills assessments, coaching, career counselling and job shadowing to build career pathways and break down outdated stigma.

Mature-age workers

Despite increasing life expectancies, mature-age workers are more likely to leave the labour force than change jobs when facing circumstances that prompt them to consider a career transition. To support retention of re-entry measures for this cohort, employers should consider:

- There is an increased level of age discrimination despite the depth of experience these workers can bring. Sourcing workers with this experience breaks down the barriers.
- Workers may be unable to commit to a long-term contract due to health issues. They may prefer shorter-term arrangements with increased flexibility, increasing opportunities for job-share arrangements with younger workers with caring responsibilities.

Veterans

Many individuals leaving the Australian Defence Force (ADF) possess transferable skills and are highly employable. Skills include teamwork, critical thinking, problem-solving, technical expertise, trade skills and the capacity to perform under pressure. The Queensland Government fully supports transitioning ADF members, with the Office for Veterans leading the coordination of programs across Government to provide a more concentrated focus on veterans' policies and services.³¹

Initiatives like the Returned and Services League (RSL) Queensland's Ex-Defence Employment, Partner Employment and Veterans On-Board, along with organisations such as The Oasis Townsville, Soldier On, Mates4Mates and Ironside Resources, aid ADF members and their partners in transitioning to civilian employment. Program offerings include career counselling, training, skill adaptation for civilian roles, interview preparation and facilitation of connections with potential employers.

Enhancing local service provision to this cohort may increase the retention rates of this highly skilled workforce.

31. Premier and Minister for Trade. (2019, June 14). *Palaszczuk Government to establish dedicated Office for Veterans*. Brisbane: Queensland Government. <https://statements.qld.gov.au/statements/87625>

Ironside Resources is an Australian veteran-owned company and social enterprise servicing the Cairns region that specialises in aiding ex-defence personnel as they transition into civilian employment. Leveraging their extensive expertise and network, they offer tailored programs and resources to equip veterans with the skills and opportunities needed to thrive in new industries.

With dedicated veteran employment specialists in Cairns, Townsville and Melbourne, Ironside Resources provides labour hire, permanent placements and veteran employment programs across Far North Queensland and nationally.

Through offerings that include mentorship and career guidance, Ironside Resources ensures ex-defence personnel can seamlessly integrate into various sectors, including the aviation and maritime and marine sectors.

Programs and solutions like those offered by Ironside Resources can play a crucial role in cultivating a robust pipeline of prospective employees for these industries. The disciplined work ethic, leadership capabilities and technical proficiencies instilled in ex-defence personnel make them ideal candidates for roles.

By bridging the gap between military service and civilian employment, Ironside Resources along with other like-minded organisations not only support veterans in their career transitions but also enrich industries like the aviation and maritime and marine with highly skilled and dedicated professionals.





Cairns aviation industry



Seventh busiest airport

in Australia with domestic passenger numbers quickly recovering towards pre-COVID-19 levels



Servicing almost

Five million passengers
annually



Australia's only

heavy aircraft maintenance base



Major

Royal Flying Doctor

Service base



Home to the

largest avionics workshop

in the Southern Hemisphere



Cairns Regional Trade Distribution Centre

opened in 2020 to support growth in
fresh food exports



Central Queensland University and Cairns Aviation Skills Centre

deliver vocational and bachelor
level qualifications in aircraft
maintenance engineering and
flight operations

The Cairns aviation industry includes a thriving General Aviation Precinct and international airport. It is a major contributor to the regional economy and home to over 100 businesses, including major MRO organisations, education and training providers (CASC and CQUniversity), freight consolidation services and rescue and charter flights.³² The region also has several smaller airports serving rural and remote communities.

Far North Queensland's MRO sector is vital to the region's connectivity. It services fixed-wing and rotary aircraft that fly the Cape, Torres Strait, Papua New Guinea and the wider Asia-Pacific. These services ensure emergency and humanitarian aid and fly-in-fly-out flights remain in the air and provide critical connectivity to areas where it matters most.

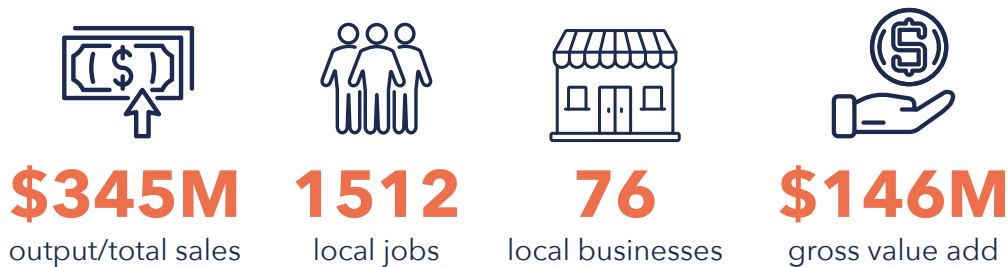
An early-stage proposal for an advanced fibre and composites manufacturing and repair facility is underway. Jet Aviation, the sole and largest independent heavy maintenance provider for large turboprop and regional jet aircraft in Australia, and Skytek, the only independent MRO for fixed and rotary-wing aircraft on the East Coast of Australia, present a significant opportunity within the facility.



32. Advance Cairns. (2023). *2024-25 Queensland Budget Submission, General Aviation*. Cairns: Advance Cairns.
https://issuu.com/advancecairns1/docs/advance_cairns_2024-25_queensland_b_3d45bd96b6d9ac?fr=sZmQwZTcyMDEyODA

Current workforce data

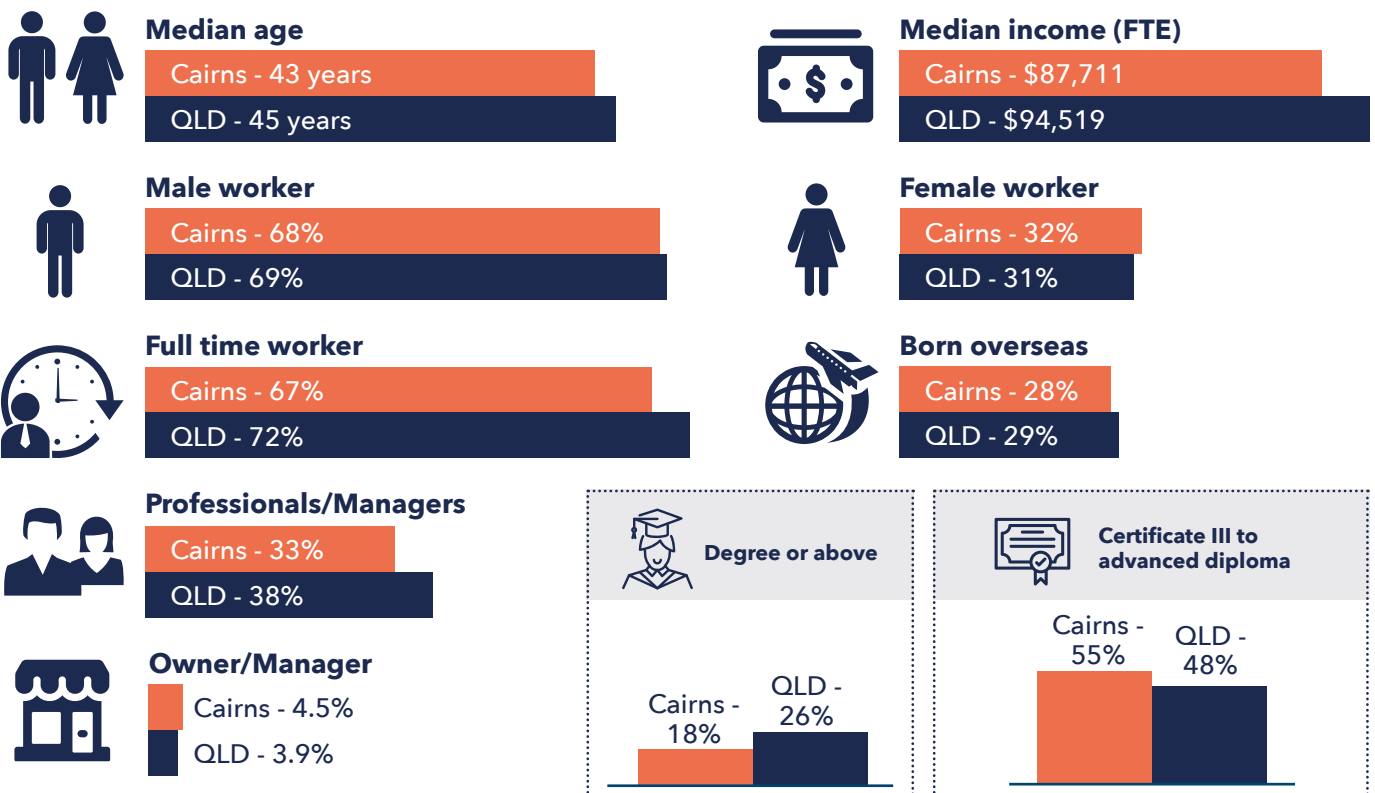
Cairns - aviation industry economic overview 2021-22³³



Key sub-industries



Characteristics of the aviation industry workforce 2021³⁴



33. Cairns Regional Council. (n.d.) *economic profile, Industry profile - Aviation*. Cairns: Cairns Regional Council. <https://economy.id.com.au/cairns/industry-profile?indKey=23804>

34. Cairns Regional Council. (n.d.) *Aviation Industry 2021/22*. Cairns: Cairns Regional Council. https://www.cairns.qld.gov.au/_data/assets/pdf_file/0006/561957/Aviation.pdf

Looking ahead - future workforce needs



The Cairns aviation industry recognised several critical workforce needs that were crucial for its future development. These needs include addressing short-term housing supply issues to accommodate the expanding workforce, alongside the necessity for expertise in renewables, green technology, decarbonisation and alternative power/fuel requirements, aligning with the industry's increasing emphasis on sustainability. Additionally, there is a demand for professionals skilled in AI and technology, and comprehensive composites training to support advancements in aircraft materials.

With the shift towards electric aviation, expertise in electric propulsion is becoming increasingly vital. So is the need for a steady supply of commercial aviation pilots and qualified aircraft engineers, including aircraft maintenance engineers (AMEs) and licensed aircraft maintenance engineers (LAMEs). Furthermore, there is a need for tradespeople and project managers specialising in infrastructure construction to support industry growth.

In IT, professionals with expertise in network management, data integration, software

Anticipating Future Skills data shows that between 2021-22 to 2025-26 there will be a



increase in jobs (538 new jobs) for the aviation industry in Cairns.

management and cybersecurity are indispensable for ensuring operational efficiency and security. Notably, the absence of aeronautical engineering courses in north Queensland highlights the need for educational institutions to address this gap in training aeronautical engineers to meet industry demands. Addressing these workforce needs is imperative for sustaining and advancing the Cairns aviation industry in the future.

