



NORTHERN TERRITORY MINERALS SECTOR CAPABILITY SCAN

WORKFORCE PROFILE, OCCUPATIONS IN DEMAND AND
WORKFORCE PATHWAYS

25 AUGUST 2026

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How to read this scan

This scan forms part of a broader capacity and capability project. It provides the evidence base for understanding current workforce capability, priority occupations and pathway maturity across the Northern Territory minerals sector, and supports future capability planning and coordination.

EXECUTIVE SUMMARY

The Northern Territory minerals sector has a significant opportunity for growth, but converting the current project pipeline into long-term Territory jobs will depend on whether workforce capability can keep pace with future industry demand.

This minerals sector capability scan examines the Northern Territory minerals industry workforce to identify where capability is already strong, where pressures are emerging and which occupations and workforce pathways are most critical to supporting future industry activity. Drawing on workforce profile data, industry consultation and workforce pathway mapping, it provides an evidence base to support capability and workforce planning across industry, government and education providers.

The findings demonstrate that workforce capability strengths and pressures are not evenly distributed across the sector. Capability pressures are concentrated in specialist technical, leadership and FIFO-dependent occupations, while local participation is strongest in operational and site-based roles supported by established Territory education and training pathways.

The scan maps workforce pathways for priority occupations spanning technical, operational, environmental, leadership and enabling functions. These occupations represent the areas where targeted workforce planning, education investment and industry collaboration are likely to have the greatest impact.

The analysis identifies six key capability insights:

1. Occupations in demand do not always align with the largest workforce cohorts.
2. FIFO reliance reflects a structural divide between local operational capability and mobile specialist capability.
3. Local participation is strongest where pathways are mature and visible.
4. Female participation is strongest where pathways are visible and accessible.
5. Younger cohorts represent a strategic attraction and retention opportunity.
6. Workforce development capacity is a limiting factor.

The scan provides industry, government and education providers with a shared evidence base to support capability planning, education investment and coordinated action. Its central finding is that workforce capability cannot be treated as a single labour market issue. Different occupations face different capability constraints and therefore require different workforce strategies.

1. INTRODUCTION

A skilled and sustainable workforce is essential to the Northern Territory minerals sector's ability to support investment, regional employment, operational continuity and long-term economic growth.

The minerals industry is a significant contributor to the Territory economy, supporting regional communities, local businesses, infrastructure investment and workforce participation. As projects progress from exploration through to development and operations, demand for skilled workers across technical, operational and professional occupations will continue to grow.

In 2024-25, the sector employed 5,447 full-time equivalent workers, including direct hire and contractors¹. As of May 2026, 16 mining projects are under development, representing an estimated \$6 billion in capital investment and supporting approximately 2,950 construction jobs and 2,450 operational jobs over time². This presents an important opportunity to strengthen the Territory workforce and increase local participation as new projects are delivered. Realising that opportunity will depend on ensuring workforce capability develops alongside project demand.

Workforce capability extends beyond workforce size alone. Different occupations require different workforce strategies. Some rely on established education and training pathways, while others depend on attracting specialist expertise, retaining experienced workers or strengthening career progression. Understanding these differences provides a stronger evidence base for workforce planning than considering labour supply in isolation.

This Minerals Sector Capability Scan establishes that evidence base by examining the current workforce profile, identifying priority occupations and assessing the maturity of workforce pathways across the Northern Territory. It provides industry, government and education providers with a shared understanding of current capability, emerging pressures and opportunities to strengthen the Territory workforce over the long term.

¹ Lawrence Consulting. Northern Territory Minerals Sector Economic Contribution Study 2024-25. May 2026

² Northern Territory Geological Survey, Mining developments in the Northern Territory, February 2026. Available online: [Mining Developments in the Northern Territory](#)

DEFINITIONS

Term	Definition
ABS	Australian Bureau of Statistics. Australia's national statistical agency and custodian of the Occupation Standard Classification for Australia (OSCA).
ANZSCO	Australian and New Zealand Standard Classification of Occupations. The former national occupation classification used by the Australian Bureau of Statistics. Workforce profile data for this study was collected using ANZSCO occupation groupings.
Attraction	The ability to attract people into priority occupations through awareness, education, recruitment and workforce participation initiatives.
Capability pressure	An area where workforce demand, attraction, retention or pathway maturity increases the risk of future capability constraints.
FIFO	Fly-in fly-out workers whose usual place of residence is outside the Northern Territory and who travel to the Territory for rostered work.
Local participation	Employment of Northern Territory residents within the minerals workforce.
MCA NT	Minerals Council of Australia – Northern Territory Division.
NT	Northern Territory.
OSCA	Occupation Standard Classification for Australia, the Australian Bureau of Statistics' classification system for occupations used to support labour market analysis, workforce planning and statistical reporting.
Pathway maturity	The extent to which education, training and career pathways are established, visible, aligned with industry needs and capable of supporting workforce development.
Priority occupations	Occupations identified through industry consultation as being strategically important to supporting current and future workforce requirements.
Retention	The ability to retain skilled workers in the Northern Territory through career progression, workforce stability and long-term employment opportunities.
RTO	Registered Training Organisation. An organisation approved to deliver nationally recognised vocational education and training (VET) qualifications and courses.
Skills summit	The 2025 NT Resources Industry Skills Summit, convened by MCA NT to identify workforce priorities, workforce gaps and opportunities for collaboration across industry, government and education providers.
VET	Vocational Education and Training. Australia's national system for delivering practical and vocational qualifications through registered training organisations (RTOs).
Workforce capability	The ability of the Northern Territory minerals sector to attract, develop and retain the workforce required to support current and future industry activity.
Workforce pathways	The education, training, experience and career progression routes that enable people to enter, develop and advance within occupations across the minerals sector.

