

# Case Study

# Sydney Metro Industry Curriculum

2023

[sydneymetro.info](http://sydneymetro.info)

The Sydney Metro industry curriculum (SMIC) program aims to increase workforce capability and capacity by developing transferable skills and competency of individuals across the industry. The approach includes mandatory training prior to commencement on site or within a specified time frame for defined occupations and across all levels of leadership and management. The program ensures competency is evidenced through nationally recognised units. This supports transferability of skills and the workers' ability to pursue further learning pathways within the industry.

SMIC has established new industry benchmarks supporting increased workforce competency and improvements in work health and safety, leadership, quality, and productivity. The program's delivery is supported through collaborative partnerships with NSW Department of Education and Training Services NSW.

Sydney Metro has taken a risk-based approach in structuring the program, addressing any areas that pose a significant safety risk to the project or areas with critical skill gaps.

The program's flexible training and assessment design allows for specialised language, literacy, and numeracy support teachers to team alongside technical trainers. Translators allow access to a diverse workforce where previously there were language barriers to participate in vocational education and training.

Initial SMIC and workforce profiling supports the delivery of workforce skills programs to address anticipated skill shortages.



SMIC participants at training.

The following areas were identified as critical skill areas:

- rail
- demolition
- tunnelling
- heavy haulage
- general civil construction
- leadership skills across all industry disciplines.

Between February 2017 and April 2023, Sydney Metro has achieved successful delivery of SMIC to more than 7,000 workers, which is over 9 per cent of the total Sydney Metro Workforce.



**Over 21,000**  
Units of competency delivered



**Over 7,000**  
Workers have successfully completed SMIC



**63%**  
Held no previous qualifications



**9%**  
Had not completed Year 10



**5.5%**  
Required language, literacy or numeracy support



**21%**  
Of participants are from a CALD background



**2.9%**  
Of participants are Aboriginal peoples

The Australasian Railway Association Building Australian Rail Skills for the Future report published in 2022 provided key findings and recommendations to address industry skills shortages including the following key directions:

- Strategic workforce planning
- Leadership collaboration and partnership
- Attracting, recruiting, and retaining our workforce
- Skilling our workforce

BIS Oxford Economics forecasted that by 2027 there would be a 7.5 per cent workforce gap across rail construction, operation, and manufacturing. By 2028 forecasted that 20 per cent of today's workforce expecting to retire. The rail workforce is ageing at 2.6 times the national rate with an average age industry age of 45.7 years of age. The Australasian Railway Association Capability Study published in 2018, found evidence of a skills crisis and by 2023 anticipated a workforce gap of 70,000 skilled workers.

SMIC is a program to train new entrants so that they are prepared to work in constructions critical high-risk areas and have industry training which will support a skilled workforce for the future.

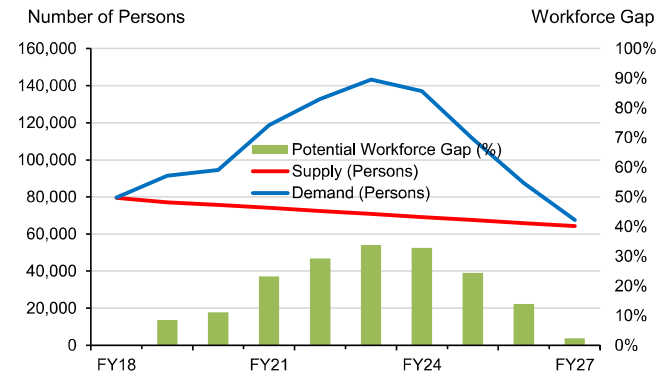
The Sydney Metro industry curriculum program works towards supporting industry, supporting safety practices in high-risk areas, and addressing skills shortages by working collaboratively in partnership with the contractors that deliver the works. Through a collaborative partnership with contractors once workforce planning requirements are completed, support is provided to identify SMIC training requirements to ensure training is provided in the critical skills areas before commencement on site.

SMIC is now being utilised to skill the workforce on the Sydney Metro City & Southwest, Sydney Metro West, and Sydney Metro –Western Sydney Airport lines. With the increase of new entrants into the workforce through various programs and initiatives as well as the incorporation of Sydney Metro industry curriculum we are committed to decreasing the workforce gap and skills shortage forecasted.

The rail industry directly employs more than 71,000 people across infrastructure delivery, operations, maintenance, and manufacturing and more than 93,000 people indirectly.

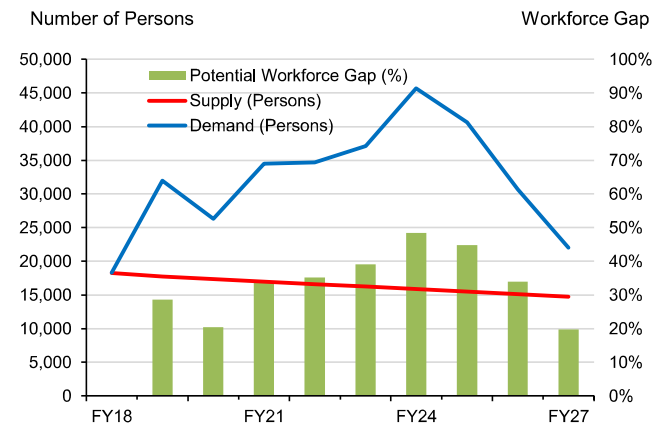
Source: The Australasian Railway Association-Building Australian Rail Skills for the Future report, published in 2022.

Figure 4.2: Australian Rail Workforce Gaps – Construction and Manufacturing

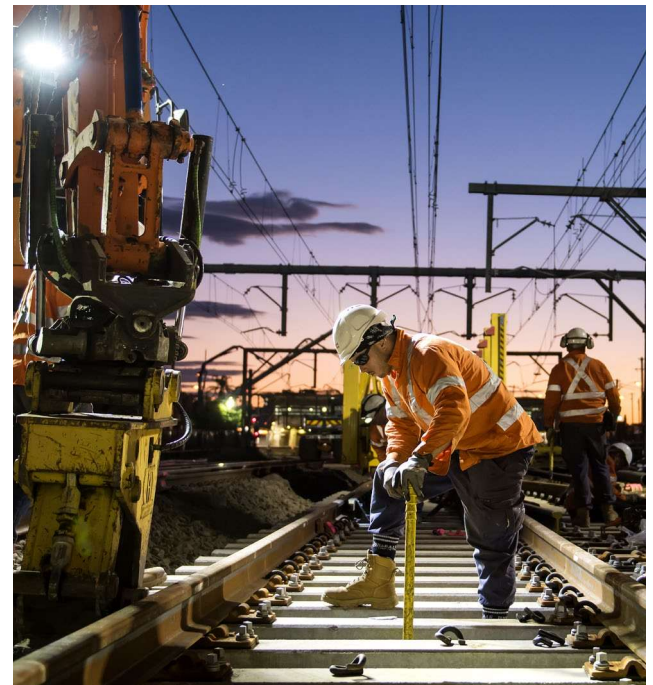


Source: BIS Oxford Economics

Figure 4.4: NSW Rail Workforce Gaps – Construction and Manufacturing



Source: BIS Oxford Economics



Platform piling excavation track laying.

### SMIC Participation

Roles in scope	Demolition worker	Civil construction worker	Pre-cast fabrication worker	Heavy haulage/ road vehicle driver	Rail protection officers
SMIC No.	568	2301	200	3281	231