Challenges and opportunities

As the region grapples with various economic shocks linked to COVID-19, geopolitical disruptors that impacted freight and supply chains, and most recently, recovery efforts from Cyclone Jasper, the industry has demonstrated great resilience, optimism and a future focused on growth.

Opportunities highlighted within broader strategic frameworks, such as *Queensland Aerospace 10-Year Roadmap and Action Plan*, *Towards Tourism 2032*, and Sustainable Aviation Fuel Initiative, provide government-enabled frameworks to support the region moving forward.³⁵

Stakeholders informed JQ that the challenges and opportunities specific to the Cairns and the Far North Queensland ecosystem are:

	 <h2>Challenges</h2>	 <h2>Opportunities</h2>
Business	<ul style="list-style-type: none"> • Growth in defence contracting • High reliance on the tourism industry • Access to skilled labour constrained by stringent licencing requirements • Ageing workforce • Decarbonisation and the transition to alternate fuel sources 	<ul style="list-style-type: none"> • Domestic Terminal upgrade in 2020 and current refurbishment of International Terminal allowing for future expansion and maintaining competitiveness • Cairns Regional Trade Distribution Centre allowing growth in fresh food exports to Asia • Early-stage proposal for an advanced fibre composites maintenance and repair facility • Commitment to net zero by 2025 with all tenants supplied by 100 per cent renewable power by 2025 • Opportunity to address outdated cultural norms
Skills	<ul style="list-style-type: none"> • Future space-based industry needs evolving regional relationships • Need to upskill trainers in composites to meet future demand • Leadership capability and skills to address issues • Shortage of pilots and aeronautical engineers • Entry into the industry – pathways, link with school curriculum, lack of awareness 	<ul style="list-style-type: none"> • Established expertise in aircraft maintenance and repair • Quality aviation training facilities • Growth in the use of composites • Partnerships with educational institutions from primary up • Professional development opportunities for existing workers
People	<ul style="list-style-type: none"> • Need to grow workforce to meet population growth/passenger movements • Limited suitable short-term housing for contractors and students • Male-dominated industry – need to challenge stereotypes and outdated culture • Work conditions (shift work, staffing levels, pay, lack of opportunities) 	<ul style="list-style-type: none"> • Targeted attraction programs for underutilised cohorts • Cross-sector skilling, gap training for existing workers • Flexible work conditions • Promotion of the range of roles, subjects and skills required

35. Department of State Development and Infrastructure. (2022). *Queensland Aerospace: 10-Year Roadmap and Action Plan 2018-2028*. Brisbane: Queensland Government. https://www.statedevelopment.qld.gov.au/_data/assets/pdf_file/0014/17231/aerospace-roadmap.pdf; Department of Tourism and Sport. (2023). *Towards Tourism 2032*. Brisbane: Queensland Government. https://www.dts.qld.gov.au/_data/assets/pdf_file/0003/1647120/22268-Towards-Tourism-2032-ONLINE-STRATEGY-v5-.pdf; Department of Environment, Science and Innovation. (2023). Sustainable Aviation Fuel Initiative. Brisbane: Queensland Government. <https://science.des.qld.gov.au/research/key-areas/defence-aviation-space>

The Trade Taster Program in Queensland offers Year 10 high school students a unique opportunity to delve into potential career paths through immersive vocational education experiences. Tailored to bridge the gap between theoretical learning and practical industry demands, this program presents short-term courses spanning various sectors, including trades, hospitality, healthcare and IT.

Participants in the Trade Taster Program acquire hands-on skills, gain invaluable industry insights and foster vital networking connections under the mentorship of seasoned TAFE instructors.

Exploring initiatives like Trade Taster or developing similar programs holds significant potential for creating a robust pathway for high school students in Cairns.



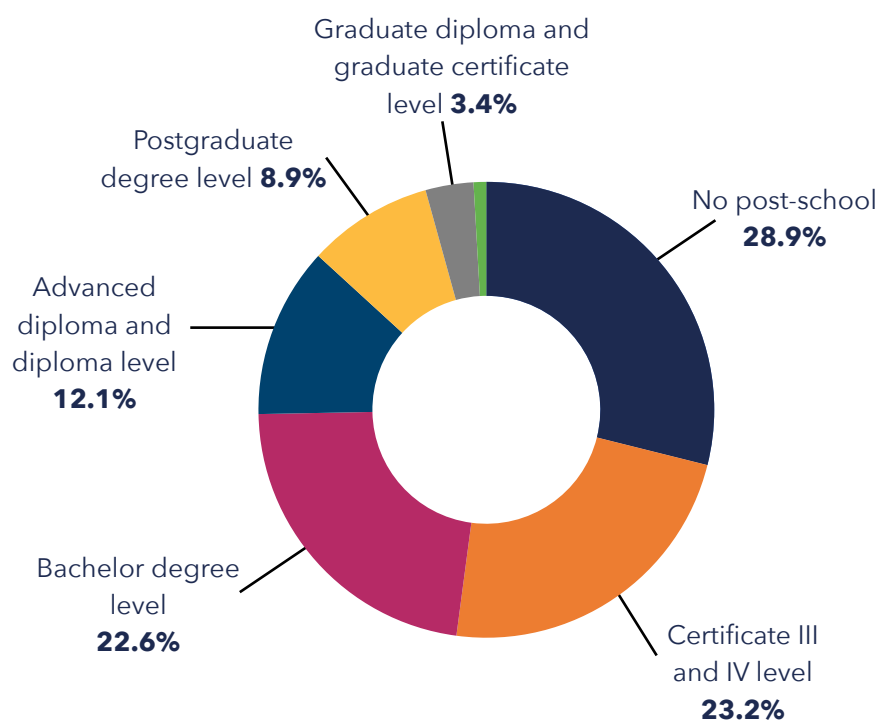
Training system to bridge the gap

Globally, the aviation industry is moving to incorporate cutting-edge technology such as remote digital tower technology – OneSky (military and civilian air traffic management system), Satellite-based Augmentation System (SBAS) and Uncrewed Aircraft Systems (UAS). Upskilling and training have never been more important to remain globally competitive.³⁶

Queensland hosts Australia's only university with both the Boeing 737 and A320 flight simulators accessible to students. This is bolstered by strong partnerships with Qantas, UniSQ, Griffith University and CQUniversity via the Qantas Group Future Pilot Program.³⁷

Aviation Australia also provides world-class training for aircraft maintenance engineering, cabin crew and remote piloting at campuses in Brisbane and Cairns.

Figure 5 Aviation qualifications in Cairns workers by qualification levels 2023-24



Source: Jobs Queensland. (2024). *Anticipating Future Skills Series, Data portal*. Ipswich: Jobs Queensland. <https://jobsqueensland.qld.gov.au/anticipating-future-skills/portal/>

Locally, CASC provides certificate and diploma-level courses in aircraft maintenance engineering to assist students in launching their careers in the aviation industry. Their facilities feature a diverse range of aircraft, offering students hands-on experience crucial for refining their engineering skills and knowledge.

The region is committed to expanding its training offerings locally to reduce travel and accommodation costs to train elsewhere. To support this strategic objective, the region will continue to seek funding to acquire a small aircraft pilot training simulator at the Cairns Airport, and an advanced fibre composites maintenance and repair facility to expand the specialist services offered.³⁸ As the gateway to Asia-Pacific, regular reviews of local training offerings to future-proof the region and ensure training addresses emerging skills needs opens the door to increased economic opportunities for the region as other nations seek to leverage offerings in Cairns rather than Brisbane or Sydney.





36. Airservices Australia (2024). *What is OneSKY?* Melbourne: Airservices Australia. <https://www.airservicesaustralia.com/about-us/innovation-and-technology/onesky/>; Australian Flying. (2018). *Airservices launches SBAS Project*. Sydney: Australian Flying. [https://www.australianflying.com.au/latest/airservices-launches-sbas-project#:~:text=Airservices%20Australia%20yesterday%20announced%20an,\(GNSS\)%20such%20as%20GPS](https://www.australianflying.com.au/latest/airservices-launches-sbas-project#:~:text=Airservices%20Australia%20yesterday%20announced%20an,(GNSS)%20such%20as%20GPS;); Australian Aviation. (2019). *Airservices to trial remote digital tower prototype at Sydney*. Sydney: Australian Aviation. <https://australianaviation.com.au/2019/11/airservices-to-trial-remote-digital-tower-prototype-at-sydney/>
37. University of Southern Queensland. (2024). *Flight Simulators*. Toowoomba: University of Southern Queensland. <https://www.unisq.edu.au/study/why-unisq/unisq-stories/testimonials/flight-simulators>; Qantas. (2024). *Qantas Group Pilot Academy*. Queensland: Qantas. <https://www.qantas.com/au/en/about-us/our-company/pilot-academy.html>
38. Cairns Regional Council. (n.d.). *Aviation industry, 2021/22*. Cairns: Cairns Regional Council. https://www.cairns.qld.gov.au/_data/assets/pdf_file/0006/561957/Aviation.pdf

Cairns aviation industry workforce plan strategies

The strategies and actions below were designed and endorsed by representatives of the Cairns aviation industry to reflect an industry-led, region-focused and government-enabled approach. Actions have been classified into high, medium and low-priority categories.