2. CURRENT WORKFORCE CAPABILITY

3.1 Methods

Workforce profile insights were collected through a voluntary survey of twelve MCA NT member companies operating in the Northern Territory. The survey used Australian and New Zealand Standard Classification of Occupations (ANZSCO) groupings to capture high-level workforce composition. For each occupation group, data was collected on worker age, gender, employment status (full-time or part-time) and place of origin (NT resident or interstate FIFO).

Data collection commenced in September 2025 and concluded in April 2026. Participating companies span exploration, operations and rehabilitation. Data was aggregated by Lawrence Consulting and provided to MCA NT for analysis.

To protect confidentiality, results are reported in aggregate across the Territory. Findings are generally presented as percentages, with selected aggregate workforce counts included where this assists interpretation and does not identify individual companies. The findings should be interpreted as indicative of workforce characteristics across participating organisations, not a comprehensive census of the NT resources workforce.

The analysis is designed to support strategic workforce and capability planning by identifying broad workforce characteristics, pathway maturity and capability risks across participating organisations.

3.2 Workforce profile

Workforce composition by occupation

Figure 2 shows that machinery operators and drivers comprise the largest cohort of the NT mining workforce at 41 per cent ($n = 1,233$), followed by tradespeople at 19 per cent ($n = 583$), supervisors at 10.4 per cent ($n = 271$) and engineers at 6.6 per cent ($n = 172$).

This indicates that operational and site-based roles make up the largest share of the current workforce and provide the strongest base for workforce development activity.

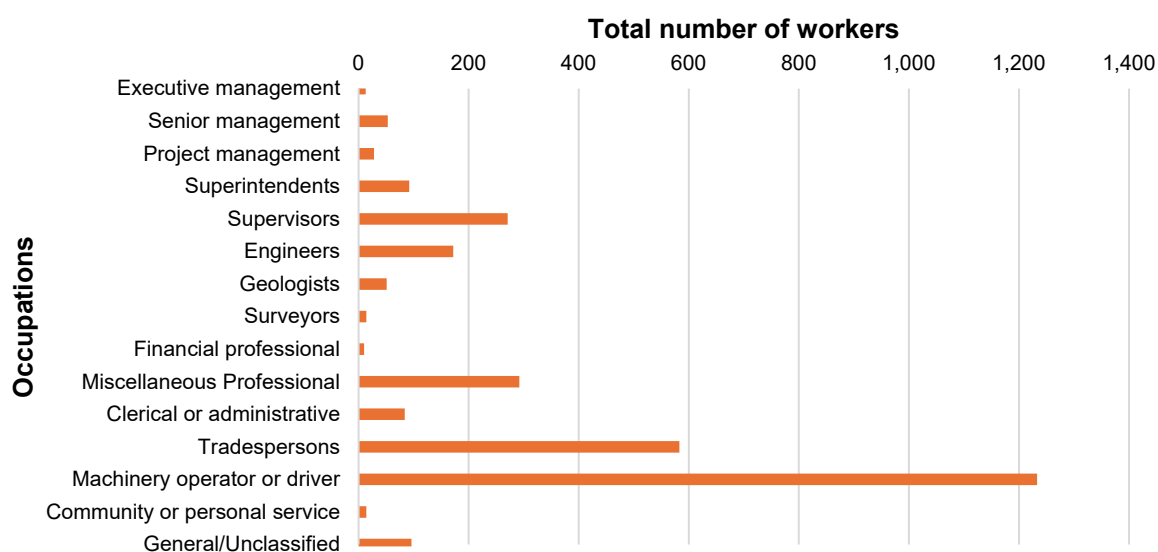


Figure 2. Workforce numbers by occupation.

Workforce insights by place of origin

Figure 3 shows that NT residents comprise 51 per cent of the workforce, compared with 49 per cent interstate FIFO workers. This indicates a relatively even split across the total workforce, but the pattern varies significantly by occupation.

FIFO representation is highest in executive management (85 per cent), financial professionals (80 per cent), surveyors (79 per cent), geologists (75 per cent) and project managers (75 per cent).

By contrast, NT residents make up the majority of community and personal services workers (79 per cent), clerical and administrative workers (68 per cent), and machinery operators and drivers (57 per cent).

Other roles are more evenly distributed between NT residents and FIFO workers, including superintendents (54 per cent FIFO), supervisors (54 per cent FIFO) and tradespeople (44 per cent FIFO). The key implication is a clear divide between locally supplied operational roles and FIFO-dependent technical and leadership occupations.

