



West

Workforce Development and Industry Participation Plan



The background features a large, stylized graphic element resembling a winding path or river. It is composed of multiple parallel lines in shades of orange, yellow, and black, with a central line of white dots. The path curves from the top left towards the bottom right. Surrounding this path are large, abstract shapes in teal, dark blue, and magenta, each filled with concentric, wavy lines that create a sense of movement and depth.

Acknowledgment of Country

Sydney Metro pays respect to Aboriginal peoples as the Traditional Owners and Custodians of the land on which we work and live, we acknowledge Elders past and present and recognise the continued connection to the land and water ways.

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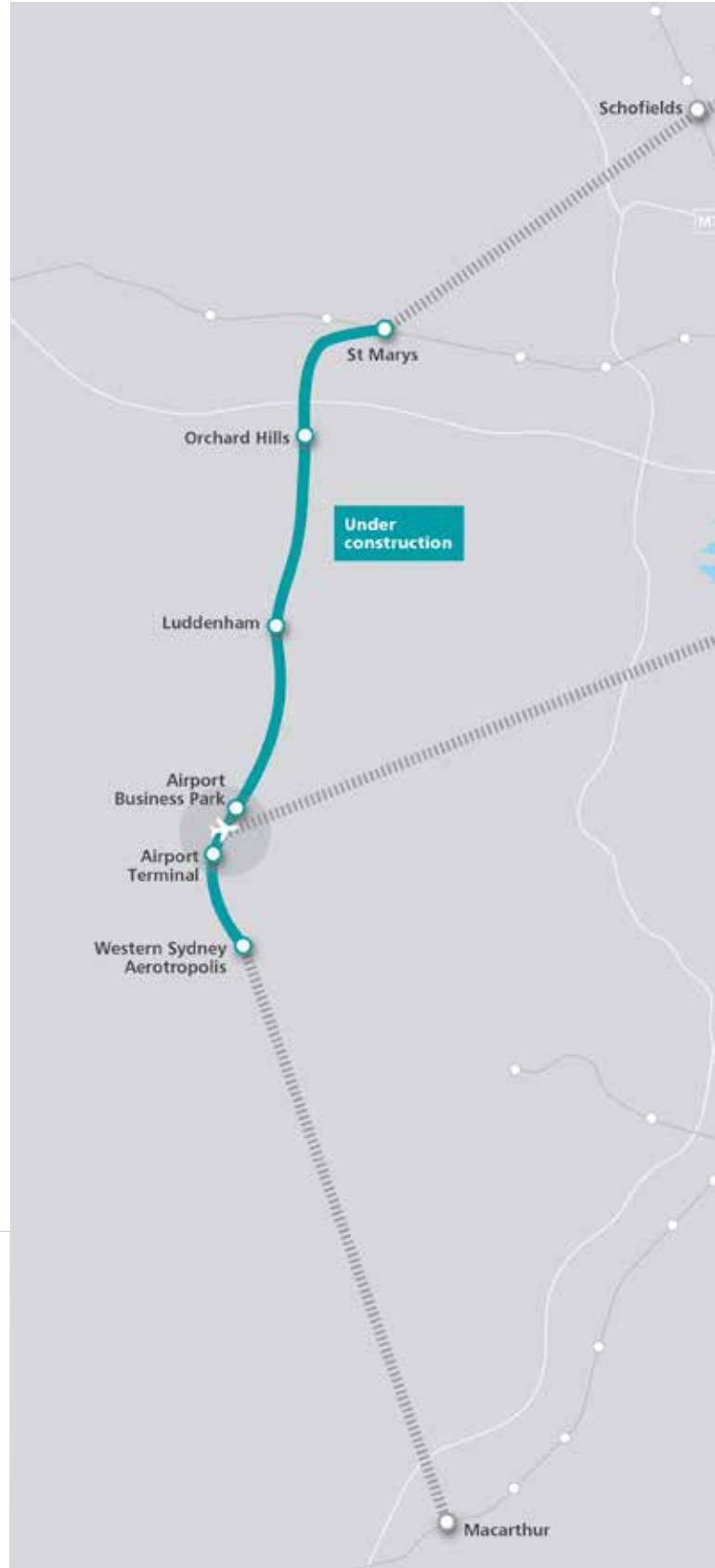
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1 Our purpose, priorities and objectives

Workforce Development and Industry Participation priorities and objectives

The Sydney Metro West project provides a significant opportunity to support jobs and skills for a more diverse and inclusive workforce and supply chain. Sydney Metro acknowledges the key to success is taking a collaborative approach to delivering these priority areas. Sydney Metro has a Workforce Development and Industry Participation Plan which sets out how these commitments will be delivered whilst addressing key state and federal policies and skills challenges.

This plan builds upon what Sydney Metro is already delivering through other projects such as Sydney Metro Northwest and Sydney Metro City & Southwest. Each program is designed in collaboration with industry and government as well as training, education and employment providers to ensure successful delivery and outcomes.



West

Construction commenced 2020



Eight stations



Connecting Greater Parramatta and the Sydney CBD



Western Sydney population, 2036

Figure 1.1: The current and proposed Sydney Metro lines



Sydney Metro West will transform Sydney for generations to come, doubling rail capacity between Parramatta and the Sydney CBDs, linking new communities to rail services and supporting employment growth and housing supply.

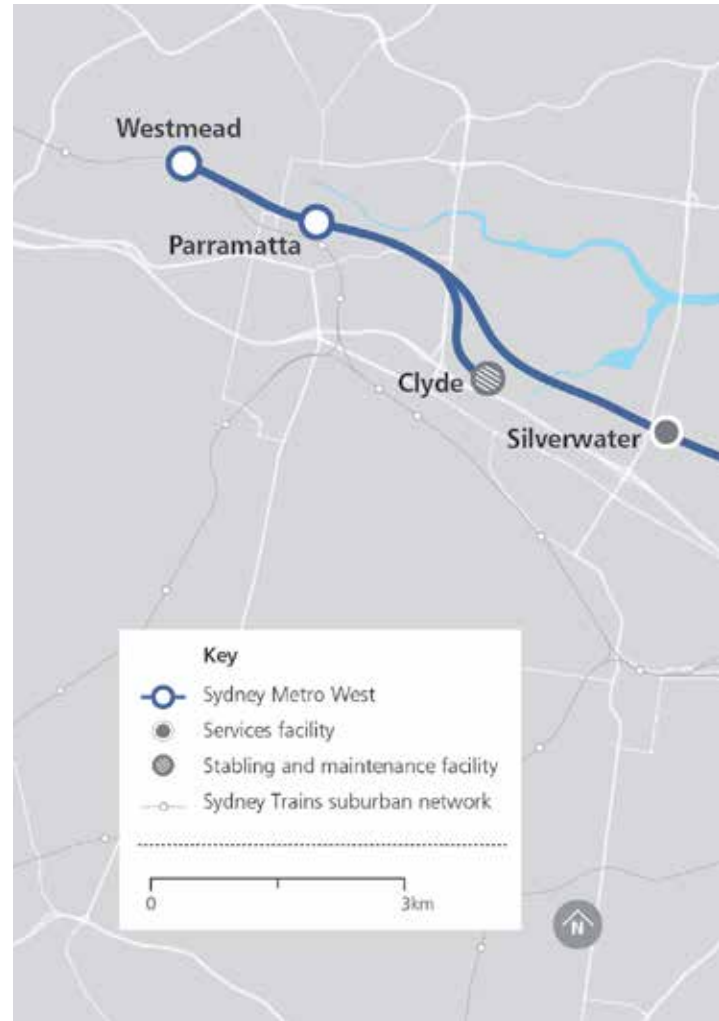


Figure 1.2: Sydney Metro West indicative alignment.

1.1 About Sydney Metro

Sydney Metro is Australia’s biggest public transport project. Services between Tallawong Station in Rouse Hill and Chatswood started in May 2019 on this new stand-alone metro railway system, which is revolutionising the way Sydney travels.

Sydney Metro’s program of work is shown in Figure 1.1 and includes:

- Sydney Metro City & Southwest
- Sydney Metro West
- Sydney Metro – Western Sydney Airport.