Meet future skills needs


CHALLENGE: Shortage of AMEs and LAMEs		
STRATEGY		OUTCOME
 Work with training providers and employers to increase training engagement <ul style="list-style-type: none"> Organise industry awareness campaigns in collaboration with local training providers to highlight the opportunities and benefits of a career in aviation 		Increased take-up of training places for AMEs and LAMEs
CHALLENGE: Shortage of aeronautical engineers		
STRATEGY		OUTCOME
 Work with local higher education institutions to develop and deliver aeronautical engineering qualifications <ul style="list-style-type: none"> Enhance promotion of training pathways into higher level engineering qualifications to allow future workforce to understand training and career pathways 		Aeronautical engineering qualifications available locally
 Engage with Engineers Australia to identify strategies to upskill and cross-skill migrant engineers to Australian standards <ul style="list-style-type: none"> CASC to host Engineers Australia at industry meetings to strengthen connection and networking Establish a relationship with Industry Skills Australia to better inform the national agenda of regional challenges 		Increased recognition and employment of suitably qualified migrant engineers ³⁹
CHALLENGE: Limited organisation-level strategic planning		
STRATEGY		OUTCOME
 Promote benefits of future-focused planning to meet future skills needs <ul style="list-style-type: none"> Support local businesses to integrate strategic and workforce plans in their recruitment and business planning activities Inform small-to-medium enterprises (SMEs) of the benefits of accessing existing workforce planning and business planning tools and resources Host a workforce planning session locally to assist SMEs Industry Workforce Advisors to connect with local industry planning activities, including supporting SMEs in drafting workforce plans 		Local employers and organisations can apply workforce planning to their workforces

39. Engineers Australia. (2022). *Strengthening the engineering workforce in Australia*. Barton: Engineers Australia.
<https://www.engineersaustralia.org.au/sites/default/files/2022-08/strengthening-engineering-workforce-australia.pdf>

CHALLENGE: Digital skills and literacy

STRATEGY	OUTCOME
 Develop digital literacy and skills programs <ul style="list-style-type: none"> • Work with local Registered Training Organisations (RTOs) to host a digital literacy short-course or micro-credential to support skills needs • Promote the availability of free online digital skills training courses and micro-credential courses offered by the Queensland Government 	Industry will have access to a digitally literate and skilled workforce

CHALLENGE: Demand for workers with skills in working with composite materials

STRATEGY	OUTCOME
 Develop and deliver composite-relevant skills training for workers locally <ul style="list-style-type: none"> • Establish industry and local training provider partnerships to meet the need • Upskill current trainers in composite materials to meet the demand for training • Embed trade and STEM related learning in secondary and further education 	Workers will be upskilled/reskilled in working with composite materials




Improve attraction and retention



CHALLENGE: Linking school offerings to industry needs

STRATEGY	OUTCOME
 Promote career pathways and progression within the industry <ul style="list-style-type: none"> • Explore programs such as Trade Taster or develop a similar initiative that allows individuals to gain practical insights into different trades within the industry • Organise industry tours, work experience, internships and hands-on experiences for students and individuals interested in pursuing careers in the aviation sector • Collaborate with Gateway to Industry Schools program (GISP) co-ordinator to increase links with local industry and skills 	Increased number of school leavers entering the industry
 Strengthen school-industry partnerships to improve understanding of industry opportunities locally <ul style="list-style-type: none"> • Enhance promotion of existing programs through eNews, social media or other communication platforms • Promote best practice and good news stories through regional partners, e.g. Council, Chambers, Regional Jobs Committees (RJC), Advance Cairns, Department of Employment, Small Business and Training • Advertise training pathway programs and industry events in school newsletters 	


CHALLENGE: Limited workforce diversity and an ageing workforce

STRATEGY	OUTCOME
 Promote the benefits of a diverse workforce to employers <ul style="list-style-type: none"> • Develop targeted marketing strategies to attract underutilised groups • Develop and promote local case studies highlighting the advantages of a diverse workforce • Include diverse workers in promotional and public-facing activities 	Skilled workers from diverse backgrounds are engaged in the workforce


CHALLENGE: Shortage of entry points into industry

STRATEGY	OUTCOME
 Strengthen existing entry points to career advisors, teachers and parents <ul style="list-style-type: none"> • CASC to advocate and support, through the Education Reference Group, improved awareness-building of entry points and programs in schools 	Increased awareness of current entry pathways to the industry
 Develop and promote entry points for workers from other industries <ul style="list-style-type: none"> • Advocate and promote to training and employment service providers to increase awareness of entry points • Create and implement base-level entry points for low and/or no-skilled workers 	Employers actively engage workers from other industries and diverse backgrounds


CHALLENGE: Global competition for skilled labour

STRATEGY	OUTCOME
 Advocate to policymakers to influence change in existing regulations <ul style="list-style-type: none"> • The local industry group maintains regular meetings to address challenges and implement strategies to enhance the resilience and competitiveness of the local industry 	Increased retention rates of skilled staff locally


CHALLENGE: Limited flexible working arrangements contributing to workers leaving region

STRATEGY	OUTCOME
 Promote and support flexible work options locally <ul style="list-style-type: none"> • Develop business case models to promote best practice examples of flexible employment options • Offer job sharing/part-time opportunities • Investigate job redesign to accommodate diverse workforce needs and create entry-level opportunities 	Increased retention rates of skilled staff locally

CHALLENGE: Local training options to support the broader Pacific workforce

STRATEGY	OUTCOME
 Local training options to reflect the skills needs of industry across the region, not just in Cairns <ul style="list-style-type: none"> • Annual review of skills needs across the region to support adjustments to training pathway programs offered locally 	Cairns is viewed as the region's training hub


CHALLENGE: Cairns not perceived as preferred destination by the family members of aviation workers

STRATEGY	OUTCOME
 Offer community integration assistance <ul style="list-style-type: none"> Provide information and support to partners of aviation workers who are new to the Cairns area, helping them navigate local services, schools, recreational activities and build social networks 	Increased satisfaction for families of aviation workers leads to higher retention rates



Build business capability


CHALLENGE: Addressing outdated cultural norms to attract a more diverse workforce (e.g. women, Aboriginal and Torres Strait Islanders, people with disability, culturally and linguistically diverse)

STRATEGY	OUTCOME
 Embed cultural awareness and disability awareness into workplaces <ul style="list-style-type: none"> Provide leadership and cultural awareness training to update leadership capability and increase awareness of the benefits of diversity in the workplace Include modules in induction training for new employees and upskill existing employees with relevant training to better support a diverse workplace Accelerate promotion of existing programs and initiatives for employers to self-assess and improve their commitment to diversity and inclusion, e.g. culturalability accreditation offered through Multicultural Australia 	<p>Increased number of people from diverse backgrounds entering the industry</p> <p>Workers from diverse backgrounds will be welcomed and supported in workplaces</p>

CHALLENGE: Employers unsure of available local business support and assistance programs

STRATEGY	OUTCOME
 Ensure employers have access to up-to-date information on business support and assistance programs <ul style="list-style-type: none"> Collaborate with service organisations and networks (Council, Chamber, RJC, Workforce North, Department of State Development and Infrastructure) to increase the reach and effectiveness of local assistance and awareness activities Develop industry alliances (Primes, SMEs, universities and RTOs) to build business capability and identify future training needs 	Improved access for local employers to business support, tools and resources
 Promote tools and resources currently available via the Business Queensland website <ul style="list-style-type: none"> Investigate opportunities for statewide and national industry conferences in the region Utilise eNews and other communication platforms to provide industry specific information directly to employers 	


CHALLENGE: SME limited core skills needed to run a business successfully

STRATEGY	OUTCOME
 Uplift leadership and management capabilities (SME-focused) <ul style="list-style-type: none"> Business enablers to provide information on human resource management services, including performance management Coaching and mentoring programs and connections to be promoted Entrepreneurship, innovation and design supported through a hub or incubator space 	Stronger leadership and management capabilities within businesses



Enhance training system engagement


CHALLENGE: Shortage of commercial pilots in region

STRATEGY	OUTCOME
 Increase the pool of commercial pilots locally <ul style="list-style-type: none"> Promote aviation offerings through local training providers 	Increased pool of commercial pilots available locally

CHALLENGE: Declining apprenticeship numbers

STRATEGY	OUTCOME
 Accelerate the promotion of the benefits of apprenticeships to employers and the community <ul style="list-style-type: none"> Engage with Australian Apprenticeships Support Network (AASN) providers locally to seek imagery and narrative of Cairns to increase uptake of apprenticeships and traineeships Participate in industry-led job and career awareness events 	Increased uptake and completion of apprenticeships and traineeships

CHALLENGE: Alignment of the school curriculum with industry skills needs

STRATEGY	OUTCOME
 Improve alignment between school curriculum and industry mathematical skill requirements <ul style="list-style-type: none"> CASC to advocate through the Education Reference Group for curriculum alignment to industry skills needs Explore the availability of gap training services/providers to address math gaps Increase awareness of math requirements to school students by building awareness of industry (careers day, speaking to schools and parents) 	Improved alignment between school curriculum and industry mathematical skills

CHALLENGE: Ensuring training aligns with industry needs

STRATEGY



Co-design local training delivery within a national framework to meet industry needs.

- Work with local training providers to identify new and emerging skills required locally and develop industry-relevant training options
- Pilot programs to test industry acceptance

OUTCOME

Local training delivery meets industry needs

CHALLENGE: Lack of suitable local infrastructure to support training

STRATEGY



Increase availability of and access to training assets and infrastructure locally

- Work with CASC/TAFE/universities to conduct an asset review and identify gaps
- Implement options to share/develop training assets with other industries, e.g. maritime and marine, and manufacturing industries
- Seek funding for a small aircraft pilot training simulator at Cairns Airport

OUTCOME

Training assets reviewed and gaps identified

Improved access to suitable infrastructure locally for training



Develop cross-sector work mobility

CHALLENGE: Collaboration between sectors to embrace retention of workers locally

STRATEGY



Promote cross-sector skilling as an opportunity to retain and share skills and workers locally

- Form a cross-industry industry advisory group made up of aviation, and maritime and marine representatives

OUTCOME

Skilled workers retained locally

CHALLENGE: Availability of gap training required to move between industries

STRATEGY



Support cross-sector skilling and work opportunities between the aviation, and maritime and marine industries to retain workers locally

- Identify common skill sets and competencies that are transferable between the two industries
- Identify compatible manufacturing and engineering assessment units to be used for cross-sector training
- Encourage regular discussions with training organisations on skills gap training needs
- Establish partnership agreements between companies in both sectors to share skills needs and facilitate employee transitions
- Review regulatory requirements to improve cross-industry skilling and workforce movement
- Provide professional development opportunities (internal and external) to broaden and diversify skills and capabilities

OUTCOME

Local workers will have the skills required to move easily between industries



Cairns maritime and marine industry



Over 100 cruise ships
visit per year



One of four Queensland
Queensland
superyacht hubs



Bulk carriers ports at
Cairns and Mourilyan,
exporting petroleum products,
sugar, fertiliser and LPG

Home port for the
**game fishing fleet
and recreational
diving fleet**



Location of **Queensland's only naval base,**

HMAS Cairns, supported by
RMC North East



Commercial fishing contributed

\$35.6 Million

in GRP and employed 630
people in 2020-2021



**World-class education
facilities**

with two universities and the
Great Barrier Reef International
Marine College

The Port of Cairns is a multi-purpose port that provides services for project, bulk and general cargo, cruise ships, commercial fishing and reef passenger ferries. Cairns is the most visited port for major cruise ships outside of Sydney, with over 100 cruise ships visiting each year.⁴⁰

The Cairns Marlin Marina is the home port for the game fishing fleet and the commercial tourism fleet. The Queensland Government has identified Cairns as one of four key superyacht hubs, providing facilities and services for the cruising yacht sector, including some of the world's most advanced superyachts.⁴¹ The Queensland Government's funding for the Cairns Marine Precinct Common User Facility, in partnership with the Australian Government, will increase the region's capacity to service the needs of the world's superyacht sector.