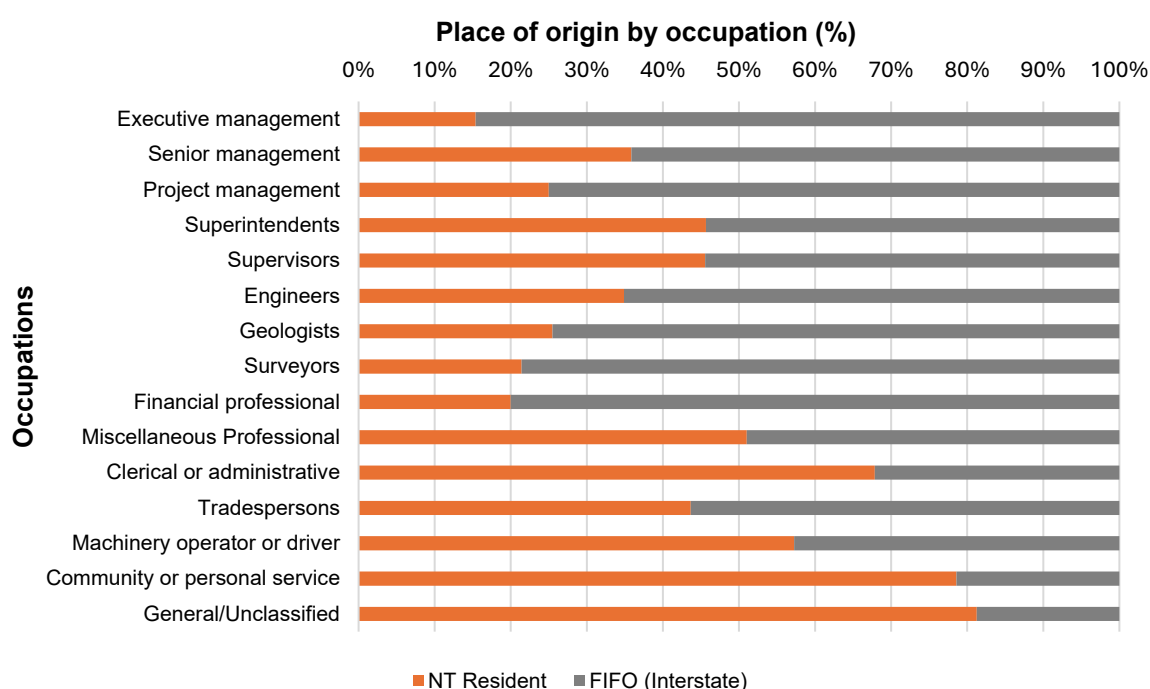


Figure 3. Place of origin by occupation for NT residents and interstate FIFO workers. Note: 'Other' occupations have been removed.

Workforce insights by gender

The NT mining workforce is 81 per cent male and 19 per cent female, broadly consistent with the national mining workforce profile of 80 per cent male and 20 per cent female.

Figure 4 shows that clerical and administrative roles are the only female-majority occupation in the NT mining workforce, at 66 per cent. Higher female representation is also observed in community and personal services (42.9 per cent), geologists (34.6 per cent), senior management (34.0 per cent), financial professionals (30.0 per cent) and superintendents (19.6 per cent).

Female representation is lower in several of the largest or most strategically important occupations, including machinery operators and drivers (17 per cent), engineers (16.9 per cent), project management (14.4 per cent) and supervisors (10.3 per cent). The lowest participation is observed in executive management (7 per cent) and tradespeople (7 per cent), with no female surveyors identified in the survey.

The data points to a substantial opportunity to increase female participation in large operational cohorts and in technical and leadership occupations that are critical to future workforce capability.

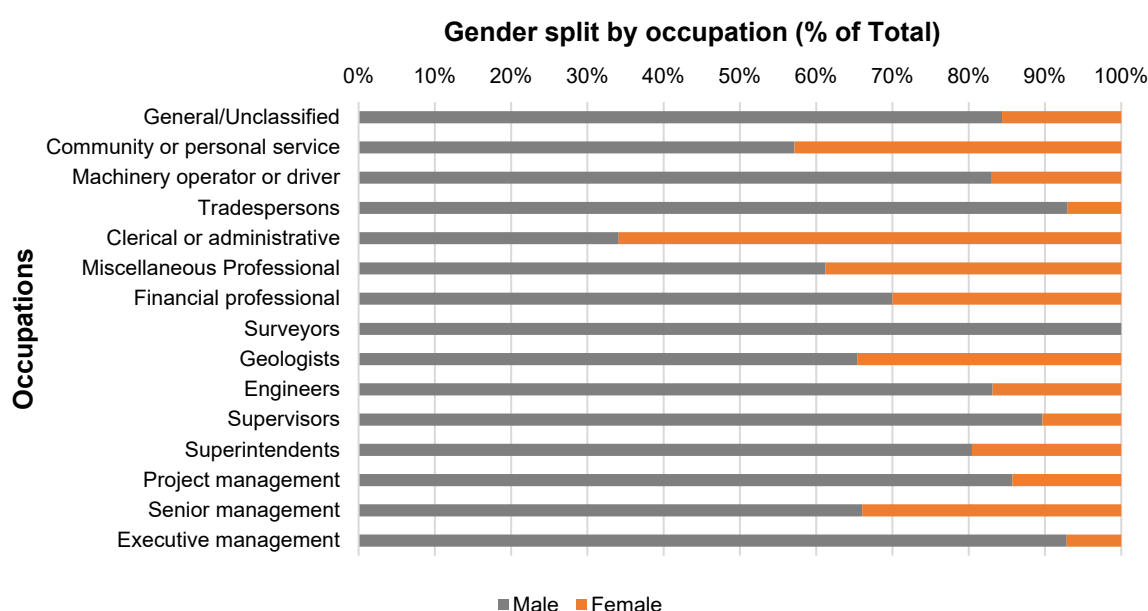


Figure 4. Gender distribution by occupation. Note: ‘Other’ occupations have been removed.

Figure 5 shows that female workers in the NT mining industry are more likely to be NT residents than FIFO workers, with 61 per cent resident in the Territory and 39 per cent working on a FIFO basis.

This reinforces the broader workforce pattern: women are more likely to be concentrated in locally anchored roles and remain underrepresented in mobile, technical and leadership positions.

Financial professionals, geologists and Executive managers are exceptions. This may reflect the limited local pipeline and the small overall number of female professionals in the NT minerals industry.