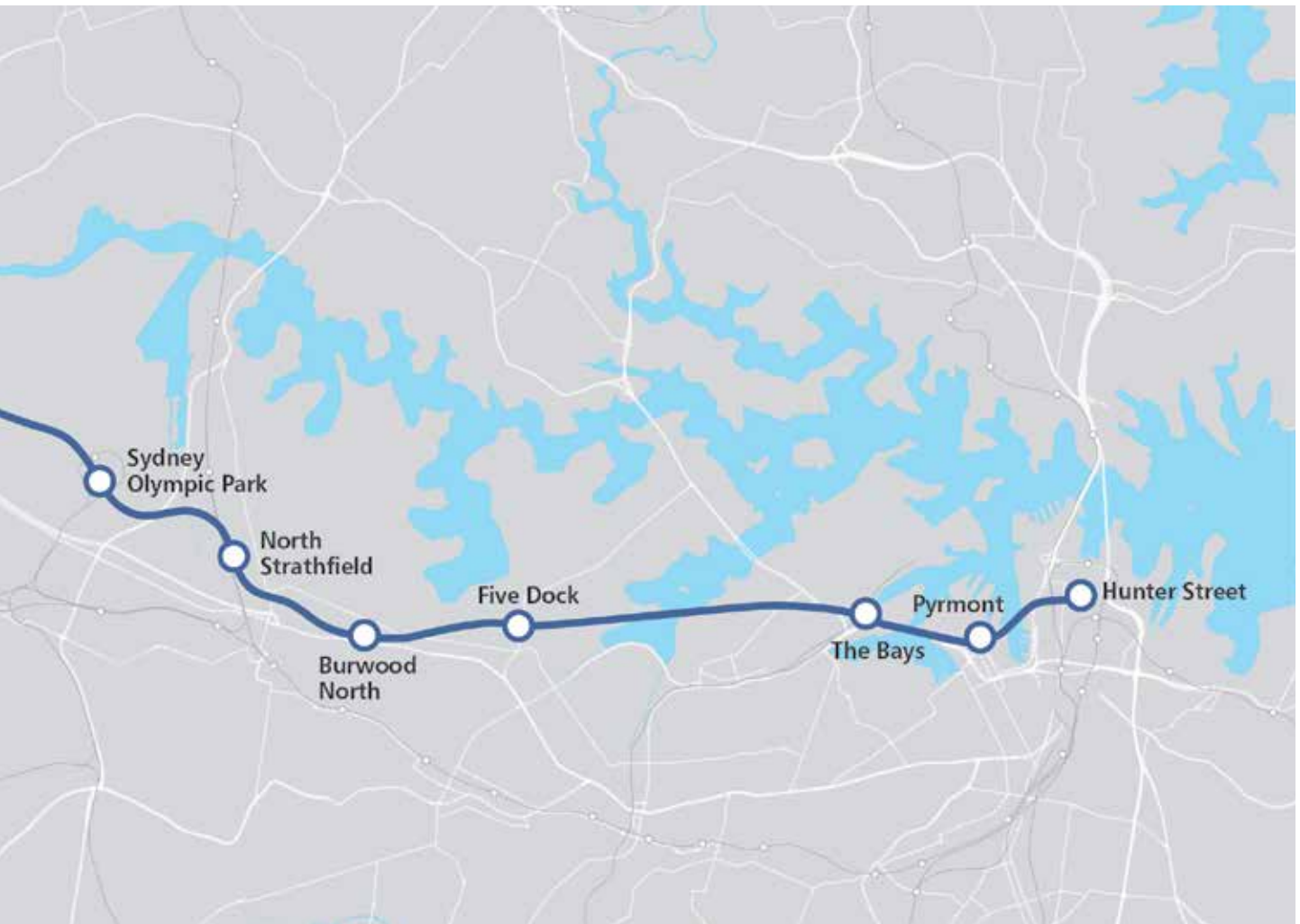
1.1.1 Sydney Metro West

Sydney Metro West is a new 24-kilometre metro line that will connect Greater Parramatta. Confirmed stations include Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and Sydney CBD. This infrastructure investment would double the rail capacity of the Parramatta to Sydney CBD corridor with a travel time target between the two centres of approximately 20 minutes.

1.2 What is Workforce Development and Industry Participation?

Sydney Metro requires the mobilisation of a highly-skilled workforce to ensure that the design, construct and operation of the railway is delivered safely, on time, and within budget.

Workforce Development and Industry Participation is a holistic concept that sets out how the project will build a pipeline of resources to design, construct and operate the railway, leave a lasting skills legacy for industry, inspire future talent whilst also addressing challenges relating to skills, employment, diversity and the supply chain. It covers a wide range of key activities, strategies and policies developing individuals, the organisation and industry in which they operate.



Sydney Metro school-based apprentices.

Workforce Development and Industry Participation Plan key priority areas are:



Industry and jobs participation

Increase opportunities for employment of local people, participation of small and medium enterprises including Recognised Aboriginal business and support industry to compete in home and global markets through active participation in client led programs.



Workforce skills development

Enable targeted and transferable skills development in areas with local and national skills shortages, support changing job roles and increased skill requirements, and embed transferable skills in the workforce.



Diversity and inclusion

Establish initiatives to increase diversity within the workforce and supply chain through collaborative partnerships.



Inspiring future talent and developing capacity

Engage young people via education and work experience through higher and vocational education and institutions to encourage interest in STEM and infrastructure related careers.



Collaboration

Sydney Metro will continue to be collaborative with organisations that have a shared interest in driving skills, diversity, jobs and industry capacity through infrastructure projects.

2 Strategic context

The NSW Government aims to be a ‘best in class’ client for the construction industry and its suppliers. In return, it expects industry to meet the highest standards of integrity, quality, innovation, diversity and inclusiveness¹.

The Workforce Development and Industry Participation Plan incorporates wider NSW Government priorities which commit to maximising opportunities including job outcomes, diversity, skills and industry participation. Sydney Metro believes greater outcomes can be achieved through collaboration and, with this in mind, will continue in partnering to support existing and future policies relevant to each phase of the project from design, construction, operation of the railway and precinct.

2.1 Relationship to other key Sydney Metro strategies

This plan aligns and contributes to the successful implementation of other Sydney Metro West strategies which have a mutual interest in driving jobs, skills, diversity and industry participation through the design, delivery and operation of the project:

- **Sydney Metro West Corridor Jobs Strategy:** outlines ways to realise the potential of the new metro rail link by unlocking job growth in key growth sectors. The corridor’s key precincts include the State’s largest health and education precinct at Westmead, the rapidly growing central CBD at Parramatta, the lifestyle precinct at Sydney Olympic Park, the emerging knowledge hub at The Bays and the global centre that is Sydney CBD.
- **Sydney Metro West Aboriginal Participation Plan:** details Sydney Metro’s approach to driving increased Aboriginal Participation. The Aboriginal Participation Plan takes the Workforce Development and Industry Participation priorities and applies a focused and targeted approach.
- **Sydney Metro West Sustainability Plan:** outlines key areas of focus and initiatives for the Sydney Metro West, including performance targets and outcomes which will be adopted across the project phases and how sustainability is integrated for Sydney Metro West. The plan shares similar priorities to drive workforce development and sustainable procurement.

¹ NSW Government action plan – A ten point commitment to the construction sector June 2018



Sydney Metro Pre-employment program participants.



Figure 2.1: Direct and indirect benefits of Workforce Development and Industry Participation.

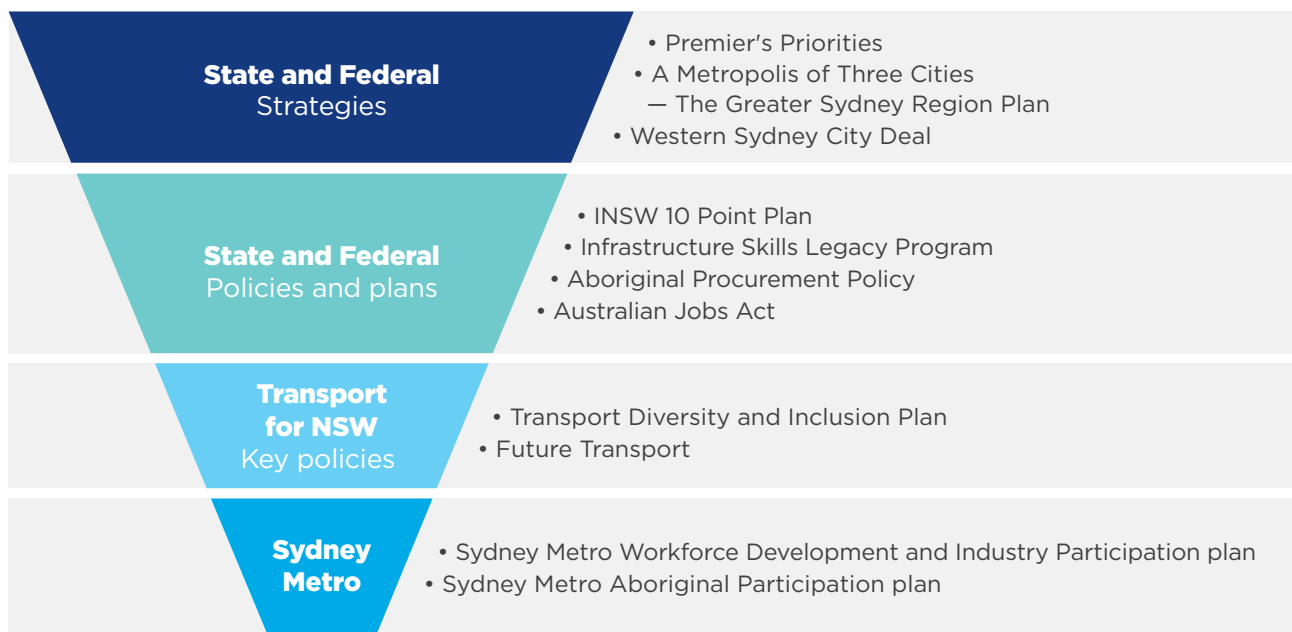


Figure 2.2: Key Workforce Development and Industry Participation policies.

2.2 Government plans, priorities and policies

The following section provides an outline of the key state and federal policies that impact the Workforce Development and Industry Participation Plan. The plan aligns and contributes to state and federal priorities, policies and associated procurement directives. Sydney Metro delivery partners will be expected to be across the key objectives detailed in these policies and plans. For further details please refer to Appendix A.

3 Collaboration and industry partnerships

One of the core values of Sydney Metro is collaboration. To achieve this plan's vision, it is critical that Sydney Metro partners with government, industry, professional association and community partners who have a similar commitment to job opportunities, skills and increased diversity within the workforce and supply chain.

3.1 Wider infrastructure collaboration

Given the current level of infrastructure investment in transport and capital construction projects across Australia, greater collaboration is necessary to avoid skills and labour shortages. The potential skills shortages Sydney Metro faces also impact other infrastructure projects of the NSW Government with its substantial investment in new roads, hospitals, schools and transport projects. Sydney Metro will partner with these organisations through mechanisms like the Skills and Employment Advisory Group (SEAG) to share intelligence and collaborate on initiatives.

In addition Sydney Metro is an active participant in the NSW Government Construction Leadership Group (CLG), led by Infrastructure NSW and subcommittees. This group has developed the NSW Government action plan: a ten point commitment to the construction sector. Part of the focus of this action plan looks for cross infrastructure collaboration to develop skills, capability, capacity and greater diversity in the construction workforce and its supply chain.