The CMP is a cluster of shipbuilding and naval vessel maintenance industries providing marine industry support across northern Australia. Its highly capable and robust supply chain comprises a broad range of marine and supporting service businesses and product suppliers, with more than 400 businesses supporting this sector.⁴²

The commercial boat facilities at East Trinity support maintenance and haulout for private vessels and provide additional berth spaces for commercial vessels when the main port is full. The expansion of Trinity Inlet in 2020 included designated cyclone moorings for large commercial vessels, which are critical for the port's emergency preparedness.

Queensland's only naval base location, HMAS Cairns, is in the Port of Cairns, supported by RMC North East. NORSTA Maritime is a joint venture between prominent local Australian maritime industry leaders – NORSHIP Marine and Tropical Reef Shipyard. It serves as the regional maintenance provider (RMP) North East and provides maintenance and sustainment services to the Royal Australian Navy across north-eastern Australia. The Australian Border Force also maintains a fleet of patrol boats which, in conjunction with the Australian Defence Force (ADF), maintain border security for the Torres Strait Islands, Coral Sea Islands and the Great Barrier Reef.⁴³

Tourism, agriculture and fishing are also major industries in the region. Raw sugar and molasses are exported through the Port of Cairns and the Port of Mourilyan, near Innisfail.⁴⁴ Several smaller marinas are also located throughout the region to cater for recreational marine activities and provide ferry access to offshore islands.

Current workforce data

Cairns - marine and defence industry economic overview 2021-22⁴⁵



40. Advance Cairns. (2019), Cairns Marine Precinct, *Capability Profile*. Cairns: Advance Cairns. https://issuu.com/advancecairns1/docs/cmp_capability_profile?e=34612461/67751785

41. Department of State Development and Infrastructure. (2018). *Queensland Superyacht Strategy 2018-2028*. Brisbane: Queensland Government. https://www.statedevelopment.qld.gov.au/_data/assets/pdf_file/0021/71265/superyacht-roadmap-and-action-plan.pdf; Ports North. (2023). *Marine tourism*. Cairns: Ports North. <https://www.portsnorth.com.au/marine-tourism/>

42. Treasurer and Minister for Trade and Investment. (2023, June 22). *Green lights for fully funded Cairns Marine Precinct*. Brisbane: Queensland Government. <https://statements.qld.gov.au/statements/98023>

43. Australian Border Force. (2021). *Maritime Border Command*. Canberra: Australian Government. <https://www.abf.gov.au/about-us/what-we-do/border-protection/maritime>

44. Ports North. (2023). *Port of Mourilyan*. Cairns: Ports North. <https://www.portsnorth.com.au/mourilyan/>

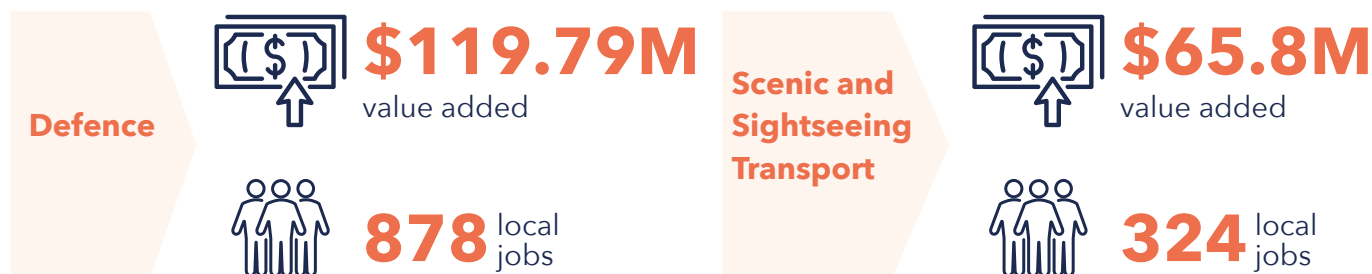
45. Cairns Regional Council. (n.d.). *economic profile, Industry profile - Marine and Defence*. Cairns: Cairns Regional Council. <https://economy.id.com.au/cairns/industry-profile?indKey=24400>



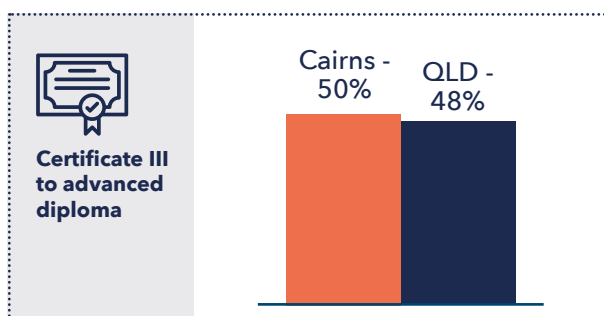
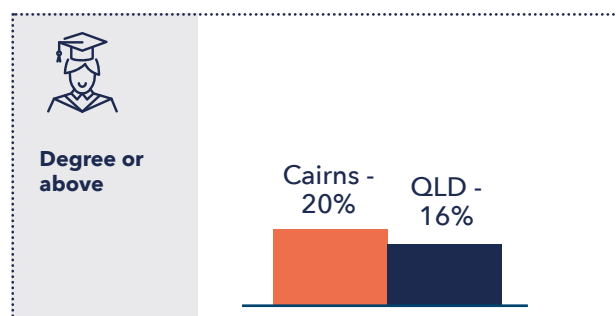
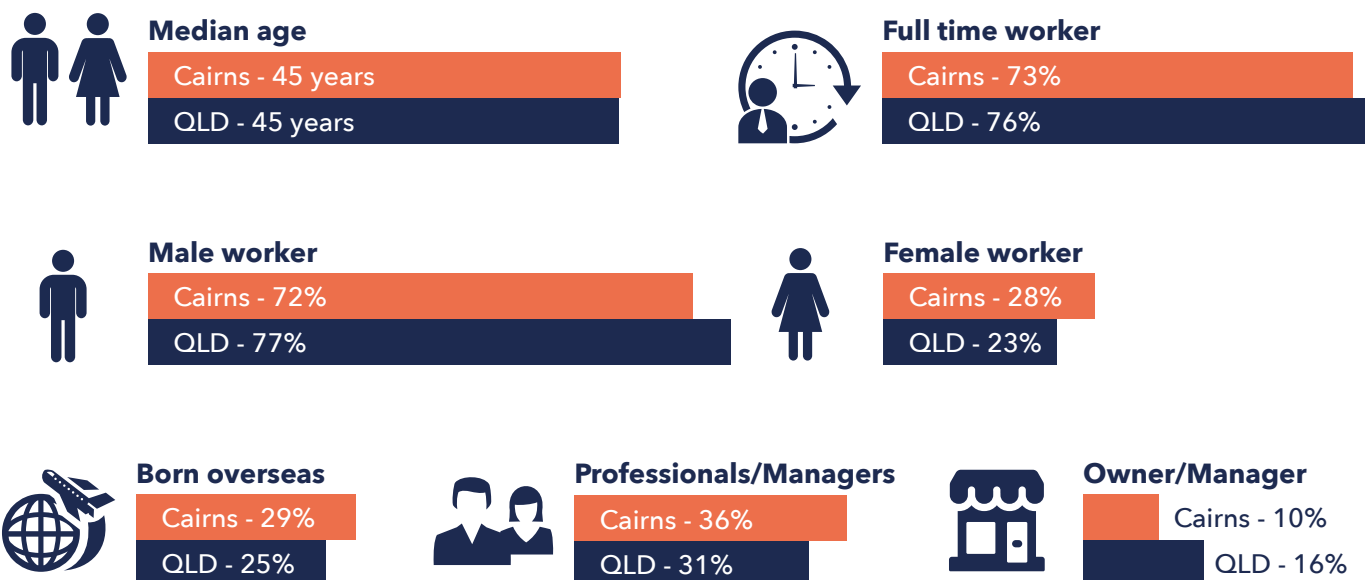
337 local businesses
6.4% total businesses



Top industries



Characteristics of the marine and defence workforce⁴⁶

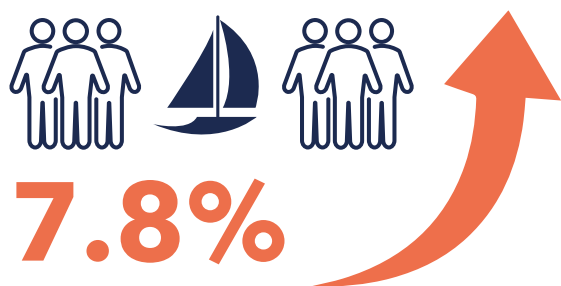


46. Cairns Regional Council. (n.d.). *Marine and Defence industry 2021/22*. Cairns: Cairns Regional Council.
https://www.cairns.qld.gov.au/_data/assets/pdf_file/0020/562034/Cairns-Marine-and-Defence-v3-1.pdf

Looking ahead - future workforce needs

The Cairns maritime and marine industry faces several critical workforce needs identified by stakeholders as pivotal for its future sustainability and growth. These needs encompass a range of skills and capacities, including digital literacy and cybersecurity expertise to navigate the evolving technological landscape. Embracing software advancements and AI is paramount to staying abreast of industry trends and enhancing operational efficiency. Moreover, the industry requires a steady supply of engineers to address complex challenges and drive innovation.

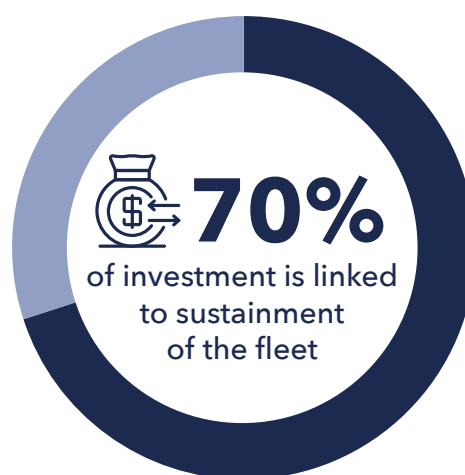
Anticipating Future Skills data shows that between 2021-22 to 2025-26 there will be a



increase in jobs (873 new jobs) for the maritime and marine industry in Cairns.

With an increasingly competitive international market, investment in developing and retaining a local, skilled workforce will become critical. Stakeholders reported an increase of global demand for qualified seafarers, to fill essential sea roles such as pilotage, towage and crewing vessels. Access to these skills is compounded by 'sea-time' requirements to obtain Australian Maritime Safety Authority (AMSA) certification to work locally. Without intervention, decreases in Australian flagged vessels may further impact potential seafarers access to vessels and capability building opportunities linked to certification and achievement of Vocational Education qualifications.