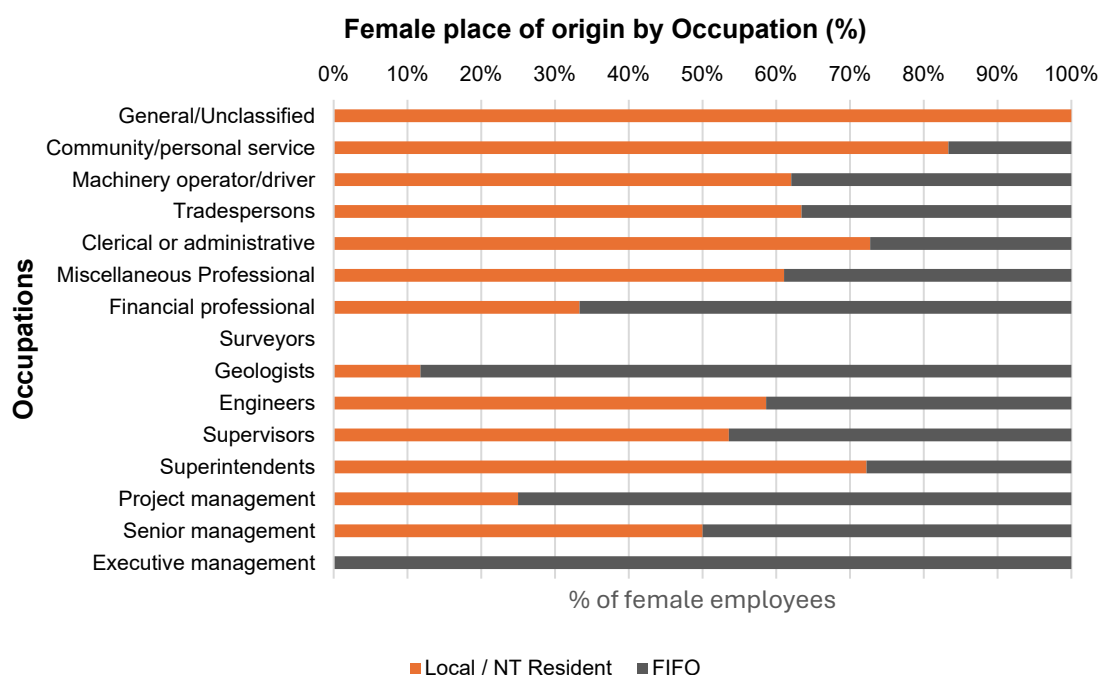


Figure 5. Place of origin by occupation for female NT residents and female interstate FIFO workers. Note: No female surveyors were identified in this study.

Figure 6 brings these patterns together by comparing gender balance, FIFO reliance and relative occupation size. The figure highlights that some of the largest workforce cohorts remain male-dominated, while several FIFO-dependent specialist occupations also have limited female participation.

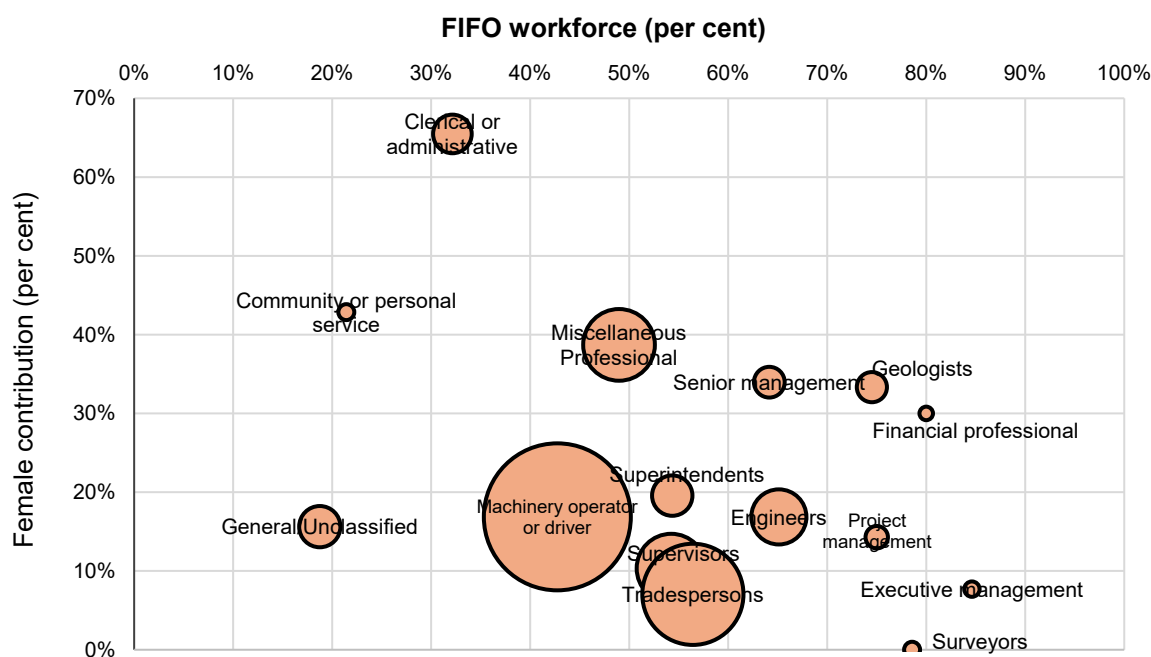


Figure 6. Gender balance and interstate FIFO reliance by occupation, with bubble size indicating relative occupation size.

Workforce insights by age

The average age of the NT mining workforce is 41 years, broadly in line with the national mining workforce median age of 42 years³.

Figure 7 shows age distribution by occupation. The youngest workforce profiles are observed in geologists (31.8 years), engineers (35.1 years), financial professionals (37.1 years), surveyors (38.4 years) and tradespeople (38.7 years). The oldest workforce profiles are in executive management (48.0 years), project management (46.8 years) and community and personal service occupations (46.7 years).

Several of the largest and most critical occupation groups, including geologists, engineers and tradespeople, have comparatively younger workforce profiles. This creates an opportunity to influence long-term retention through early engagement, site exposure and clear progression pathways.