The Sydney Metro team have collaborated with other state and federal government agencies such as the NSW Department of Planning, Industry and Environment and the Australian Department of Education, Skills and Employment to ensure an effective strategy is developed with resources and expertise to support the delivery of these initiatives. The Sydney Metro team will continue its collaborative activities with Sydney Metro West key stakeholders to ensure a coordinated approach.



Sydney Metro school based apprentice.

3.2 Sydney Metro Corporate Plan

The program of works being delivered by Sydney Metro represents an unprecedented opportunity to deliver broad social and economic benefits to our State, for generations to come. In developing investment business cases, we strive to look for value-for-money opportunities to concurrently deliver against the objectives of relevant Commonwealth, State and Local plans and priorities².

In 2019 Sydney Metro presented its inaugural Corporate Plan following becoming a standalone agency. The Plan outlines our strategic objectives with one of these key priorities being workforce capability. As an agency Sydney Metro is committed to working alongside our partners to ensure we have a skilled and diverse workforce to deliver existing and future Metro projects. The Sydney Metro Workforce Development and Industry Participation Plan is a key part of ensuring we are supporting this strategic priority.

In addition we are committed to contributing to the achievement of NSW Government ten point commitment to the construction industry and continuing to work with government and industry to ensure our plans are fit for purpose.

3.3 Sydney Metro Skills and Employment Advisory Group (SEAG)

A strategic stakeholder forum SEAG was established in early 2014. It brings together NSW and Australian governments, industry bodies, employers and training organisations. The objective of this collaborative group is to inform, advise and support the delivery of the Sydney Metro Workforce Development and Industry Participation strategies and associated programs. SEAG members have a mutual interest in the delivery of Sydney Metro objectives and are able to provide expertise and funding to support delivery.

3.4 Education and skills hubs

Sydney Metro recognises the need to investigate potential partnerships and opportunities to support the delivery of the Workforce Development and Industry Participation outcomes. As a linear project, Sydney Metro and its delivery partners will need to work with a range of training providers to support the delivery of skills development training. Industry relevant trainers are essential however there are shortages of skilled trainers, especially those with the necessary, contemporary industry experience. Sydney Metro will work with our delivery partners and training authorities to develop strategies which support skilled subject matter experts to increase the capacity of the vocational training sector.

There are a large number of established vocational education and training (VET) and higher education (HE) providers at both ends of the line. In the east, the University of Sydney and the University of New South Wales, both of which also have a presence in Western Sydney. Other HE providers in the west include Western Sydney University. For VET, the public provider TAFE NSW has campuses such as Ultimo and Nirimba as well as Randwick in Sydney's Eastern.

Around Parramatta at the western end of the line the Western Sydney University (WSU) has extensive facilities and is expanding rapidly. Nearby, plans for a new \$280 million Engineering Innovation Hub are under development³. The project is a joint venture development with the Western Sydney University (WSU) and UNSW Sydney in partnership with Charter Hall. Other universities such as the University of New England have smaller presences in central Parramatta. Whilst not in Parramatta itself, TAFE NSW has extensive education and skills facilities at nearby Granville as well as its slightly more distant campuses at Nirimba (Quakers Hill), Miller, Ingleburn and Blacktown. There are a number of private providers in Parramatta, again largely offering business and care programs.

² Sydney Metro Corporate Plan 2019.

³ Boucher, Dinah Lewis, Parramatta's new engineering innovation hub under way, Urban Developer 27 May 2019. <https://theurbandeveloper.com/articles/parramattas-new-engineering-innovation-hub-underway> Viewed on 12 June 2019.

4 Priorities and objectives

The Workforce Development and Industry Participation priorities and objectives reflect the wider industry and government drivers as described previously in sections 1 and 2. The following sections provide further detail of the context to each priority and planned approach to support for Sydney Metro West.

4.1 Priority 1: Industry and jobs participation

Objectives

- Provide employment opportunities across Sydney with a targeted approach for Western Sydney
- Increase opportunities for small medium enterprises (SMEs) including Recognised Aboriginal Business to access Sydney Metro supply chain
- Support industry to compete in home and global markets.

4.1.1 Current issues and context

Increasing small to medium enterprise engagement

Sydney Metro West is an opportunity to enable supply chain diversity through an increase of SMEs including Recognised Aboriginal business and social enterprise participation.

According to the Australian Small Business and Family Enterprise Ombudsman, small businesses dominate employment in the agriculture, fishing, real estate, construction, professional services and accommodation and food services industries. In Western Sydney only three per cent of businesses employ 20 or more people; just over 60 per cent of businesses are sole traders with a self-employed owner, whilst 28.2 of businesses are micro businesses with one to four employees⁴.

Businesses are reporting worsening labour shortages while pressures in the procurement of building materials and equipment is widespread. Supply constraints remain at elevated levels with a range of large-scale projects continuing to draw heavily on labour and capital requirements⁵. Sourcing sub-contractors also remained a key concern in the six months to September 2018, with 57.8 per cent also citing 'major' or 'moderate' difficulty, although this was down from 66.7 per cent in the previous six months⁶. The challenge of pressures in the procurement space could be addressed by supporting the capacity of small businesses to participate in the supply chain⁷. This could also be supported through breaking down packages further to allow for a wider scope of businesses to respond.

By working together with wider NSW Government, Sydney Metro in conjunction with our delivery partners has an opportunity to help realise the ten point commitment to the construction sector and encourage an increase in the "supply side" capacity of the sector to meet future demand⁸.

4 William Buck and associates, Making Western Sydney Greater Edition 5 - H1 2017. https://www.williamsbuck.com/wp-content/uploads/2018/09/WB_-_Making-Western-Sydney-Greater-05_-_Digital-v1.pdf Viewed on 12 June 2019.

5 Ai Group Construction Outlook Survey - November 2018.

6 Ai Group Construction Outlook Survey - July 2018.

7 Ai Group Construction Outlook Survey - November 2018.

8 NSW Government Action Plan - A ten point commitment to the construction sector June 2018.



An artist's impression of the Parramatta metro station.

Jobs participation

Sydney Metro West provides an opportunity for employment and developing a sustainable and skilled workforce to build and operate the railway whilst building a pipeline of workers for wider industry. The Labor Force Participation rate along the alignment varies from an above national average of 70 per cent in the rapidly developing Bays precinct to a below national average rate of 57 per cent near Burwood, though in most areas it is a slightly below the national average at 62 per cent. Similarly the statistics for disengaged youth vary from a high 22 per cent in the Sydney CBD to 11 per cent in Burwood (See Appendix Community Profile). Benefits of having a targeted approach to supporting wider employment include:

- Increased availability of skills and capacity, supporting project delivery within a value for money approach.
- Socio-economic benefits for local communities and individuals.
- Providing better employment options for local under-represented groups including job seekers, Aboriginal people, young people and women.
- Management of risks around providing local jobs as part of the project.
- Supports the Greater Sydney Commission's vision of jobs growth in Western Sydney.
- Supports related jobs and industry participation policies such as the Aboriginal Procurement Policy.

4.1.2 Implementation plan

These opportunities and issues can be addressed through contractual mechanisms and innovative initiatives by our delivery partners that encourage capacity and capability building. Table 1 provides an indication of the implementation plan needed to support the industry participation objectives.

Table 1: Industry and jobs participation initiatives

Objective	Measures of success	Status
Provide employment opportunities across Sydney with a targeted approach for Western Sydney	<ul style="list-style-type: none"> Mandatory measurable employment outcomes Establish a target for a percentage of the workforce from Greater Western Sydney 	<ul style="list-style-type: none"> Outcome established and in delivery Target established and in delivery
	<ul style="list-style-type: none"> Pre-employment programs supporting local people into employment 	<ul style="list-style-type: none"> Outcome established and in delivery
	<ul style="list-style-type: none"> Sydney Metro Jobs Brokerage Program 	<ul style="list-style-type: none"> Committed to and in development
	<ul style="list-style-type: none"> Tenderers to commit to initiatives supporting employment opportunities 	<ul style="list-style-type: none"> Committed to and in development
Support industry to compete in home and global markets	<ul style="list-style-type: none"> Sydney Metro delivery partners participate in client led programs which builds their overall capacity and capability of responding to government priorities 	<ul style="list-style-type: none"> Outcome established and in delivery
Increase opportunities for small medium enterprises including Recognised Aboriginal Business to access Sydney Metro supply chain	<ul style="list-style-type: none"> Minimum number of Recognised Aboriginal businesses in the supply chain Minimum number of small, medium enterprises and social enterprises in the supply chain Tenderers commit to innovative initiatives supporting small business capacity Sydney Metro Aboriginal Business Forum 	<ul style="list-style-type: none"> Target established and in delivery Target established and in delivery Outcome established and in delivery Outcome established and in delivery



Sydney Metro Pre-employment program participant.

Case study

Sydney Metro Aboriginal Business Forums



Aboriginal Business Forum.

In 2016, the Sydney Metro established the Sydney Metro Aboriginal Business Forums as a mechanism to support its commitment to increase Recognised Aboriginal Businesses in the wider supply chain. Aboriginal business networking forums were held in late 2017 and again in April 2018.

These forums allow for Aboriginal businesses to keep abreast of upcoming packages of work across the project and network with Sydney Metro delivery partners and the wider supply chain. The forums were attended by more than 100 Aboriginal businesses, tier one and tier two Sydney Metro contractors, and representatives from government agencies. Achievements to date include:

- Three Aboriginal Business forums delivered to date following Sydney Metro Industry Briefings.
- Over 150 Recognised Aboriginal businesses participated in the forum.
- Increased engagement and new relationships built between industry and recognised Aboriginal businesses.
- Increased awareness of the types of requirements needed to bid for packages of work.
- Feedback and support to build the capacity of businesses to respond to future packages.
- Several Aboriginal businesses have been successful in being awarded packages of work and/or supply good and services to the wider Sydney Metro supply chain and operations.
- As of May 2020, 49 Recognised Aboriginal businesses have worked on the Sydney Metro City & Southwest (CSW) project.
- Several Aboriginal businesses are now approved suppliers for our delivery partners.
- Sydney Metro delivery partners have built relationships with Aboriginal businesses to support capacity building.
- As of May 2020, 11 per cent of Small Medium Enterprises (SMEs) in our CSW supply chain are Aboriginal businesses.
- As of May 2020, 2.5 per cent Aboriginal participation.