As Plan Galileo is implemented, longer-term, Cairns may also experience an onshore surge sustainment workforce to meet the increasing skills and workforce requirements to maintain an increase to Australian naval vessels.



Investing in maritime trainers ensures a skilled workforce with the latest industry knowledge and best practices. Workforce planning training for employers is crucial for effective resource management and strategic decision-making. Developing leadership capabilities, including fostering a culture of collaboration and nurturing soft skills, is vital for driving organisational success. Offering gap training initiatives and establishing clear career pathways are instrumental in addressing skill shortages and facilitating professional development within the industry.

Additionally, as the Cairns maritime and marine industry evolves, navigating the shifting landscape of industrial relations will be essential. Implementing HR infrastructure to support workers transitioning between sectors can enhance workforce mobility and adaptability, ensuring an industry's resilient and dynamic workforce.

47. Industry Skills Australia. (2024). *Maritime Industry, 2024 Workforce Plan*. Kingston: Industry Skills Australia.
https://isa-files.azureedge.net/2024-03/Maritime%20Industry%202024%20Workforce%20Plan_Public_Consultation.pdf

Challenges and opportunities

As the region continues to recover from the economic shock of COVID-19 and rebuild from Cyclone Jasper, the industry remains optimistic and future-focused. With a strong commitment to capitalise on opportunities highlighted within broader strategic frameworks, such as the *Defence Industry Development Strategy*, *Queensland Superyacht Strategy*, *Queensland Sustainable Fisheries Strategy*, and *Towards Tourism 2032*, stakeholders informed JQ that the challenges and opportunities specific to the Cairns and the Far North Queensland ecosystem are:



Challenges



Opportunities

Business	<ul style="list-style-type: none"> • Competition from other superyacht hubs could draw business away • Lack of digital culture and capability within enterprises • Leadership capability (culture, soft skills) needs updating • Lack of collaboration to retain workers locally • Lack of awareness of the benefits of employing a diverse workforce • Lack of local coordination and business support 	<ul style="list-style-type: none"> • Expansion and upgrade of the CMP to meet the needs of heavier, longer and more complex modern vessels • Designation as an RMC provides long-term sustainment opportunities • Strengthen linkages between private industry and defence • Designation as a superyacht hub encourages the development of and investment in complementary facilities and services • Growth of other specialised areas such as modular builds (large vessels) and boatbuilding (up to 50m) • Establishment of a dedicated maritime and marine hub
Skills	<ul style="list-style-type: none"> • Increasing need for engineers across a range of disciplines (and competition from other industries for engineers) • Upskilling needed in digital literacies and skills, such as software advancements, AI and cyber security • Declining apprenticeship commencement rates • Lack of sufficient training providers in some key areas • Lack of awareness of the availability of training options (including free training options) 	<ul style="list-style-type: none"> • Expansion of the GBRIMC will grow both program delivery and student numbers • Grow a more highly skilled and digital-savvy workforce • Increased upskilling and reskilling opportunities for existing workers • Co-design of local training delivery within a national framework where possible • Developing micro-credentials to enable skills development and fill training gaps
People	<ul style="list-style-type: none"> • Career pathways not clear or promoted • Limited flexible work arrangements available • Ongoing professional development is not an option • Gap training is required to move between industries locally • Loss of income due to phasing out of gillnet fishing in the Great Barrier Reef • Increase workforce diversity 	<ul style="list-style-type: none"> • Develop and support cross-sector skills transfer to retain workers in the region • Opportunities to become industry mentors and/or qualified maritime skills trainers • Linkages to veteran support programs to develop a pathway into the local industry, similar to the Defence Industry Pathway Program (DIPP) and Defence Industry Internship Program (DIIP) 49 • Promote career pathways into the industry (both VET and higher education)

48. Defence. (2024). *Defence Industry Development Strategy*. Canberra: Australian Government. <https://www.defence.gov.au/about/strategic-planning/defence-industry-development-strategy> ; Department of State Development and Infrastructure. (2018). *Queensland Superyacht Strategy 2018-2028*. Brisbane: Queensland Government. https://www.statedevelopment.qld.gov.au/_data/assets/pdf_file/0021/71265/superyacht-roadmap-and-action-plan.pdf; Department of Agriculture and Fisheries. (2017). *Queensland Sustainable Fisheries Strategy 2017-2027*. Brisbane: Queensland Government. <https://cabinet.qld.gov.au/documents/2017/Jun/FishPol/Attachments/Strategy.pdf>; Department of Tourism and Sport. (2023). *Towards Tourism 2032*. Brisbane: Queensland Government. https://www.dts.qld.gov.au/_data/assets/pdf_file/0003/1647120/22268-Towards-Tourism-2032-ONLINE-STRATEGY-v5-.pdf

49. Defence. (2023). *Pathways to keep the talent coming*. Canberra: Australian Government. <https://www.defence.gov.au/news-events/news/2023-06-16/pathway-keep-talent-coming>; Defence. (n.d.). *Defence Industry Internship Program*. Canberra: Australian Government. <https://diip.com.au/student-information/about-the-program/>

A dedicated maritime and marine hub

The establishment of a maritime and marine hub in Cairns will unlock a multitude of opportunities for businesses, investors and skilled professionals. From ship repair and maintenance to marine conservation, defence and tourism, the hub will become a beacon of expertise and collaboration, driving economic prosperity, capability development and environmental stewardship.

The maritime and marine business ecosystem will benefit from a one-stop shop of support services, ensuring access to up-to-date information on business support and assistance programs, connecting industry networks and providing market intelligence. This will empower businesses to navigate regulatory frameworks, access funding and training opportunities and leverage support for sustainable growth.

Moreover, the hub will facilitate the promotion of cross-sector skilling and work opportunities between the aviation and maritime industries and other industries. It will serve as a catalyst for increasing awareness of employment and training opportunities in both sectors and the retention of skilled professionals through joint initiatives and collaborative projects that create pathways for career advancement and professional development.

The Defence Industry Pathways Program (DIPP) in Western Australia fosters talent and cultivates future leaders in the defence sector. Participants gain specialised skills and hands-on experience, bridging education and employment. Through strategic partnerships, mentorship opportunities and tailored training, the program shapes the next generation of defence professionals.

Developing and delivering similar industry pathway programs could greatly benefit the Cairns maritime and marine industry. Tailored initiatives would provide aspiring professionals with targeted training, experience and industry connections essential for success. Collaboration between institutions, industry and government can drive innovation and growth in the Cairns maritime and marine sector.

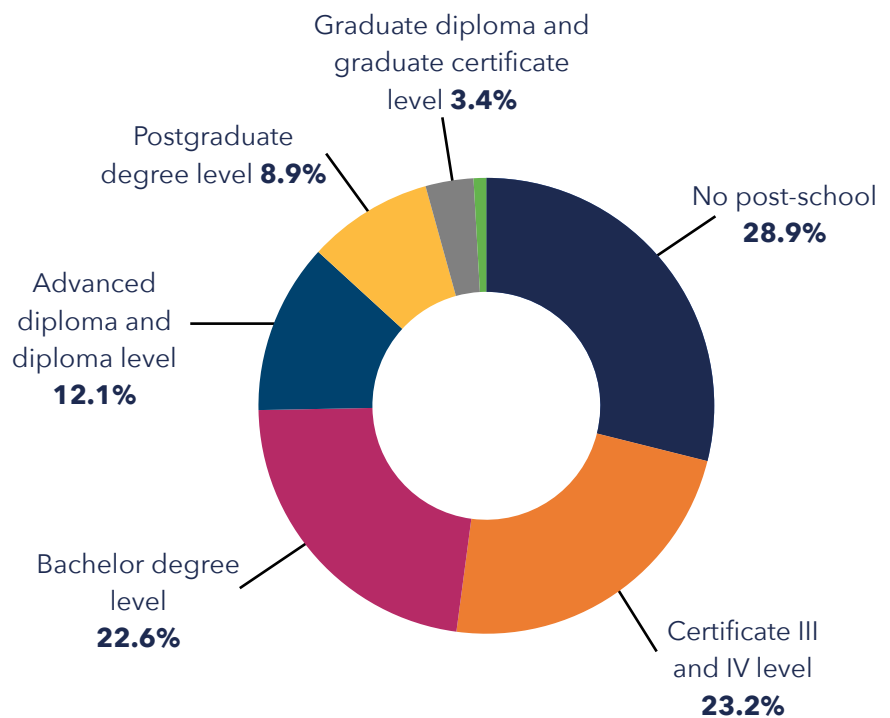


Training system to bridge the gap

In parallel with the global aviation industry, the maritime and marine sector is rapidly embracing cutting-edge technologies to enhance efficiency and safety, such as the increasing use of autonomous and remotely operated vessels. Largely driven by technological advancements, seafarers and maintenance crews must reskill and upskill to maintain a competitive edge. Additionally, skills are emerging that are linked to a green economy and zero emissions targets as hydrogen, battery and electric options continue to be explored and introduced.⁵⁰

The Cairns region offers a variety of training options tailored to the needs of the maritime and marine industry. The GBRIMC (located in Cairns) offers courses specific to the industry. In contrast, TAFE Queensland campuses in Cairns, Atherton and Innisfail offer courses in skill areas that directly support the industry, such as the Certificate III in Engineering (Mechanical Trade).

Figure 6 Maritime and marine qualifications in Cairns workers by qualification levels 2023-24.



Source: Jobs Queensland. (2024). *Anticipating Future Skills Series, Data portal*. Ipswich: Jobs Queensland. <https://jobsqueensland.qld.gov.au/anticipating-future-skills/portal/>

Recognising the importance of expanding local training offerings, stakeholders are committed to reducing barriers to entry for aspiring trade, technical and professionals within the maritime industry. By investing in local training infrastructure and facilities, the region aims to attract talent and cultivate a skilled workforce capable of meeting the evolving demands of the maritime and marine industry.

In May 2023, the Queensland Government announced a \$16 million expansion of the GBRIMC in Cairns.⁵¹ The expansion will include a new boat shed, workshop and additional classrooms, offices and staff facilities. Welcomed by the industry, the expansion represents a significant opportunity to enhance and broaden training offerings, effectively bridging the gap and fostering closer collaboration with industry partners to address emerging skills needs.