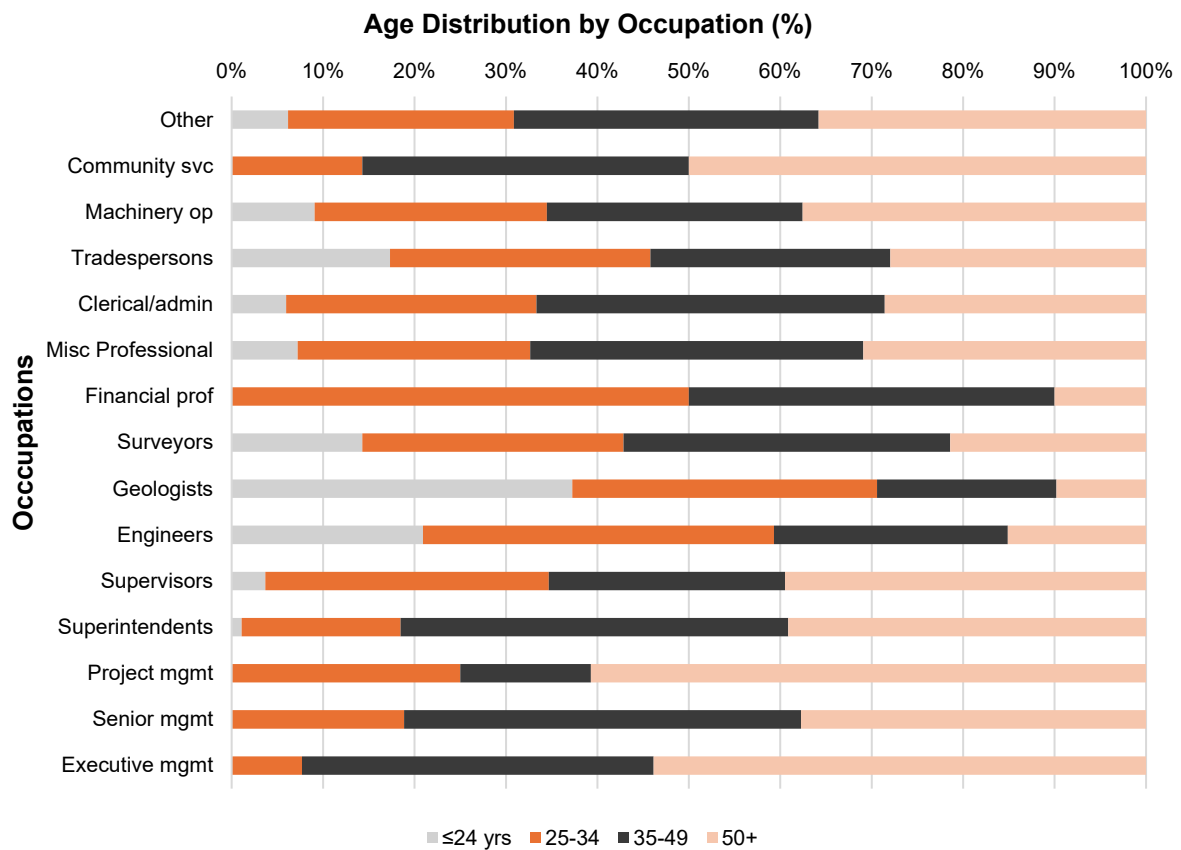


Figure 7. Age distribution by occupation.

Figure 8 shows the average age of the FIFO workforce by occupation size. It reinforces that FIFO reliance is not limited to entry-level or short-term roles. It is also present in specialist and leadership occupations where experience, technical depth and progression pathways are important to future workforce capability.

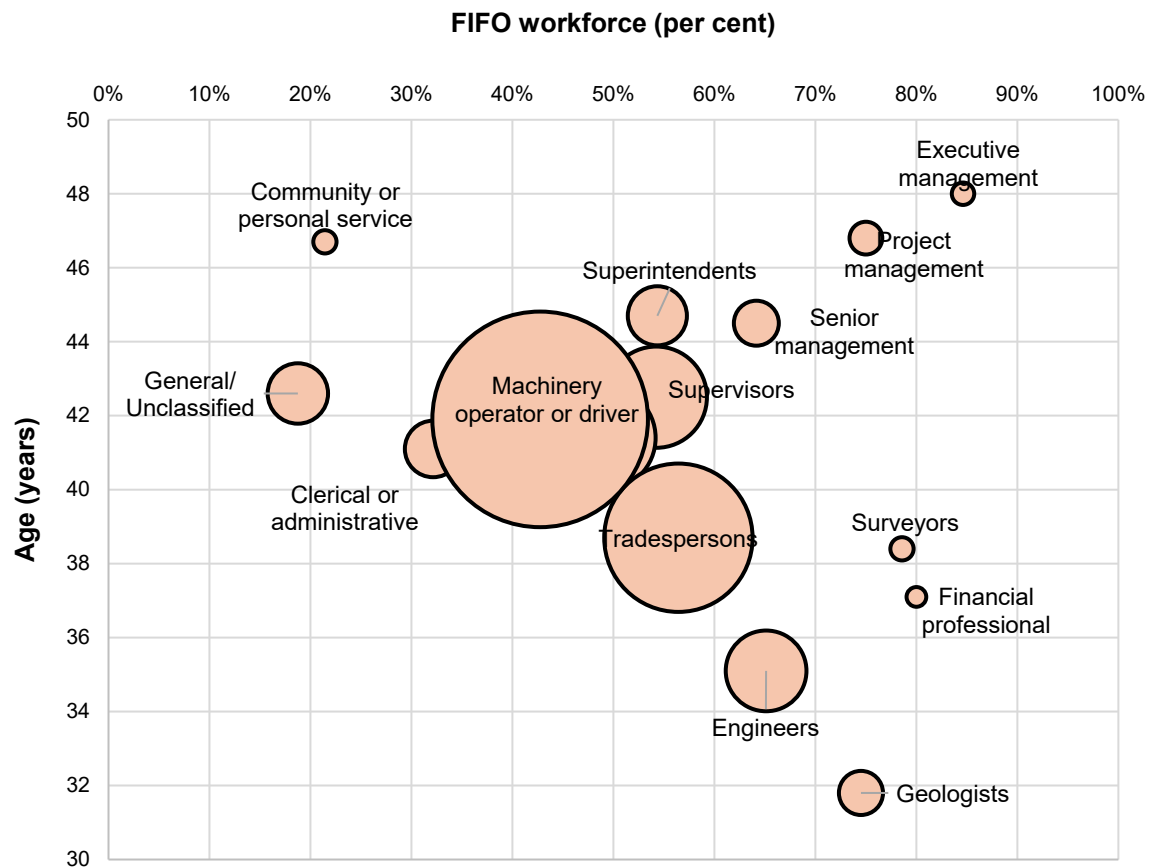


Figure 8. Average age of FIFO workforce by occupation, with bubble size indicating relative occupation size.