4.2 Priority 2: Workforce skills development

Objectives

- Address immediate and future skills shortages locally and nationally through targeted and transferable skills development
- Respond to changing job roles and increased skill requirements
- Embed long lasting transferable skills including health and safety culture, leadership, team work and promoting continuous improvement.

4.2.1 Current skills challenges

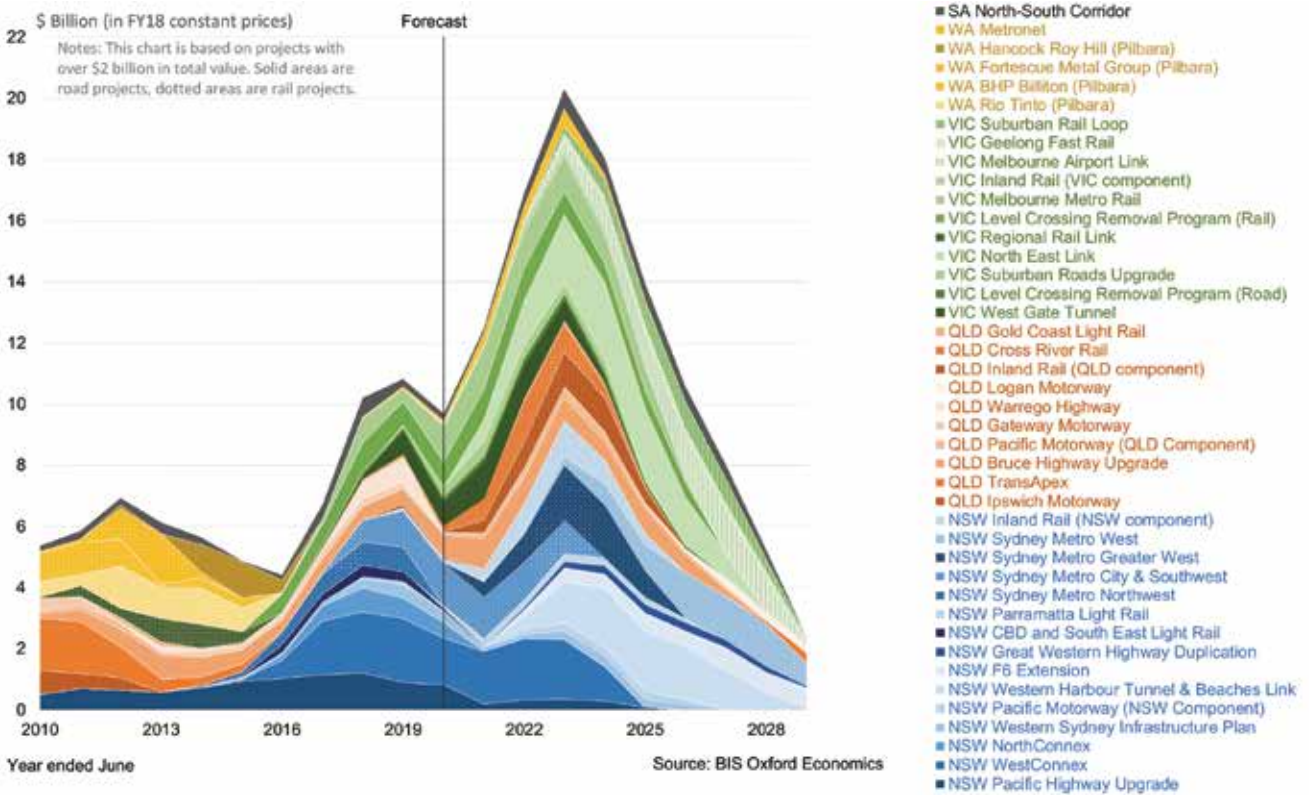
Concurrent infrastructure projects in delivery

A skills capability study by BIS Oxford Economics for the Australasian Railway Association (ARA) made it clear that, “The overwhelming evidence is that there is a fast developing skills crisis in the Australasian rail industry”⁹. This is a result of massive investment and growth as well as an ageing current workforce and the impacts of new digital technologies. This crisis is national and applies to operations and maintenance as well as construction and manufacturing staff.

An idea of the scale of the rail investment pipeline can be seen in this graphic from the report¹⁰:

The industry in Australia is already experiencing skills shortages as investment grows in new rail infrastructure and rolling stock and operations expand, with the number of train drivers, controllers, track workers, signalling engineers and technicians, maintenance workers, electrical technicians and tunnellers not keeping up with growing demand¹¹.

Figure 3.1 Sydney Metro BIS Skills and Jobs Forecast report.



⁹ Australasian Railway Association, Skills Capability Study: skills crisis: a call to action. BIS Oxford Economics for ARA, 2018, p.2.

¹⁰ Ibid, p.13.

¹¹ Australian Industry Standards Forecast 2019.

Digital technology is also causing an overhaul of operations in the rail industry. Amongst the various new technologies, automation and driverless systems are expected to have the greatest impact on the industry and the required future skills. Implementing driverless technology also requires improvements to signalling and communications infrastructure to facilitate the transition¹².

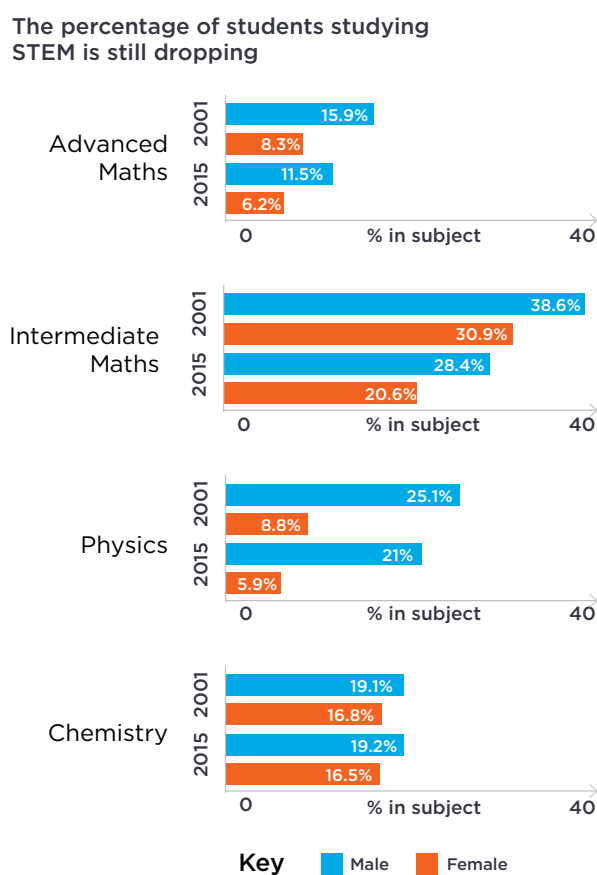
According to the Australian Industry Standards Forecast 2019, some of the priority skills needed in the next three years include safety, signalling technicians and engineers. As a result there will be an increased demand for a pipeline of workers to support the integration of these systems in the preparation of operating a driverless railway. In addition Australian Industry Standards has forecasted that some of the priority skills needed in the next three years include safety, signalling technicians and engineers.

Sydney Metro West needs to work with industry to ensure strategies are in place to develop a pipeline of workers in order to deliver future projects safely and on time. The timeline to support new entrants into some of these occupations can take years as many are required to take on apprenticeships and other higher qualifications. Therefore it is vital that government and industry work together now to develop skills in these technical areas.

The number of infrastructure projects in the pipeline will also increase the demand for Science, Technology, Engineering and Maths (STEM) skills and engineering disciplines. According to a report by Engineers Australia 'If Australia is to become an innovative nation, our engineering capability must expand. This should be done by reducing reliance on skilled migration and producing a greater number of home-grown engineers.' As demonstrated in the Figure 3.2, the report also indicated that fewer students were taking maths a high school. Engineering disciplines are critical in the planning, design and construct phases of the project. Tenderers will be expected to have strategies in place to support skills development in critical skill shortage areas.

Department of Education, Skills and Employment¹³ and industry¹⁴ bodies¹⁵ such as the Australian Railway Association¹⁶ regularly monitor skills shortages. These are dynamic and can change with the state of the economy. The very high levels of infrastructure investment in NSW and Australia more broadly are putting great pressure on the types of skills needed by Sydney Metro and our delivery partners. Currently identified shortages are identified in Table 2.

Figure 3.2: Engineers Australia - Make Things Happen Summary report



12 Australian Industry Standards Forecast 2019.

13 Australian Government Department of Jobs and Small Business, Skill Shortage List New South Wales, Australian Government, Canberra, 2018.

14 PwC Skills for Australia, Mining, Drilling and Civil Infrastructure Industry Skills Forecast and Proposed Schedule of Work April 2017, Sydney, PwC, 2017. Viewed 13 August 2018. Available at: <https://s3-ap-southeast-2.amazonaws.com/pwcau.prod.s4aproduct.assets/wp-content/uploads/20170718142515/20170428-MDCI-Industry-Skills-Forecast-and-Proposed-Schedule-of-Work.pdf> and Artibus Innovation, Construction, Plumbing and Services IRC Skills Forecast and Proposed Schedule of Work, Hobart, Artibus Innovation, 2018.