50. Industry Skills Australia. (2024). *Maritime Industry, 2024 Workforce Plan*. Kingston: Industry Skills Australia. https://isa-files.azureedge.net/2024-03/Maritime%20Industry%202024%20Workforce%20Plan_Public_Consultation.pdf

51. Great Barrier Reef International Marine College. (2023). *Shipshape for the future*. Cairns: Great Barrier Reef International Marine College. <https://www.gbrimc.com.au/news/2500-shipshape-for-the-future>

Notably, introducing the Certificate III in Maritime Operations (Integrated Rating) as part of this expansion will enable more individuals to enter the industry, effectively addressing the rising demand for skilled maritime professionals. Moreover, as the GBRIMC will become the sole provider of this certification in Queensland, it holds immense potential to attract talent to the region. Beyond meeting immediate workforce needs, this expansion initiative is poised to cultivate a more highly skilled and digitally adept workforce. Furthermore, it allows industry professionals to transition into mentoring or certified trainer roles, further enriching the sector’s talent pool and facilitating ongoing professional development.

As a cross-over skills requirement, the industry supports funding proposals through grant applications to build a dedicated advanced fibre composites maintenance and repair facility in Cairns.⁵² A comprehensive list of training offerings specific to the Cairns maritime and marine industry can be found in JQ’s publication *Grow Your Own Workforce: region and industry environmental scan*.⁵³

Cairns maritime and marine workforce plan strategies

The strategies and actions below were designed and endorsed by representatives of the Cairns maritime and marine industry to reflect an industry-led, region-focused and government-enabled approach. Actions have been classified into high, medium and low-priority categories.



Meet future skills needs

CHALLENGE: Increasing demand for professionals and tradespeople from various fields and disciplines		
STRATEGY		OUTCOME
 HIGH PRIORITY	Collaborate to increase training engagement	
	<ul style="list-style-type: none">Expand partnerships between local education and training providers for tailored engineering pathways aimed at future and existing workers and apprentices	Increased pool of appropriately skilled engineers available for local employment opportunities
	<ul style="list-style-type: none">Organise industry awareness campaigns in collaboration with local education and training providers to highlight the opportunities and benefits of a career in maritime and marine engineering	Retain skilled workers locally
	<ul style="list-style-type: none">Support science, technology, engineering and mathematics (STEM) activities at high-profile events and competitions to raise awareness of diverse career paths within the industryOptimise maritime logbook hours (on-water experience) within maritime qualifications by training organisations to support marine tourism to recruit their future workforce	Increase awareness of local maritime and marine career pathway opportunities

52. Cairns Regional Council. (n.d.). *Aviation industry, 2021/22*. Cairns: Cairns Regional Council. https://www.cairns.qld.gov.au/_data/assets/pdf_file/0006/561957/Aviation.pdf

53. Jobs Queensland. (2023). *Grow Your Own Workforce: Region and industry environmental scan*. Ipswich: Queensland Government. <https://www.jobsqueensland.qld.gov.au/wp-content/uploads/2024/02/GYO-Cairns-maritime-and-marine-e-Scan.pdf>


CHALLENGE: Limited awareness of future work pipeline and organisation-level strategic planning

STRATEGY	OUTCOME
 Increase local understanding of strategic plans, notable entry points and the future work pipeline to foster a broader understanding of the maritime and marine ecosystem <ul style="list-style-type: none"> Host an annual industry event with guest speakers from key industry leaders, including defence, superyachts, tourism and fisheries, to discuss challenges and opportunities for the local industry and Far North Queensland supply chain 	<p>Future pipeline is clearer to assist local employers in aligning their skilled workforce to it</p> <p>Career seekers and current employees have improved understanding of career opportunities and pathways</p>
 Promote benefits of future-focused planning to meet future skills needs <ul style="list-style-type: none"> Support local businesses to integrate strategic and workforce plans in their recruitment and business planning activities Inform small-to-medium enterprises (SMEs) of the benefits of accessing existing workforce planning and business planning tools and resources Host a workforce planning session locally to assist SMEs Industry Workforce Advisors to connect with local industry planning activities, including supporting SMEs in drafting workforce plans 	<p>Local employers and organisations can apply workforce planning to their workforces</p>

CHALLENGE: Digital skills and literacy

STRATEGY	OUTCOME
 Develop digital literacy and skills programs <ul style="list-style-type: none"> Work with local RTOs to host a digital literacy short-course or micro-credential to support skills needs Promote the availability of free online digital skills training courses and micro-credential courses offered by the Queensland Government 	<p>Industry will have access to a digitally literate and skilled workforce</p>

CHALLENGE: Demand for workers with skills in working with composite materials

STRATEGY	OUTCOME
 Develop and deliver composite-relevant skills training for workers locally <ul style="list-style-type: none"> Establish industry and local training provider partnerships to meet the need Upskill current trainers in composite materials to meet the demand for training Embed trade and STEM related learning in secondary and further education 	<p>Workers will be upskilled/reskilled in working with composite materials</p>




Improve attraction and retention

CHALLENGE: Limited awareness and promotion of career pathways as industry evolves

STRATEGY	OUTCOME
 Promote career pathways and progression within the industry <ul style="list-style-type: none"> Explore programs such as Trade Taster or develop similar initiatives that allow individuals to gain practical insights into different trades within the industry Organise industry tours, work experience, internships and hands-on experiences for students and individuals interested in pursuing careers in the maritime and marine sector 	<p>Increased number of school leavers entering the industry</p> <p>Increased numbers of students into VET in Schools (VETiS) funded marine/maritime pre-employment programs, including Trade Taster</p>
 Promote career pathways and progression within the industry <ul style="list-style-type: none"> Organise workshops and seminars focused on career advancement within the industry Facilitate mentorship programs that pair experienced professionals with those looking to advance their careers Offer cross-training and development opportunities that allow workers to diversify their skill set 	<p>Intellectual capital is retained and shared within the industry</p>
 Promote career pathways and progression within the industry <ul style="list-style-type: none"> Regularly showcase changes and opportunities in the sector and beyond Implement recognition programs that acknowledge and celebrate the achievements of workers within the industry 	


CHALLENGE: Limited workforce diversity and an ageing workforce

STRATEGY	OUTCOME
 Promote the benefits of a diverse workforce to employers <ul style="list-style-type: none"> Develop targeted marketing strategies to attract underutilised groups Develop and promote local case studies highlighting the advantages of a diverse workforce Include diverse workers in promotional and public-facing activities 	<p>Skilled workers from diverse backgrounds are engaged in the workforce</p>



CHALLENGE: Ex-defence skills transition capacity is unknown

STRATEGY	OUTCOME
 Strengthen linkages and awareness of veteran support programs to develop transition pathways <ul style="list-style-type: none"> Invite veterans' support agency and Defence Jobs Queensland to become a member of the Industry Advisory Group/Project Champion Group Promote the benefits of ex-defence personnel working within the industry Provide opportunities for ex-defence/industry engagement 	<p>Ex-defence personnel and families are retained locally, contributing to a skilled local workforce</p>
 Explore gap training opportunities for ex-defence individuals transitioning to the commercial workforce <ul style="list-style-type: none"> Undertake skills mapping and gap training in collaboration 	<p>Better promotion of local employment and training opportunities</p> <p>Increased awareness and alignment between defence training systems and industry requirements</p>


CHALLENGE: Limited industry pathway opportunities

STRATEGY	OUTCOME
 Develop and deliver industry pathway programs similar to Defence Industry Pathway Program (DIPP) and Defence Industry Internship Program (DIIP) <ul style="list-style-type: none"> • Trial DIPP and/or DIIP locally for applicability • Develop a business case to seek funding to deliver programs locally 	Increased pool of skilled labour

CHALLENGE: Loss of industry knowledge as workers leave the industry

STRATEGY	OUTCOME
 Explore opportunities to retain skilled and experienced workers locally <ul style="list-style-type: none"> • Identify suitable trainers and transfer these individuals to the training sector • Discuss and highlight the benefits of mobility of workers between employers and industry to keep them living and working locally 	Skills and labour are retained locally
 Develop and implement mentoring programs for experienced workers <ul style="list-style-type: none"> • Identify potential industry representatives for mentoring roles • Offer phased retirement options and create incentives to retain experienced workers in advisory or mentoring roles • Showcase and share innovative application of skills among sector workers in the region 	


CHALLENGE: Limited flexible working arrangements contributing to workers leaving the region

STRATEGY	OUTCOME
 Promote and support flexible work options locally <ul style="list-style-type: none"> • Develop business case models to promote best practice examples of flexible employment options • Offer job sharing/part-time opportunities • Investigate job redesign to accommodate diverse workforce needs and create entry-level opportunities 	Increased retention rates of skilled staff locally




Build business capability

CHALLENGE: Addressing outdated cultural norms to attract a more diverse workforce (e.g. women, Aboriginal and Torres Strait Islanders, people with disability, culturally and linguistically diverse)

STRATEGY	OUTCOME
 Embed cultural awareness and disability awareness into workplaces <ul style="list-style-type: none"> • Provide leadership and cultural awareness training to update leadership capability and increase awareness of the benefits of diversity in the workplace • Include modules in induction training for new employees and upskill existing employees with relevant training to better support a diverse workplace • Accelerate promotion of existing programs and initiatives for employers to self-assess and improve their commitment to diversity and inclusion, e.g. culturability accreditation offered through Multicultural Australia 	<p>Increased number of people from diverse backgrounds entering the industry</p> <p>Workers from diverse backgrounds will be welcomed and supported in workplaces</p>


CHALLENGE: Limited local coordination and information sharing

STRATEGY	OUTCOME
 Support an industry-led ecosystem <ul style="list-style-type: none"> • Establish and launch a regional industry hub to support information sharing and collaboration • Establish an Industry Advisory Group to support the dissemination of information and provide advocacy to Government on industry support needs • Undertake a needs analysis, identifying gaps in available data and determining effective methods for ongoing data collection and analysis to inform decision-making in the maritime and marine industry 	<p>Industry has access to support information and mechanisms to connect industry networks</p>

CHALLENGE: Employers unsure of available local business support and assistance programs

STRATEGY	OUTCOME
 Ensure employers have access to up-to-date information on business support and assistance programs <ul style="list-style-type: none"> • Collaborate with service organisations and networks (e.g. Council, Chamber, RJC, Workforce North, Department of State Development and Infrastructure) to increase the reach and effectiveness of local assistance and awareness activities • Develop industry alliances (Primes, SMEs, universities and RTOs to build business capability and identify future training needs 	<p>Improved access for local employers to business support, tools and resources</p>
 <ul style="list-style-type: none"> • Promote tools and resources currently available via the Business Queensland website • Investigate opportunities for statewide and national industry conferences in the region • Utilise eNews and other communication platforms to provide information directly to employers 	


CHALLENGE: SME limited core skills needed to run a business successfully

STRATEGY	OUTCOME
 Uplift leadership and management capabilities (SME-focused) <ul style="list-style-type: none"> • Business enablers to provide information on human resource management services, including performance management • Coaching and mentoring programs and connections to be promoted • Entrepreneurship, innovation and design supported through a hub or incubator space 	Stronger leadership and management capabilities within businesses