3. WORKFORCE PATHWAYS AND CAPABILITY DEVELOPMENT

4.1 Pathway assessment approach

The workforce profile presented in Section 3 describes the current composition of the Northern Territory minerals workforce using broad occupation groups. While these groupings provide an overview of workforce capability across the sector, they do not provide sufficient detail to assess workforce pathways, capability maturity or future workforce risks.

To better understand future workforce capability, this section assesses the occupations represented within the workforce profile, with particular focus on the ten occupations identified by industry as strategic workforce priorities through the 2025 NT Resources Industry Skills Summit.

The priority occupations were selected from more than 50 workforce shortages identified across approximately 30 occupation types because of their strategic importance, training lead times and expected future demand. Together, they represent the occupations where workforce capability is expected to have the greatest influence on future project delivery, operational performance and long-term industry growth. They span technical, operational, environmental, leadership and enabling functions, providing a balanced assessment of the workforce required to support exploration, mining, mineral processing, environmental management and corporate operations across the Northern Territory minerals sector.

While the detailed assessment focuses on the priority occupations, the broader workforce profile has also been considered to provide a complete assessment of workforce capability across the sector. Occupations identified through the Skills Summit are highlighted within Table 1 to distinguish them from occupations that were assessed but are not currently considered strategic workforce priorities.

Rather than prescribing training requirements, this assessment considers whether the Territory has the workforce pathways needed to develop and sustain capability in each occupation. Each occupation has been assessed by considering:

- Typical workforce pathway;
- Maturity of Northern Territory education and training pathways; and
- Implications for attraction, retention and long-term workforce capability.

4.2 Workforce pathway maturity assessment

Table 1 provides a workforce capability assessment for occupations represented within the workforce profile. Occupations have been mapped to the most relevant Occupation Standard Classification for Australia (OSCA) occupation code or occupation group to support consistent workforce planning and pathway analysis. Where an exact OSCA occupation does not exist, the closest relevant occupation or occupation group has been adopted.

Workforce profile data presented earlier in this report was collected using the former Australian and New Zealand Standard Classification of Occupations (ANZSCO). The pathway assessment has been aligned to OSCA, the Australian Bureau of Statistics' current occupation classification, to support contemporary workforce planning and analysis.

This assessment focuses on occupational pathways rather than site-specific competency requirements. Employer-specific inductions, licences and mandatory workplace certifications (such as White Cards, first aid or working at heights) have not been assessed because they vary across employers and do not materially influence pathway maturity at an industry level.

Table 1. Workforce pathway maturity and capability assessment by occupation

Occupation group	Occupation	OSCA code	Typical workforce pathway	Current NT pathway	Pathway maturity [†]	NT delivery opportunity
Geoscience	Geologist*	244531 Geologist	Bachelor of Science (Geology or Earth Science). Honours desirable.	Earth science subjects are available in the Territory; however, no dedicated geology major is currently delivered. Capability is primarily developed through interstate education supported by local graduate and field experience.	Not established	Opportunity to establish a Territory geology major and strengthen graduate field experience.
	Hydrogeologist*	244533 Hydrologist	Bachelor of Science (Geology) with postgraduate hydrogeology.	No dedicated Territory hydrogeology pathway. Capability is primarily developed through interstate education.	Not established	Opportunity to develop specialist postgraduate partnerships.
	Spatial Scientist / GIS*	241233 Geospatial Specialist	Bachelor of Spatial Science, GIS or Surveying.	Limited Territory-specific pathway. Capability is primarily developed through interstate education and workplace experience.	Developing	Opportunity to strengthen local spatial capability.
Engineering	Mining Engineer*	243631 Mining Engineer	Bachelor of Engineering (Mining).	No Territory mining engineering degree currently available.	Not established	Opportunity to explore university partnerships or distance delivery models linked to site-based learning.

	Mechanical Engineer*	243532 Mechanical Engineer	Bachelor of Engineering (Mechanical).	Engineering pathway available through CDU.	Developing	Opportunity to continue and strengthen the local engineering pathway.
	Electrical Engineer*	243331 Electrical Engineer	Bachelor of Engineering (Electrical).	Engineering pathway available through CDU.	Developing	Opportunity to expand graduate placements linked to Territory projects.
	Chemical Engineer*	243131 Chemical Engineer	Bachelor of Engineering (Chemical).	No dedicated Territory chemical engineering pathway. Capability is primarily developed through interstate education.	Not established	Opportunity to explore future pathways aligned with critical minerals processing.
	Structural Engineer*	243234 Structural Engineer	Bachelor of Engineering (Civil/Structural).	Structural specialisation generally completed interstate.	Developing	Opportunity to develop professional specialisation partnerships.
	Metallurgist / Metallurgical Engineer*	243132 Extractive Metallurgist 243133 Materials Engineer	Bachelor of Metallurgical Engineering, Minerals Processing or Chemical Engineering.	No dedicated Territory metallurgy pathway. Capability is primarily developed through interstate education.	Not established	Opportunity to support emerging processing capability.
Environment & ESG	Environmental Scientist*	2444 Environmental Consultants and Scientists	Bachelor of Environmental Science, Natural Resource Management or Biology.	Established undergraduate pathway through CDU.	Established	Opportunity to continue graduate and cadetship programs.
	ESG / Social Performance*	112231 Communications Manager (Public Relations) 221231	Bachelor of Environmental Science, Social Science, Communications,	No dedicated Territory ESG pathway.	Not established	Scope to build professional short courses and workplace learning linked to ESG, community engagement and social performance roles.