15 Australian Industry Standards, Rail IRC Skills Forecast, Melbourne, AIS, 2017, p. 27 and TAFE NSW Western Sydney and Western Sydney Business Connection, Skills barometer 2015 - Future Skills Needs for Greater Western Sydney, Kingswood, TAFE Western Sydney, 2015.

16 Australasian Railway Association, Skills Capability Study: skills crisis: a call to action. BIS Oxford Economics for ARA, 2018, p44.

Table 2: Identified technical skills shortages

Job level	Design and construction phase	Operations phase
Professional	<ul style="list-style-type: none"> • Civil engineer • Surveyor • Systems engineer • Cloud based signalling systems engineer 	<ul style="list-style-type: none"> • Occupational health and safety professionals • Trainer and assessor – including simulator and virtual reality (VR) trainers • Cyber security • Risk and assurance professionals • Big data analysts
Technician	<ul style="list-style-type: none"> • Electrician 	<ul style="list-style-type: none"> • Signalling technician • Train controller • Track maintenance technicians • Remote condition monitoring staff • Customer service staff
Trade	<ul style="list-style-type: none"> • Motor mechanic • Sheet metal trades • Fitter and machinist • Carpenters and joiner • Fibrous plaster • Plumber • Truck driver • Tunnellers 	<ul style="list-style-type: none"> • Mechanical • Fitter and machinist • Truck driver • Maintenance trades

Disruption and change – globalisation, digitisation and population growth

Sydney Metro in terms of its Workforce Development and Industry Participation Plan needs to accommodate the disruption and change being brought about through globalisation and the rapid advance of new digital technologies such as artificial intelligence (AI).

The Australasian Railway Association study on skills capability by BiS Oxford Economics also highlighted these issues. The report concludes, *“a key driving force for future new skills in the rail industry is technological innovation, which can deliver more optimised asset management and operations, offer greater energy efficiency, and can deliver stronger safety outcomes. New technologies, including automation, digitisation and ‘big data’, remote operations and augmented or virtual reality systems have the capacity to change, significantly, the type of skills required by the rail industry. New technologies are likely to constrain demand for ‘hands on’, labour intensive operations and maintenance activities in rail, with new systems favouring less direct intervention through enhanced monitoring, diagnostics and communications which will lead to an uplift in preventative rather than reactive measures, and a focus on digital rather than physical rail infrastructure and learning techniques”*¹⁷.

As technology advances there will be an increased focus on data and digital. Therefore digital literacy, technical and soft skills will be critical skills in the near future.

4.2.2 Implementation plan

Sydney Metro, with industry and government has a collective responsibility to work together to ensure there are sufficient transferable skills available to safely deliver existing and future infrastructure projects.

Sydney Metro City & Southwest has a proud record in creating best practice educational and training programs at the operative, trades and technician levels for its future and existing workforces. Sydney Metro West will continue and expand existing client led programs which support skills development for the project and explore new partnerships with higher education institutions.

¹⁷ Australasian Railway Association, Skills Capability Study: skills crisis: a call to action. BIS Oxford Economics for ARA, 2018, p 44.

Table 3: Workforce skills development initiatives

Objective	Measures of success	Status
Address immediate and future skills shortages locally and nationally through targeted and transferable skills development	<ul style="list-style-type: none"> Sydney Metro Pre-employment Programs build into educational pathways for apprentices and trainees – building job readiness skills for new entrants 	<ul style="list-style-type: none"> Outcome established and in delivery
	<ul style="list-style-type: none"> 20 per cent of the workforce to undertake accredited skills development training As part of the above, focused skills targets to support existing and emerging skill shortages 	<ul style="list-style-type: none"> Target established and in delivery
	<ul style="list-style-type: none"> Tenderers commit to innovative initiatives supporting new and emerging technologies 	<ul style="list-style-type: none"> Outcome established and in delivery
	<ul style="list-style-type: none"> Critical skill shortages addressed 	<ul style="list-style-type: none"> Outcome established and in delivery
Respond to changing job roles and increased, higher level skill requirements	<ul style="list-style-type: none"> Delivery partners working with VET and Higher Education providers to upskill and support new entrants in advanced technical skill areas 	<ul style="list-style-type: none"> Committed to and in development
	<ul style="list-style-type: none"> Minimum number of graduates and work experience placements for design only packages to support new skills in technical areas 	<ul style="list-style-type: none"> Committed to and in delivery
	<ul style="list-style-type: none"> Tenderers commit to innovative initiatives that support skill shortage areas 	<ul style="list-style-type: none"> Committed to and in development
	<ul style="list-style-type: none"> New job roles during the operations phase supporting new skills in Australia 	<ul style="list-style-type: none"> Committed to and in development
Embed long lasting transferable skills including health and safety culture, leadership, team work and promoting continuous improvement	<ul style="list-style-type: none"> Revised Sydney Metro Industry Curriculum (SMIC) Program – pre-commencement training Builds transferable skills Increased safety awareness amongst new entrants 	<ul style="list-style-type: none"> Outcome established and in delivery



Sydney Metro Pre-employment program participant.

Case study

Sydney Metro Industry Curriculum



Sydney Metro Pre-employment participants.

The Sydney Metro Industry Curriculum (SMIC) commenced in 2017. The program aims to increase workforce capacity and capability by developing transferable skills and competency across industry. The program is mandatory pre-commencement training for the following areas which were identified as critical skill areas:

- Demolition
- Tunnelling
- Heavy haulage
- Civil construction
- Rail
- Leadership

The SMIC program ensures minimum competency requirements must be met prior to commencing work on site, or within a specified timeframe. Competency is evidenced through nationally recognised units. This supports transferability of skills and the workers' ability to pursue further learning pathways. 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. Currently, 55 per cent of the workforce who have completed the SMIC training declared that they had not held any previous qualifications. Key outcomes to date include:

- Over 12,000 units of competence delivered through SMIC
- Over 3,400 participants have successfully completed the program. Of those participants:
 - 55 per cent held no prior qualifications
 - 11 per cent required literacy and numeracy support
 - 29 per cent required English language support
 - 7 per cent had not completed year 10.

4.3 Priority 3: Diversity and inclusion

Objectives

- Increase participation of Culturally and Linguistically Diverse (CALD) People
- Increase participation of Aboriginal and Torres Strait Islander Peoples
- Increase female representation in non-traditional trades and leadership
- Target long term unemployed and underemployed
- Target Refugees
- Target Returned Servicemen.

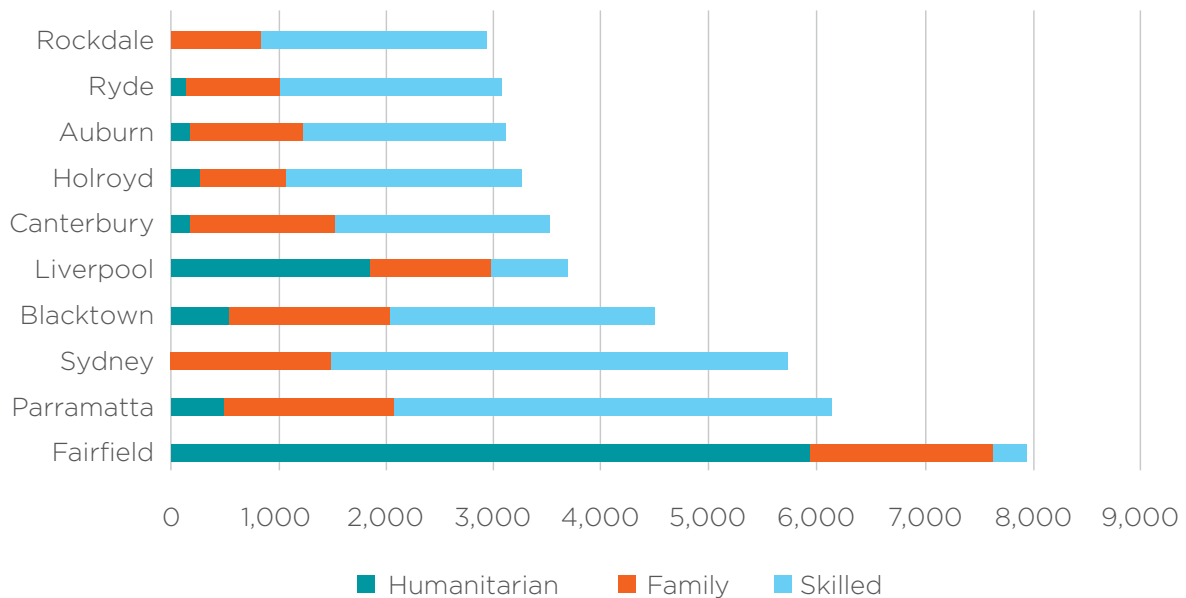
4.3.1 Context

The groups of people identified here suffer from below average outcomes in the labour market. Sydney Metro’s education and training strategies will help alleviate these disadvantages and increase the pool of skilled labour to help build this and other major projects.

A number of research reports have found that migration (and the cultural diversity that it engenders over time) has boosted the economic performance of Australia and, in turn, NSW¹⁸. Sydney Metro West also aims to support a diverse and inclusive workforce to maximise these economic, social and cultural benefits. Sydney Metro recognised the positive impact that the projects could make by proactively supporting local employment along the alignment and under-represented groups with our delivery partners. The targeted diversity groups were identified based on a reflection of the socio-economic groups along the alignment and wider government priorities.

Figure 4.1: Of 10 local government areas, Parramatta had the second largest number of migrants in 2016-17.

Top 10 NSW settlement locations



18 Nieuwenhuysen, J., Storer, D. The economic advantages of cultural diversity in Australia, Prepared for NSW Government and Community Relations Commission, Sydney, 2011. And Syrett, S., Sepulveda, L., 'Realising the diversity dividend: population diversity and urban economic development', Environment and Planning 2011 A, 43(2).



Sydney Metro Pre-employment program participant.