Enhance training system engagement

CHALLENGE: Shortage of qualified maritime trainers locally

STRATEGY	OUTCOME
 Increase the number of locally qualified maritime trainers <ul style="list-style-type: none"> • Establish programs to identify, attract and support individuals interested in becoming trainers • Prioritise local trainer development in Queensland and Australian labour market programs for the region • Involve RTOs to support competitive and affordable training systems • Promote fee-free TAFE and similar assistance programs • Offer incentives to individuals to build the trainer pool, e.g. flexible work and/or study arrangements 	Increased number of suitably skilled and qualified maritime trainers available locally


CHALLENGE: Gaps with Australian Maritime Safety Authority (AMSA) recognising qualifications and sea time

STRATEGY	OUTCOME
 Collaborate with AMSA to identify and address gaps <ul style="list-style-type: none"> • Advocate AMSA to recognise sea time and international qualifications for Australians returning from abroad and transitioning defence personnel • Establish open lines of communication between industry and AMSA to facilitate ongoing collaboration via an Industry Advisory Group • Conduct a comprehensive needs assessment to identify specific gaps in AMSA offerings • Schedule in-region workshops with AMSA with invitations to include other relevant regional representatives 	Improved recognition of qualifications by AMSA

CHALLENGE: Declining apprenticeship numbers

STRATEGY	OUTCOME
 Accelerate the promotion of the benefits of apprenticeships to employers and the community <ul style="list-style-type: none"> Engage with Australian Apprenticeships Support Network (AASN) providers locally to seek imagery and narrative of Cairns to increase uptake of apprenticeships and traineeships Participate in and promote industry-led job and career awareness events, e.g. annual maritime jobs and careers expo 	Increased uptake and completion of apprenticeships and traineeships


CHALLENGE: Ensuring training aligns with industry needs

STRATEGY	OUTCOME
 Co-design local training delivery within a national framework, where possible, to meet industry needs <ul style="list-style-type: none"> Work with local training providers to identify new and emerging skills required locally and develop industry-relevant training options Pilot programs to test industry acceptance 	Local training delivery meets industry needs




Develop cross-sector work mobility


CHALLENGE: Workforce labour market infrastructure to support staff moving between the sectors to stay employed locally

STRATEGY	OUTCOME
 Investigate a group training organisation (GTO) model <ul style="list-style-type: none"> Engage with existing GTO models being used by other industries or regions to understand their structure, operations and outcomes Engage with locally based GTOs to implement a pilot program to test the feasibility and effectiveness Develop and implement a coordinated labour distribution model to effectively apply skills as needed across the region 	<p>Workers will be able to move between the two industries easily</p> <p>Local employers will have access to appropriately skilled workers</p>

CHALLENGE: Collaboration between sectors to embrace retention of workers locally

STRATEGY	OUTCOME
 Promote cross-sector skilling as an opportunity to retain and share skills and workers locally <ul style="list-style-type: none"> Form a cross-industry industry advisory group made up of aviation, and maritime and marine representatives 	Skilled workers are retained locally

CHALLENGE: Availability of gap training required to move between industries

STRATEGY	OUTCOME
<div data-bbox="134 342 269 427">  <p>HIGH PRIORITY</p> </div> <p>Support cross-sector skilling and work opportunities between the maritime and marine, and aviation industries to retain workers locally</p> <ul style="list-style-type: none"> • Identify common skill sets and competencies that are transferable between the two industries • Identify compatible manufacturing and engineering assessment units to be used for cross-sector training • Encourage regular discussions with training organisations on skills gap training needs • Establish partnership agreements between companies in both sectors to share skills needs and facilitate employee transitions • Review regulatory requirements to improve cross-industry skilling and workforce movement • Provide professional development opportunities (internal and external) to broaden and diversify skills and capabilities • Industry Advisory Group to advocate for suitable skill sets to be developed (e.g. micro-credential), promoted and delivered locally 	<p>Skilled workers are retained locally</p>

Combined aviation, and maritime and marine workforce strategies

Across the Cairns region, the aviation, and maritime and marine industries are facing similar challenges that are impacting their ability to maximise current and emerging opportunities; these include:

- an ageing workforce
- enhancing workforce diversity
- a competitive labour market
- strengthening leadership and management capabilities within businesses
- growing demand for highly skilled workers, e.g. workers with composite skills

- necessity for a digitally literate workforce
- retaining and upskilling the existing workforce
- declining apprenticeship numbers
- urgency to attract a younger, skilled workforce
- increasing need for entry points into the industries.

While these challenges were common to both industries, some were unique to each industry. Both industries require trades workers. However, the skill sets required are different.



Maritime and marine gaps

Trades (shipbuilding, marine engineers)
Limited local coordination and information sharing
Shortage of qualified maritime trainers
Gaps with AMSA's recognition of qualifications and sea time



Aviation gaps

Trades (aircraft engineers – AMEs, LAMEs)
Global competition for skills labour (e.g. pilots)
Shortage of aeronautical engineers
Alignment of school maths curriculum with industry needs





An advanced fibre composite maintenance and repair facility in Cairns will enhance collaboration between the aviation and maritime and marine sectors. By sharing expertise and resources, both industries can leverage innovative solutions and best practices, fostering synergy and driving growth in Cairns.

The strategies and actions outlined below have been collaboratively developed and endorsed by representatives of the Cairns aviation, and maritime and marine industries. They reflect an industry-led, region-focused and government-enabled approach. These strategies and actions represent the highest common priorities identified by both sectors, highlighting the need for a collaborative approach to tackle challenges and capitalise on mutual opportunities.



Meet future skills needs


CHALLENGE: Limited organisation-level strategic planning		
STRATEGY		OUTCOME
 Promote benefits of future-focused planning to meet future skills needs <ul style="list-style-type: none"> • Support local businesses to integrate strategic and workforce plans in their recruitment and business planning activities • Inform small-to-medium enterprises (SMEs) of the benefits of accessing existing workforce planning and business planning tools and resources • Host a workforce planning session locally to assist SMEs • Industry Workforce Advisors to connect with local industry planning activities, including supporting SMEs in drafting workforce plans 		Local employers and organisations can apply workforce planning to their workforces
CHALLENGE: Demand for workers with skills in working with composite materials		
STRATEGY		OUTCOME
 Develop and deliver composite-relevant skills training for workers locally <ul style="list-style-type: none"> • Establish industry and local training provider partnerships to meet the need • Upskill current trainers in composite materials to meet the demand for training • Embed trade and STEM related learning in secondary and further education 		Workers will be upskilled/reskilled in working with composite materials



Improve attraction and retention

CHALLENGE: Linking school offerings to industry needs		
STRATEGY		OUTCOME
 Promote career pathways and progression within the industry <ul style="list-style-type: none"> • Explore programs such as Trade Taster or develop similar initiatives that allow individuals to gain practical insights into different trades within the industry • Organise industry tours, work experience, internships and hands-on experiences for students and individuals interested in pursuing careers in either sector 		Increased number of school leavers entering the industry


CHALLENGE: Limited workforce diversity and an ageing workforce

STRATEGY	OUTCOME
 Promote the benefits of a diverse workforce to employers <ul style="list-style-type: none"> • Develop targeted marketing strategies to attract underutilised groups • Develop and promote local case studies highlighting the advantages of a diverse workforce • Include diverse workers in promotional and public-facing activities 	Skilled workers from diverse backgrounds are engaged in the workforce




Build business capability

CHALLENGE: Addressing outdated cultural norms to attract a more diverse workforce (e.g. women, Aboriginal and Torres Strait Islanders, people with disability, culturally and linguistically diverse)

STRATEGY	OUTCOME
 Embed cultural awareness and disability awareness into workplaces <ul style="list-style-type: none"> • Provide leadership and cultural awareness training to update leadership capability and increase awareness of the benefits of diversity in the workplace • Include modules in induction training for new employees and upskill existing employees with relevant training to better support a diverse workplace • Accelerate promotion of existing programs and initiatives for employers to self-assess and improve their commitment to diversity and inclusion, e.g. culturability accreditation offered through Multicultural Australia 	<p>Increased number of people from diverse backgrounds entering the industry</p> <p>Workers from diverse backgrounds will be welcomed and supported in workplaces</p>


CHALLENGE: SME limited core skills needed to run a business successfully

STRATEGY	OUTCOME
 Uplift leadership and management capabilities (SME-focused) <ul style="list-style-type: none"> • Business enablers to provide information on human resource management services, including performance management • Coaching and mentoring programs and connections to be promoted • Entrepreneurship, innovation and design supported through a hub or incubator space 	Stronger leadership and management capabilities within businesses



Enhance training system engagement


CHALLENGE: Declining apprenticeship numbers

STRATEGY	OUTCOME
 Accelerate the promotion of the benefits of apprenticeships to employers and the community <ul style="list-style-type: none"> Engage with Australian Apprenticeships Support Network (AASN) providers locally to seek imagery and narrative of Cairns to increase uptake of apprenticeships and traineeships for both industries Participate in industry-led job and career awareness events 	Increased uptake and completion of apprenticeships and traineeships



Develop cross-sector work mobility

CHALLENGE: Collaboration between sectors to embrace retention of workers locally

STRATEGY	OUTCOME
 Promote cross-sector skilling as an opportunity to retain and share skills and workers locally <ul style="list-style-type: none"> Form a cross-industry industry advisory group made up of aviation, and maritime and marine representatives 	Skilled workers remain in the local area

CHALLENGE: Availability of gap training required to move between industries

STRATEGY	OUTCOME
 Support cross-sector skilling and work opportunities between the aviation, and maritime and marine industries to retain workers locally <ul style="list-style-type: none"> Identify common skill sets and competencies that are transferable between the two industries Identify compatible manufacturing and engineering assessment units to be used for cross-sector training Encourage regular discussions with training organisations on skills gap training needs Establish partnership agreements between companies in both sectors to share skills needs and facilitate employee transitions Review regulatory requirements to improve cross-industry skilling and workforce movement Provide professional development opportunities (internal and external) to broaden and diversify skills and capabilities 	Local workers will have the skills required to move easily between industries

Appendix 1

The aviation industry ecosystem

The aviation industry is not classified as a single industry within the Australian and New Zealand Statistical Industrial Classification (ANZSIC) 2006. The industry brings together subsectors from two ANZSIC classifications. The Project Champion Group highlighted the classifications listed below as directly impacting the Cairns region's aviation industry.