		Communication s Officer (Public Relations)	Business or Indigenous Studies.			
	Mine Closure / Rehabilitation*	2444 Environmental Consultants and Scientists	Bachelor of Environmental Science, Geology or Engineering; postgraduate study desirable.	No dedicated specialist Territory pathway.	Not established	Opportunity to develop industry-led specialist units and postgraduate training linked to mine closure and rehabilitation.
	Heritage Officer*	232335 Heritage Consultant	Bachelor of Archaeology, Anthropology, Indigenous Studies or Cultural Heritage Management.	Limited specialist Territory pathway.	Developing	Opportunity to strengthen cultural heritage capability.
Trades	Diesel Fitter*	351433 Diesel Technician	Certificate III in Automotive Diesel Technology.	Established apprenticeship delivery.	Established	Opportunity to expand apprentice capacity.
	Mechanical Fitter*	332231 Fitter (General) 351131 Automotive Technician (General)	Certificate III in Engineering – Mechanical Trade.	Established apprenticeship delivery.	Established	Opportunity to maintain the apprenticeship pipeline.
	Electrician*	381231 Electrician (General)	Certificate III in Electrotechnology Electrician.	Established apprenticeship delivery.	Established	Opportunity to expand apprenticeship capacity and strengthen regional delivery linked to mine-site demand.
	Auto Electrician	351231 Automotive Electrician	Certificate III in Automotive Electrical Technology.	Established apprenticeship delivery.	Established	Opportunity to strengthen mining-specific placements.

	Instrumentation Technician	382233 Electronic Instrument Technician	Certificate III or IV in Instrumentation and Control; Certificate IV in Electrical – Instrumentation.	Limited specialist Territory delivery.	Developing	Opportunity to build industry-RTO partnerships.
Process Operations	Process Operator / Technician*	73 Machine and Stationary Plant Operators 74 Mobile Plant Operators	Certificate III in Process Plant Operations; Certificate IV in Process Plant Technology.	Limited Territory-specific delivery.	Developing	Scope to build industry-RTO partnerships for process plant operations and workplace-based delivery.
	Metallurgical Technician	313935 Metallurgical or Materials Technician	Certificate IV in Laboratory Techniques; Diploma of Laboratory Technology.	Limited specialist Territory pathway.	Developing	Opportunity to support laboratory and processing capability.
	Laboratory Technician	311531 Chemical Technician 149333 Laboratory Manager	Certificate IV in Laboratory Techniques; Diploma of Laboratory Technology.	Limited specialist Territory pathway.	Developing	Opportunity to support laboratory science capability.
Business Support	Administration*	599999 Clerical and Administrative Workers	Certificate III/IV in Business; Diploma of Leadership and Management.	Strong Territory VET delivery.	Established	Opportunity to continue mining business pathways.
	Financial Professional	211131 Accountant	Bachelor of Accounting, Commerce or Finance; CPA/CA desirable.	Established university pathway.	Established	Opportunity to expand graduate opportunities.
	Human Resources	222131 Human Resources Advisor 111331	Bachelor of Human Resource Management or Business.	University pathway through business qualifications.	Established	Opportunity to strengthen graduate HR pathways.

		Human Resources Manager				
Supply chain	Storeperson / Logistics*	721131 Storeperson 571131 Logistics Officer	Certificate III in Supply Chain Operations; Certificate III in Warehousing Operations.	General logistics qualifications available.	Developing	Opportunity to align supply chain and warehousing programs with mining logistics requirements.
Leadership and management	Executive Management*	121131 Chief Executive Officer or Managing Director	Business, Engineering or Science degree; MBA, AICD or AIM desirable.	Leadership capability developed primarily through workplace progression.	Progression dependent	Opportunity to strengthen leadership succession and executive development pathways within Territory operations.
	Supervisor / Superintendent	132233 Production Manager (Mining) 313531 Mining Supervisor 721132 Warehouse Supervisor	Certificate IV in Leadership and Management; Diploma of Leadership and Management, or progression from trade/professional role.	Strong local leadership qualifications available.	Progression dependent	Opportunity to strengthen structured leadership progression.
	Project Manager	01 Major Group, Manager	Engineering, Business or Construction degree; Diploma of Project Management desirable.	University and VET pathways available.	Established	Opportunity to strengthen project management capability.

* Indicates occupations identified through the 2025 NT Resources Industry Skills Summit as strategic occupation groups. Some priority groups have been disaggregated into individual occupations to support detailed workforce pathway analysis.

† Pathway maturity: Established = mature Territory pathway with local education or training delivery and clear workforce progression; Developing = pathway exists but has gaps in delivery, scale or industry alignment; Emerging = early or limited Territory pathway with potential to develop further; Not established = no dedicated Territory pathway and capability relies on interstate education, specialist experience or employer-led development; Progression dependent = capability is developed primarily through workplace experience and career progression.

4.3 Key pathway findings

Table 1 shows that the Territory has a mixed pathway maturity profile. Some occupations have established local education and training pathways, while others rely heavily on interstate education, specialist experience or employer-led development. This distinction is important because the occupations with the thinnest pathways are often those most critical to future project delivery, approvals, processing, closure and leadership capability.

Key findings:

1. Established capability foundations

Mechanical and maintenance trades, electrotechnology, environmental science and administration benefit from clearer Territory education and training pathways. These occupations provide a practical base for local participation, regional employment and future capability development.