Aboriginal participation

The Sydney Metro West project can provide significant opportunity and outcomes for Aboriginal businesses and communities. Sydney Metro West aims to develop a diverse and inclusive workforce and supply chain by increasing Aboriginal participation and enhancing skills development through targeted programs that develop both specific technical and generic transferable skills.

Having a targeted and focused approach to Aboriginal participation will result in a lasting legacy of more skills for individuals and greater capability and capacity for Aboriginal peoples and Aboriginal businesses to respond to these opportunities. For further information please refer to the Sydney Metro West Aboriginal Participation Plan, which supports wider government policies and the Initial Workforce Development and Industry Participation Plan.

Culturally and Linguistically Diverse (CALD)

In the area covered by the Western Sydney Regional Organisation of Councils (WSROC) 45 per cent of people speak a language other than English at home, with the most common languages spoken being Arabic, Vietnamese, Mandarin, Cantonese, Hindi and Filipino/Tagalog. CALD is a collective term but individuals within the CALD classification have very varied backgrounds, needs and priorities. Given the size of the population in Greater Western Sydney, Sydney Metro encourages our contractors to ensure a culturally inclusive workplace and identify opportunities to support CALD people into the workforce.

Refugees and asylum seekers

There are over 3,500 refugees and asylum seekers¹⁹ who live in the Sydney Metro West potential catchment area. The Multicultural NSW Community Relations Report 2016-2017 reports that the vast majority of humanitarian settlements are in Fairfield with only Liverpool having other settlements of some significance²⁰.

¹⁹ Refugee Council of Australia (website) Statistics on people seeking asylum in the community, RCA, 2018. Viewed on 20 June 2018. Available at: <https://www.refugeecouncil.org.au/getfacts/statistics/aust/asylum-community/>

²⁰ Multicultural NSW Community Relations Report 2016-2017, Parramatta, Multicultural NSW, p7 Viewed on 29 January 2019. Available at: <https://www.parliament.nsw.gov.au/lc/papers/DBAssets/tabledpaper/WebAttachments/73019/Multicultural%20NSW%20Community%20Relations%20Report%202016-17.pdf>

The NSW Government currently has a Refugee Employment Support Program (RESP) which is a four-year \$22 million initiative by the NSW Government, managed by the NSW Department of Industry. RESP addresses the challenges that are experienced by refugees and asylum seekers in finding long term skilled employment opportunities. The RESP will assist up to 6,000 refugees and 1,000 asylum seekers across Western Sydney and Illawarra, the areas where a majority of the refugees settle in NSW²¹. Sydney Metro will work with wider government and encourage our contracting partners to identify employment pathways on the project.

Unemployed and underemployed young people

The national unemployment rate for young people is double the adult rate. As the Brotherhood of St Laurence²² has pointed out youth unemployment has never really recovered from the Global Financial Crisis of 2008²³. The Brotherhood also point out over 20 per cent of youth unemployment is long term with these young people without a job for over a year. For teenagers, there are considerable variations in 15-19 year old youth unemployment across Western Sydney. It is highest in Tregear and Emerton (Western Sydney) at over 30 per cent, a figure also reached in South Western Sydney at Fairfield. It is lower nearer to Central Sydney with rates of around 23 per cent for Auburn and Lidcombe²⁴. The Brotherhood of St Laurence is an Australian not-for-profit community organisation that works to prevent and alleviate poverty across Australia. It undertakes research as well as provides services to disadvantaged groups.

Underemployment, where young people want to work more hours, is often higher than unemployment. Utilising data from the Household Income and Labour Dynamics in Australia (HILDA) Survey the Brotherhood found that 18 per cent of young people were underemployed in February 2017. They surmised that, "Young Australians face a much more brutish job scenario than their parents or grandparents ever did".

Non-traditional employment for women

Traditional male dominated trades in the construction industries pay considerably more than traditional female occupations. In the construction industry only 12 per cent of the total employment is female²⁵, a low rate which is common in the rail industry. Males make up nearly 90 per cent of trade apprenticeships commencements in NSW. Disappointingly, from 2014 to 2018, though male trade apprentices commencements marginally increased from 19,820 to 20,650, female trade apprentices commencements actually declined over the same period from 2930 to 2510²⁶.

To support this imbalance, the INSW ten point commitment to construction requires all major construction projects to have targets related to doubling the number of women in trade related work. Sydney Metro is currently a demonstration pilot as part of the NSW Infrastructure Skills Legacy program and as part of its approach will have mechanism in place to support an increase in women in non-traditional occupations.

Returned service men and women

From around 1990 nearly 300,000 men and women have served in the Australian Defence Force. Many participated in war zones such as Iraq and Afghanistan. Others participated in peace keeping missions in areas as diverse as East Timor, Bougainvillea, Cambodia, the Solomon Islands, Somalia and Rwanda. As a result some of these service personnel experienced life-changing physical injuries whilst others were impacted mentally. Given the number of military bases in Western Sydney, many of these veterans still live in the area.

While serving, these men and women receive excellent technical training and have transferable skills and life experiences. Sydney Metro encourages its delivery partners to work with veteran's organisations to identify suitable employment opportunities on the project.

4.3.2 Implementation plan

Since 2013, Sydney Metro has worked closely with industry and government to deliver programs and embed targets to increase diversity and inclusion on Sydney Metro projects. Sydney Metro will continue to set targets and deliver these programs for Sydney Metro West and work with other infrastructure projects in the area to ensure a coordinated approach to employment is developed.

21 https://www.training.nsw.gov.au/programs_services/funded_other/resp/index.html

22 Brotherhood of St Laurence, Reality bites, Australia youth unemployment in a millennial era, Fitzroy, BSL, 2017.

23 ABS 2017, Labour force, Australia, Cat. no. 6291.0.55.001, data cube UM3, trend estimates derived using a 12-month average of the monthly data.

24 O'Neill, P, 2017, Youth Unemployment in Western Sydney, Centre for Western Sydney. P34. Viewed on 23 January 2019 https://www.westernsydney.edu.au/__data/assets/pdf_file/0010/1269064/YA_unemployment_fnl_V6.1.pdf.

25 Australian Government Workplace Gender Equality Agency. Gender composition of the workplace: by industry, Canberra, Australian Government, 2016

26 NCVET, 2018, Apprentices and trainees 2018: June quarter - data slicer. Viewed on 4 February 2019. https://www.westernsydney.edu.au/__data/assets/pdf_file/0010/1269064/YA_unemployment_fnl_V6.1.pdf

Table 4: Diversity and inclusion implementation plan

Objective	Measures of success	Status
Increase participation of Culturally and Linguistically Diverse (CALD) people	<ul style="list-style-type: none"> • Sydney Metro Industry Curriculum supports CALD groups in high risk disciplines prior to working on Sydney Metro • Tenderers commit to initiatives that support CALD people into employment 	<ul style="list-style-type: none"> • Outcome established and in delivery • Industry led
Increase participation of Aboriginal and Torres Strait Islander peoples	<ul style="list-style-type: none"> • 2.5 per cent of the workforce to be Aboriginal peoples 	<ul style="list-style-type: none"> • Target established and in delivery
	<ul style="list-style-type: none"> • Minimum number of recognised Aboriginal businesses in the supply chain 	<ul style="list-style-type: none"> • Target established and in delivery
	<ul style="list-style-type: none"> • Tenderers commit to initiatives which support the retention and development of Aboriginal peoples in employment 	<ul style="list-style-type: none"> • Industry led
Increase female representation in non-traditional trades and leadership	<ul style="list-style-type: none"> • Per cent of the Workforce to be females in non-traditional trades (per cent will vary to suit the scope of works) 	<ul style="list-style-type: none"> • Target established and in delivery
	<ul style="list-style-type: none"> • Tenderers commit to initiatives which support women into non-traditional trades and women in senior leadership 	<ul style="list-style-type: none"> • Committed to and in development • Industry led
Target long term unemployed and underemployed	<ul style="list-style-type: none"> • Pre-employment programs to support those with barriers into sustainable employment 	<ul style="list-style-type: none"> • Outcome established and in delivery
Target Refugees and Asylum Seekers	<ul style="list-style-type: none"> • Contractors commit to initiatives to support Refugees and Asylum Seekers into employment 	<ul style="list-style-type: none"> • Industry led
Returned service men and women	<ul style="list-style-type: none"> • Contractors commit to bid back initiatives to support returned serviceman into employment 	<ul style="list-style-type: none"> • Industry led



Sydney Metro Pre-employment program participants.

Case study

The Level Crossing Removal Authority (LXRA) – Training for the future

The Level Crossing Removal Project (LXRP) was established by the Victorian Government to oversee the largest rail infrastructure project in the state's history. Central to the project is the elimination of 75 level crossings across metropolitan Melbourne by 2025, in addition to upgrading or constructing more than 27 train stations, laying many kilometres of new track and making associated rail improvements.

The Level Crossing Removal Authority's targeted GROW, GEN8 & GEN44 Training for the Future programs is designed to build a diverse pipeline of graduates ready for careers in rail and transport industry, which supports the Victorian Government's Training for the Future skills and industry capability development initiative.

They offer people from marginalised backgrounds, including refugees and asylum seekers, the skills and qualifications they need to gain employment in the Victorian rail industry.

GEN44 is designed to build a diverse pipeline of graduates ready for careers in rail and transport, through the partnerships with project alliances, joint ventures and training for the future partners, GEN44 aims to provide 44 rail-focused internships each year to university students from marginalised or disadvantaged backgrounds, including those who:

- Are Aboriginal or Torres Strait Islander people
- Are from low socio-economic backgrounds
- Have a disability
- Are refugees/asylum seekers

The aim is for women to make up 50 per cent of the total intern intake.

The GEN 8, GEN 44 and GROW programs were established in late 2017. In this short time, a third of GROW participants and 62 per cent of GEN44 interns have come from refugee and/or asylum seeker backgrounds. In its first 10 months, 15 interns completed the GEN8 program and 23 GROW participants have secured employment.