Aviation industry contributors

Industry code and name	ANZSIC group	Includes primary activities (but not limited to)
C Manufacturing	239 Other transport equipment manufacturing	<ul style="list-style-type: none">• Aircraft engine building or repairing• Aircraft manufacturing• Airframe building and repair• Avionics equipment repairing n.e.c.• Glider manufacturing and repair (except hang glider)• Guided missile manufacturing• Helicopter manufacturing or repairing
I Transport, postal and warehousing	490 Air and space transport	<ul style="list-style-type: none">• Air freight transport service• Air passenger transport service• Aircraft charter, lease or rental, with crew, for freight and/or passengers
I Transport, postal and warehousing	522 Airport operations and other air transport support service	<ul style="list-style-type: none">• Air traffic control service• Air transport navigation service• Aircraft support service n.e.c.• Airport baggage handling service• Airport operation• Airport terminal operation

The maritime and marine industry ecosystem

The maritime and marine industry is not classified as a single industry within the Australian and New Zealand Statistical Industrial Classification (ANZSIC) 2006. The industry brings together subsectors from a range of ANZSIC classifications. The Project Champion Group (PCG) highlighted the classifications listed below as directly impacting the maritime and marine industry in the Cairns region.

Maritime and marine industry contributors

Industry code and name	ANZSIC group	Includes primary activities (but not limited to)
A Agriculture, forestry and fishing	041 Fishing	<ul style="list-style-type: none">• Crab fishing or potting• Rock lobster fishing or potting• Saltwater crayfish fishing• Prawn fishing• Scampi fishing• Bottom long line fishing• Line fishing• Ocean trolling• Squid jigging• Surface long-line fishing• Beach seining, fishing• Bottom gill netting, fishing

Industry code and name	ANZSIC group	Includes primary activities (but not limited to)
		<ul style="list-style-type: none"> • Danish seining, fishing • Finfish trawling • Pair trawling • Purse seining • Set netting, fishing • Surface netting, fishing • Abalone/paua fishing • Freshwater eel fishing • Freshwater fishing n.e.c. • Marine water fishery product gathering • Oyster catching (except from cultivated oyster beds) • Pearling (except pearl oyster farming) • Seaweed harvesting • Spat catching • Turtle hunting
C Manufacturing	112 Seafood processing	<ul style="list-style-type: none"> • Crustacean, processed, manufacturing (including cooked and/or frozen) n.e.c. • Fish cleaning or filleting • Fish fillet manufacturing • Fish loaf or cake manufacturing • Fish paste manufacturing • Fish pate manufacturing • Fish, canned, manufacturing • Fish, dried or smoked, manufacturing • Mollusc, processed, manufacturing (including shelled) • Oyster, shelling, freezing or bottling in brine • Scallop, preserved, manufacturing • Seafood, canned, manufacturing • Seafood, preserved, manufacturing • Whole fin fish freezing
C Manufacturing	191 Polymer product manufacturing	<ul style="list-style-type: none"> • Polycarbonate sheet manufacturing • Sheet foam manufacturing • Adhesive manufacturing • Casein glue manufacturing • Glue manufacturing • Rubber adhesives manufacturing • Water repellent coating manufacturing (for concrete and masonry) • Awning, fibreglass, manufacturing • Hull, boat building, manufacturing
C Manufacturing	201 Glass and glass product manufacturing	<ul style="list-style-type: none"> • Window glass manufacturing • Mirror manufacturing • Safety glass manufacturing
C Manufacturing	229 Other fabricated metal product manufacturing	<ul style="list-style-type: none"> • Chain manufacturing (except forged, cast or sprocket chain) • Dowel pin, metal, manufacturing • Expansion bolt, metal, manufacturing • Machine screw, metal, manufacturing • Masonry anchor, metal, manufacturing • Nut or bolt, metal, manufacturing • Rivet, metal, manufacturing • Screw, metal, manufacturing • Set screw, metal, manufacturing • Turnbuckle, metal, manufacturing • Washer, metal, manufacturing • Anodising • Brass finishing or plating • Cadmium plating • Chromium plating • Copper plating • Enamelling of metal

Industry code and name	ANZSIC group	Includes primary activities (but not limited to)
		<ul style="list-style-type: none"> • Heat treating metal or metal products • Metal coating n.e.c. • Metal polishing or finishing • Plastic coating of metal • Powder coating of metal and metal products • Painting of manufactured metal products • Mast, aluminium, manufacturing
C Manufacturing	239 Other transport equipment manufacturing	<ul style="list-style-type: none"> • Drydock operation • Hull cleaning • Ship repairing • Ship wrecking • Shipbuilding • Submarine constructing • Boat repairing • Boatbuilding • Canoe manufacturing • Dinghy manufacturing • Inflatable boat manufacturing • Jet boat building • Motorboat, inboard and outboard, building • Powerboat building • Sailboat manufacturing • Yacht construction
C Manufacturing	249 Other machinery and equipment manufacturing	<ul style="list-style-type: none"> • Capstan manufacturing • Hoist or hoisting equipment manufacturing (except clothes hoists) • Hydraulic lifting equipment and parts manufacturing • Diesel engine manufacturing n.e.c. • Engine, internal combustion, manufacturing n.e.c. • Marine engine manufacturing (except diesel inboard engines 37kW brake power and over) • Marine jet unit manufacturing
C Manufacturing	251 Furniture manufacturing	<ul style="list-style-type: none"> • Chair manufacturing (except dental chairs fitted with mechanical devices) • Cabinet, radio, radiogram or television, manufacturing (metal framed) • Furniture fittings, metal, manufacturing • Furniture part, metal, manufacturing • Furniture, metal, manufacturing • Metal furniture manufacturing n.e.c. • Bed base, upholstered, manufacturing • Fibreglass furniture manufacturing
F Wholesale trade	349 Other machinery and equipment wholesaling n.e.c.	<ul style="list-style-type: none"> • Mathematical instrument wholesaling • Navigation equipment wholesaling • Cellular telephone wholesaling • Communication equipment wholesaling • Two-way radio equipment wholesaling • Telecommunication equipment parts wholesaling • Radio or television part wholesaling • Radio receiving set wholesaling • Boat wholesaling • Marine engine wholesaling • Marine equipment wholesaling n.e.c. • Pumping machinery or equipment wholesaling
F Wholesale trade	371 Textile, clothing and footwear wholesaling	<ul style="list-style-type: none"> • Awning, textile, wholesaling • Canvas goods wholesaling n.e.c. • Cordage wholesaling • Fabric, textile, wholesaling • Glass fibre fabric wholesaling • Netting, textile wholesaling • Rope wholesaling (except wire rope) • Sail cloth wholesaling

Industry code and name	ANZSIC group	Includes primary activities (but not limited to)
G Retail trade	400 Fuel retailing	<ul style="list-style-type: none"> • Diesel oil retailing • Engine oil retailing • Petrol retailing
G Retail trade	422 Electrical and electronic goods retailing	<ul style="list-style-type: none"> • Radio receiving set retailing (except car radios) • Two-way radio equipment retailing • Visual display unit (VDU) retailing • Computer equipment retailing • Computer hardware retailing • Computer software retailing (except computer games) • Electronic goods retailing n.e.c.
G Retail trade	424 Recreational goods retailing	<ul style="list-style-type: none"> • Canoe retailing • Fishing tackle retailing • Sailboard retailing • Wetsuit retailing • Boat retailing (including used) • Boat trailer retailing • Marine accessory retailing n.e.c. • Outboard motor retailing • Sailing or nautical accessory retailing • Yacht retailing
I Transport, postal and warehousing	481 Water freight transport	<ul style="list-style-type: none"> • Coastal sea freight transport service between domestic ports • Freight ferry service • Harbour freight transport service • International sea freight transport service between domestic and international ports • River freight transport service • Ship freight management service (i.e. operation of ships on behalf of owners) • Water (river, sea and lake) freight transport service
I Transport, postal and warehousing	482 Water passenger transport	<ul style="list-style-type: none"> • Boat charter, lease or rental, with crew for passenger transport • Ferry operation, including vehicular • Passenger ferry service • Passenger ship management service (i.e. operation of ships on behalf of owners) • Ship charter, lease or rental, with crew, for passenger transport • Water passenger transport service • Water taxi service
I Transport, postal and warehousing	501 Scenic and sightseeing transport	<ul style="list-style-type: none"> • Airboat operation • Charter fishing boat operation • Harbour sightseeing tour operation • Hovercraft operation • Whale watching cruise operation
I Transport, postal and warehousing	521 Water transport support services	<ul style="list-style-type: none"> • Ship loading or unloading service (provision of labour) • Stevedoring service • Coal loader operation (water transport) • Container terminal operation (water transport) • Grain loader operation (water transport) • Port operation • Ship mooring service • Water freight terminal operation • Water passenger terminal operation • Wharf operation • Lighterage service • Navigation service (water transport) • Pilotage service • Salvage service, marine • Ship registration and agency service • Towboat and tugboat operation • Water vessel towing service

Industry code and name	ANZSIC group	Includes primary activities (but not limited to)
I Transport, postal and warehousing	529 Other transport support services	<ul style="list-style-type: none"> • Water freight forwarding service • Toll bridge operation
I Transport, postal and warehousing	530 Warehousing and storage services	<ul style="list-style-type: none"> • Bulk petroleum storage service • Cool room storage service • Controlled atmosphere store operation • Free store operation (storage of goods not under bond) • Furniture storage service • Refrigerated storage service • Storage n.e.c. • Warehousing n.e.c.
L Rental, hiring and real estate services	661 Motor vehicle and transport equipment rental and hiring	<ul style="list-style-type: none"> • Boat hiring (without crew) • Houseboat rental • Ship rental (without crew) • Shipping container rental
M Professional, scientific and technical services	692 Architectural, engineering and technical services	<ul style="list-style-type: none"> • Drafting service, architectural • Map preparation service • Oceanographic surveying service • Boat designing service • Marine engineering consulting service • Naval architecture service • Materials strength testing service
O Public administration and safety	760 Defence	<ul style="list-style-type: none"> • Armed forces unit operation (except manufacturing or educational) • Civil defence operation (military) • Government administration (defence)
S Other services	942 Machinery and equipment repair and maintenance	<ul style="list-style-type: none"> • Radio and stereo repair and maintenance (except automotive) • Communication equipment, repair and maintenance • Computer and computer peripheral equipment repair and maintenance • Navigation instrument (including radar and sonar) repair and maintenance • Radar and sonar equipment repair and maintenance • Engine repair (except automotive) • Outboard motor repair • Pump and compressor repair • Shipping barrel and drum reconditioning and repairing

Source: Australian Bureau of Statistics. (2016). *Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0)*. Canberra: Australian Government. <https://www.abs.gov.au/statistics/classifications/australian-and-new-zealand-standard-industrial-classification-anzsic/2006-revision-2-0>