2. Pathway gaps and specialist capability constraints

Geoscience, hydrogeology, mining engineering, metallurgy, ESG, mine closure and some process-related occupations have less mature or not established Territory pathways. These areas are more exposed to interstate education pipelines, specialist recruitment and employer-led development.

3. Progression-based capability

Leadership, supervision and executive capability depend less on entry-level training and more on retaining experienced workers, supporting workplace progression and creating structured pathways into senior operational and management roles.

These findings provide the basis for the key capability insights in the following section.

4. KEY CAPABILITY INSIGHTS

The workforce profile, occupations in demand and pathway mapping point to a clear conclusion: workforce capability risk is concentrated, not evenly distributed. The challenge is not simply whether the Territory has enough workers, but whether the right capability exists in the occupations most critical to future project delivery. The following insights identify where workforce capability is strongest, where pressures are emerging and where future capability planning should be focused.

4.1 Occupations in demand do not always align with the largest workforce cohorts

The largest workforce cohorts are not automatically the highest capability risks. Machinery operators, tradespeople and supervisors account for a significant share of current employment, but smaller specialist occupations can have greater strategic significance because they are harder to source, harder to train locally and more exposed to thin workforce pipelines.

This is most evident in geoscience, ESG and social impact, mine closure and rehabilitation, process operations and logistics. While these occupations represent a smaller share of the workforce, they are critical to approvals, project delivery, operations, closure obligations and supply chain performance.

The workforce planning task is therefore not simply to grow the largest workforce cohorts. It is to ensure capability is available in the occupations that present the greatest risk to future project delivery.

4.2 FIFO reliance reflects a structural divide between local operational capability and mobile specialist capability

The workforce profile identifies a clear structural divide between locally anchored operational roles and more mobile technical and leadership occupations. Operational roles such as machinery operators, tradespeople and administrative occupations have strong Territory participation, while specialist and leadership roles remain more reliant on interstate FIFO workers.

This pattern reflects differences in workforce capability rather than overall labour supply. Specialist occupations typically require greater technical expertise, deeper experience and longer development timeframes, making them more difficult to recruit and retain locally.

Reducing long-term workforce risk will therefore depend not only on attracting workers into the industry, but also on strengthening local specialist capability and creating clearer progression into leadership roles.

4.3 Local participation is strongest where pathways are mature and visible

Local participation is strongest in occupations supported by established Territory education and training pathways, particularly machinery operators and drivers, tradespeople, environmental science roles and administration. These occupations benefit from visible career pathways, local training delivery and strong connections with Territory employers.

By contrast, geoscience, ESG and social impact, mine closure and rehabilitation, process operations and logistics have less mature pathways and remain more reliant on interstate labour.

Leadership capability differs again. It depends less on formal qualifications than on retaining experienced workers and supporting progression into senior operational and management roles.

These findings demonstrate that workforce capability cannot be addressed through a single workforce pipeline. Different occupations have different pathway maturity, capability constraints and workforce development needs.

4.4 Female participation is strongest where pathways are visible and accessible

Female participation is strongest in occupations with established and visible pathways, and lowest in technical, trade and FIFO-dependent roles.

This suggests that participation is influenced by pathway design and accessibility, rather than occupation alone. Improving access to technical and trade pathways will be important to increasing female participation in the occupations most critical to future workforce capability.

4.5 Younger cohorts represent a strategic attraction and retention opportunity

Several high-demand occupations, including geologists, engineers and tradespeople, have comparatively young workforce profiles and higher workforce mobility.

This presents both risk and opportunity. Younger workers are more mobile, but they are also at a career stage where early engagement, practical experience and structured career progression can influence whether they build long-term careers in the Territory.

4.6 Workforce development capacity is a limiting factor

Workforce development capacity is constrained by supervision requirements, trainer availability and the operational demands placed on experienced workers.

In technical and high-risk environments, the same workers responsible for safe operations are often also responsible for training apprentices and trainees. This limits how quickly conventional workforce development models can scale.

Increasing apprentice and trainee numbers alone will not resolve this constraint. Workforce development capacity must be considered alongside training supply and industry demand to build a sustainable workforce capable of supporting future project delivery.

CONCLUSION

This Minerals Sector Capability Scan provides the first comprehensive assessment of workforce capability across the Northern Territory minerals sector. By combining workforce profile data, industry consultation and workforce pathway mapping, it establishes a baseline understanding of current capability, identifies the occupations most critical to future industry needs and assesses the maturity of the pathways that support them.

The findings demonstrate that the Territory has a strong foundation on which to build future workforce capability. Established operational capability, strong local participation across many site-based occupations and existing education and training pathways provide a solid base for future workforce development. At the same time, the analysis shows that capability is not evenly distributed across occupations. Workforce pressures are concentrated in specialist technical, leadership and emerging occupations, where pathways are less mature and workforce development requires longer-term investment. These findings demonstrate that the Territory's workforce challenge is not simply one of workforce supply, but of ensuring the right capability is developed in the right occupations at the right time.

Importantly, this study shows that workforce capability cannot be considered through workforce numbers alone. Building a sustainable workforce depends on understanding the relationship between attraction, retention, education and training pathways, workforce development capacity and career progression. Considering these factors together provides a more complete evidence base for workforce planning than labour supply in isolation.

As the Northern Territory's minerals sector continues to grow, this evidence provides a stronger foundation for workforce planning across industry, government and education providers. Rather than prescribing specific actions, it identifies where capability is already strong, where future capability pressures are most likely to emerge and where investment in workforce pathways is likely to deliver the greatest long-term benefit.

Ultimately, the opportunity extends beyond meeting future workforce demand. It is to strengthen the Territory's long-term capability so that future mineral development delivers enduring economic, workforce and community benefits. By identifying where capability exists today and where it needs to grow, this scan provides a practical foundation for more informed workforce planning and targeted capability investment across the Northern Territory.