An artist's impression of Westmead metro station.

4.4 Priority 4: Inspiring future talent and developing capacity

4.4.1 Building a sustainable pipeline

Nationally, the Australian population is ageing. In Western Sydney, the ageing is marginally less intense and the diversity more so²⁷. The rail industry has its own ageing issues, though, with 53 per cent of the rail workforce aged over 45, the challenges presented by an ageing workforce are likely to persist long-term within the industry. These factors justify the need for the industry and wider government to inspire and attract young people into the industry to ensure a sustainable pipeline of the future. In consideration of this Sydney Metro and its partners develop initiatives to support young people to consider infrastructure related career pathways.

Young people in Western and South Western Sydney not in employment, education or training (NEET)

Average unemployment rates for the period 2009 to 2016 for persons aged 15-24 in the catchment do vary. Areas in Western Sydney like Parramatta and Blacktown have above average rates of over 12.4 per cent, but the City and Inner West have below average rates for the age group of less than 10.4 per cent²⁸.

Apprentices and traineeships

Apprenticeships are particularly important to Sydney Metro and are a key priority to the NSW Government in supporting continued growth of the economy. National trends show a decline in the take up and completion of apprenticeships and traineeships overall, and a move away from vocational education and training to higher education. However analysis of the data shows the declines are far more marked in non-trade traineeships in occupations such as sales worker. Apprenticeships in traditionally male, trade occupations including construction and engineering are showing increases although not enough to eliminate all potential skill shortages^{29 30}.

Recent NCVER data for the twelve months ending 30 September 2018 showed that trade apprenticeship enrolments increased by 2245 or 3.1 per cent across Australia³¹. This compares to a drop of 4230 in traineeship sales workers (minus 27.9 per cent) across Australia. The reason for these changes can be in some part attributed to the construction and infrastructure booms and changes in Australian government policy which led to declines in government subsidies for non-trade enrolments. Though these figures indicate more trade apprentices started apprenticeships, apprenticeship completion rates have recently marginally fallen.

For trade apprentices due to complete their courses the completion rate had fallen to 47.1 per cent from 48.5 per cent in the previous year³². These figures relate to the trade apprentices' initial contract of training. If an adjustment is made for apprentices who switched employers and had more than one contract of training, the overall completion rate rose to 58.5 per cent in 2017, which is still marginally less than the 59.6 per cent the previous year. This shows the importance of facilitating, where necessary, apprentices moving between employers to allow them to complete their apprenticeships. Completion rates are also positively impacted by appropriate mentoring and peer support. Sydney Metro in conjunction with delivery partners will deploy strategies with its contractors to support mentoring and retention to maximise completion rates.

Sydney Metro West is also keen to follow developments in the UK where higher level apprenticeships offer opportunities beyond trades into professional careers and where the off-the-job credential can be a degree³³. Such apprenticeships can provide an aspirational pathway for students from a wide variety of backgrounds where they can study for a degree and get paid work at the same time. They also address changing skill needs in the economy where higher level technical and generic skills are becoming increasingly important as work becomes more automated and complex.

27 McCrindle (website), 2016 Census shows a growing, ageing, and more culturally diverse Australia, Baulkham Hills, 2018. Viewed on 4 August 2018.

Available at: <https://mccrindle.com.au/insights/blog/2016-census-shows-growing-ageing-culturally-diverse-australia/> Robertson, Shanthi and Aquino, Kristine, Blaming migrants won't solve Western Sydney's growing pains, The Conversation (website viewed on 4 August 2018).

Available at: <https://theconversation.com/blaming-migrants-wont-solve-western-sydneys-growing-pains-77403>

28 O'Neill, P, 2017, Youth Unemployment in Western Sydney, Centre for Western Sydney, P24. Viewed on 26 June 2016 See: https://www.westernsydney.edu.au/__data/assets/pdf_file/0010/1269064/YA_unemployment_fnl_V6.1.pdf

29 NCVER, Apprentices and trainees 2018 - June quarter infographic, Adelaide, NCVER, 2018 Viewed on 22 Jan 2019 <https://data.gov.au/dataset/ds-dga-cff2ae8a-55e4-47db-a66d-e177fe0ac6a0/details>

30 NSW Dept of Industry - A Review of Apprenticeships and Traineeships in New South Wales Consultation Paper - July 2016.

31 NCVER, Apprentices and trainees 2018: September quarter - Australia, Statistical report, 5 March 2019 Viewed on 1 May 2019 <https://data.gov.au/dataset/ds-dga-cff2ae8a-55e4-47db-a66d-e177fe0ac6a0/details>

32 NCVER, Australian vocational education and training statistics, Completion and attrition rates for apprentices and trainees 2017. Viewed on 3 May 2019 <https://data.gov.au/dataset/ds-dga-cff2ae8a-55e4-47db-a66d-e177fe0ac6a0/details>

33 NCVER VOCED plus website, Focus on higher level apprenticeship pathways, Adelaide, NCVER, 2018. Viewed on 20 June 2018 <http://www.voced.edu.au/content/focus-higher-level-apprenticeships-pathways>

Promoting science, technology, engineering, arts and maths

Increasingly, jobs today require people to have good numeracy and quantitative skills. Chief Executive of the Australian Industry Group, Innes Willox, noted that “STEM skills are essential for the future economic and social well-being of the nation with an estimated 75 per cent of the fastest growing occupations requiring STEM skills and knowledge. Despite this, enrolments and the number of graduates with STEM qualifications continue to decline. This is a major concern for industry”³⁴. This is also a major concern for Sydney Metro projects which require skills from design engineer to ICT professional to the skills needed for the operator of the railway.

4.4.2 Implementation plan

Sydney Metro recognises the increased activity across industry to support and inspire future talent into the industry. Sydney Metro wishes to support our contractors with existing successful initiatives, ensure minimum targets and percentages and also pilot new approaches such as the higher apprenticeship model to further drive this priority. To support these programs and targets, Sydney Metro recognises the importance of also ensuring the right level of mentoring is provided to support completion and retention.

Table 5: Inspiring future talent and developing capacity initiatives

Objective	Measures of success	Status
Engage young people from all educational sectors	Targets set with minimum numbers of graduates and work experience placements	<ul style="list-style-type: none"> Target established and in delivery
	Mandatory bid backs initiatives committed to that support inspiring future talent objectives	<ul style="list-style-type: none"> Outcome established and in delivery Industry led
	School based apprenticeships will be encouraged where appropriate	<ul style="list-style-type: none"> Outcome established and in delivery Industry led
Support vocational career development through apprenticeships and traineeships	20 per cent of the Trade Workforce to be Apprentices	<ul style="list-style-type: none"> Target established and in delivery
	10 per cent of the Workforce to be in Traineeships where traineeship qualifications are available	<ul style="list-style-type: none"> Target established and in delivery
	Sydney Metro Apprentice and Trainee Program	<ul style="list-style-type: none"> Outcome established and in delivery
	Mandatory bid backs initiatives committed to that support retention and completion rates	<ul style="list-style-type: none"> Committed to and in development
Collaborate with higher and VET educational institutions to provide opportunities in STEM related careers	Mandatory bid backs initiatives committed to which could include educational partnerships to promote STEM related careers and partnerships with local schools	<ul style="list-style-type: none"> Outcome established and in delivery Industry led
	Pilot Higher Apprenticeships with delivery partners	<ul style="list-style-type: none"> Committed to and in development

³⁴ Office of the Chief Scientist, *Australia's STEM workforce, a survey of employers*, Deloitte Access Economics, Canberra, 2014, p2.

5 Benchmarking

Throughout the development of the approach to new projects, Sydney Metro considers lessons learnt from previous projects as well as what has worked successfully to date.

Sydney Metro has had a range of successes during the delivery of Sydney Metro projects. New approaches in workforce development and industry participation achieved on Sydney Metro are being translated across industries, influencing policy and applied elsewhere. Key successes include but are not limited to:

- Sydney Metro Pre-employment programs supporting long term unemployed into sustainable employment with an 84 per cent job conversion rate.
 - Establishment of the Skills and Employment Advisory Group.
 - Winner of the 2015 NSW Premiers Award in category 'Making NSW a better place to live'.
 - The Sydney Metro Industry Curriculum Program (pre-commencement training) established in 2016 has had over 4500 workers to date with 59 per cent of those participants holding no prior qualifications.
 - Engaged over 700 apprentices and trainees on the projects.
- Sydney Metro jobs and industry participation has engaged with 1,011 small to medium enterprises and 11 per cent of the City & Southwest's small to medium enterprises have been recognised Aboriginal businesses.
 - Over 11,200 people have undertaken accredited training supporting upskilling and mitigating skill shortages.

In the development of this plan, Sydney Metro incorporated lessons learnt from other Sydney Metro projects. These include:

- A continued focus on targeted skills development.
- Ensuring workforce development and industry participation objectives are appropriate, achievable and relevant to project scope, industry and government.
- Working collaboratively with industry and government to drive consistent further outcomes.
- Client led programs have seen the best success in delivering outcomes.
- Taking a collaborative approach to deliver client led programs.
- Increasing participation of under-represented groups through Sydney Metro Pre-employment programs and further educational pathways.
- Developing partnerships to support delivery of scalable and sustainable programs.
- Working closely with industry in the delivery of targets and programs.



Sydney Metro Apprentices at Excellence Awards 2019 night.



Sydney Metro Pre-employment program graduate.

5.1 Workforce Development and Industry Participation programs and initiatives

Sydney Metro has established a range of client led programs which support our delivery partners in achieving outcomes for the Sydney Metro Workforce Development and Industry Participation priorities and contractual requirements. Significant outcomes have been achieved to date through existing Sydney Metro projects with an intention to further enhance these programs for Sydney Metro West. Sydney Metro Workforce Development and Industry Participation programs include:

- Sydney Metro Pre-employment program – a collaborative model providing accredited entry level technical skills and employability training for the long term unemployed and other under-represented groups in the workforce. The program is designed to prepare job ready candidates for entry level opportunities.

- Sydney Metro Apprentice program.
- Sydney Metro Aboriginal Business forums.
- Sydney Metro Industry Curriculum program.
- Sydney Metro Job Brokerage and Careers Program.

In addition Sydney Metro has established partnerships with government and other related bodies who have support mechanisms and resources available for skills development, supporting under-represented groups through employment and small business participation. Further information on Sydney Metro programs and other available can be found in the Sydney Metro Program Tool Kit.

6 Next steps

It is expected that this initial plan will undergo further refinements through the development of Sydney Metro West. Next steps include:

- Continue to consult and collaborate with existing and new stakeholders to seek feedback and obtain resources to support the delivery of this plan.
- Continue capturing lessons learnt through the delivery of Sydney Metro City & Southwest and incorporate these into the plan.
- Review skills and jobs forecast to develop a targeted approach potential skill shortages during delivery and operations.
- Foster new partnerships with organisations with a mutual interest in our priorities and objectives.
- Determine an implementation plan to support the delivery of the plan.
- Review existing and potential initiatives and programs to support the plan.
- Collaborate with the project team to prepare for the procurement phase in the development of workforce development and industry participation requirements and associated documents.
- Investigate the potential to pilot Higher Apprenticeships.



Sydney Metro Pre-employment program participant.



Sydney Metro Pre-employment program participants.

Appendices

Appendix A Government policies and plans

Government plans, priorities and policies	Relationship to Sydney Metro West
<p>Aboriginal Procurement Policy (2021) – supersedes the APIC and APP 2018 policies</p>	<p>The NSW Government values the economic, social and cultural contribution of the Aboriginal community in NSW. The Aboriginal Procurement Policy (APP) will contribute to the NSW Government’s strategic economic policy of Growing NSW’s First Economy.</p> <p>Government procurement provides a significant opportunity to increase Aboriginal skills and economic participation.</p> <p>The APP supports the NSW Government Plan for Aboriginal Affairs, OCHRE, and is a key deliverable under the Aboriginal Economic Development framework.</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Support employment opportunities for Aboriginal people • Support sustainable growth of Aboriginal businesses
<p>INSW – NSW Government Action Plan: A ten point commitment to the construction sector</p>	<p>The NSW Government Construction Leadership Group (CLG), led by Infrastructure NSW has developed the <i>NSW Government Action Plan: A ten point commitment to the construction sector</i>. Part of the focus of this action looks for cross infrastructure collaboration to develop skills, capability, capacity and greater diversity in the construction workforce and its supply chain.</p> <p>The Sydney Metro Workforce Development and Industry Participation Plan respond to points nine and ten. Sydney Metro actively participates in strategic advisory groups which support the commitment of this Plan.</p>
<p>Infrastructure Skills Legacy Program</p>	<p>The Infrastructure Skills Legacy Program (ISLP) will capitalise on the NSW Government’s record levels of infrastructure investment to boost the number of skilled construction workers and create fresh pathways to employment across the state.</p> <p>Sydney Metro City and Southwest has been a demonstration pilot for the program since 2016. To date over 2000 workers have achieved accredited training outcomes. Of those 2400 workers, 55 per cent of the participants held no prior qualifications. Sydney Metro will continue working collaboratively with NSW Department of Planning, Industry and Environment as part of our approach for Sydney Metro West.</p>
<p>PBD-2017-05 Construction training and skills development</p>	<p>NSW Government agencies must set targets for the engagement of apprentices and trainees on construction projects over \$10 million and must report outcomes to the Department of Industry.</p> <p>Since 2013, Sydney Metro has set targets for contract packages across all Sydney Metro projects. Sydney Metro will continue to set apprentice and trainees targets suited to the scope of the package and relevant skills shortages at the time.</p>
<p>PBD-2019-03-Access to government construction procurement opportunities by small and medium sized enterprises</p>	<p>The Procurement Board encourages NSW Government agencies to consider small and medium enterprises (SMEs) for construction procurement opportunities.</p> <p>Sydney Metro has set minimum targets for our delivery partners to engage small to medium enterprises in the supply chain. Sydney Metro will continue this for West and will work closely with our delivery partners to support initiatives to increase SME participation.</p>

Government plans, priorities and policies	Relationship to Sydney Metro West
<p>Australian Jobs Act</p>	<p>Under the Jobs Act, Australian Industry Participation (AIP) plans are required for major projects with capital expenditure of \$500 million or more. AIP plans provide detail on the expected opportunities to supply goods and/or services to the project; how these opportunities will be communicated to potential suppliers; and how Australian businesses will be assisted in longer-term participation, including encouraging capability development and integration into global supply chains.</p> <p>Sydney Metro will develop a Sydney Metro West Australian Industry Participation plan which will be made available to tenderers.</p>
<p>Aboriginal Participation in Construction (2018) is superseded by Aboriginal Procurement Policy (2021)</p>	<p>Sydney Metro has incorporated this policy into our Workforce Development and Industry Participation requirements since 2016. Sydney Metro also has an Aboriginal Participation plan to drive the policy outcomes. Sydney Metro will continue its focus and commitment to Aboriginal Participation through Sydney Metro West.</p>
<p>Future Transport 2056</p>	<p>Future Transport 2056 is an update of NSW's Long Term Transport Master Plan. It is a suite of strategies and plans for transport developed in concert with the Greater Sydney Commission's Sydney Region Plan, Infrastructure NSW's State Infrastructure Strategy, and the NSW Department of Planning, Industry and Environment's regional plans, to provide an integrated vision for the state.</p>



An artist's impression of Burwood North metro station.

Appendix B Community analysis

This section highlights the key socio-economic opportunities for the Sydney Metro West station precinct areas based on a data analysis exercise that was undertaken using 2011 and 2016 census data. The darker blue the square, the greater the opportunity that exists when compared with the Greater Sydney average and Sydney Metro West alignment average.

The community analysis at SA2 level around the station precincts of Sydney Metro West provide a robust and more granular understanding of the community profiles. Particularly in relation to vulnerable populations that exists along the alignment.



Wheelchair access sign on platform screen door.

Table 5: Sydney Metro West SA2 community analysis

Station	Westmead Station			Parramatta Station		Sydney Olympic Park Station
SA2 area	Greater Sydney	Northmead	Wentworthville - Westmead	North Parramatta	Parramatta - Rosehill	Homebush Bay - Silverwater
Population		21,222	16,322	23,066	30,741	19,594
Population density	407	3,577	4,147	3,618	3,267	1,740
Median age	35.8	33.3	33.8	31.2	33.8	32.9
Age groups		Younger population, more 25-45	Younger population, more 25-45	Younger population, more 25-45	Younger population, greater 25-45	More 25-45, less over 55
Born overseas	36%	63%	50%	61%	70%	49%
Area of birth		S & Central Asia	S & Central Asia	S, central & N Asia	Southern & central Asia	NE Asia
Speaks other language at home	36%	51%	69%	52%	72%	49%
Speaks English not well or at all	7%	8%	11%	8%	12%	12%
Religion	52% christian, 25% secular & other	22% Hindu; 40% Christian	37% Hindu; 31% Christian	41% christian, 11.5% hindu	35% Hindu	28% secular & other
Aboriginal population %	1.5%	0.5%	0.6%	0.8%	0.4%	2.3%
Aboriginal population #		106	98	185	123	451
Government allowances		Slightly more family, less others	More disability & family	Slightly less age, slightly more disability	Less age pensions, more family tax	Less all, much less Age
Labour force participation rate	62%	66%	62%	62%	66%	61%
Unemployment rate	6%	7%	9%	9%	9%	5.5%
Completed year 12	60%	70%	59%	67%	75%	66%
Post-school qualifications	62%	75%	67%	68%	73%	77%
Disengaged youth	15%	15%	13%	20%	18%	18%
Need for assistance	4.9%	4%	5%	6%	3%	2%
Homeless	18,971	21	126	146	362	178



Aerial view from Parramatta to the CBD.

North Strathfield Station	Burwood North Station		Five Dock Station	Bays Station	CBD Station	Zetland Station
Concord West - North Strathfield	Concord - Mortlake - Cabarita	Burwood - Croydon	Five Dock - Abbotsford	Lilyfield - Rozelle	Sydney - Haymarket - The Rocks	Waterloo - Beaconsfield
26,116	22,706	25,879	21,497	14,933	29,970	35,323
5,118	3,593	5,761	4,653	4,144	6,981	9,864
31	39.9	32.4	40.6	38.5	30.6	30.7
More 25-35, less over 45	More over 45	More 25-35	More over 45, less 15-25	Less 15-35, more 35-55	More 15-35, less over 45, under 15	More 15-35, less over 45, under 15
59%	60%	35%	31%	28%	68%	54%
NE Asia	NE Asia	NE Asia, S&E Europe	Europe & NE Asia	NW Europe, Oceania	SE & NE Asia	NE Asia, NW Europe
61%	38%	65%	31%	15%	61%	46%
14%	13%	19%	12%	5%	16%	12%
37% Secular	40% secular	64% christian	62% christian	42% secular	22% buddhist, 32% secular	43% secular
0.4%	0.3%	0.5%	0.7%	1.0%	0.2%	1.8%
104	68	129	150	149	60	636
Less all	Slightly more age	Less all	More age, less other	Less All	Less all	Less all
64%	63%	57%	64%	70%	62%	61%
7%	4%	9%	4%	4%	7%	7%
77%	72%	64%	62%	71%	75%	73%
71%	65%	61%	67%	75%	74%	69%
12%	10%	11%	14%	14%	22%	14%
3%	5%	5%	6%	4%	1%	3%
93	44	512	33	26	1662	254

