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Future Jobs, Future Skills

Growth in higher education demand from Western Sydney

Size of demand

The benchmark year used for this report is 2050

Demand for higher education in Western Sydney is forecast to grow by up to

84%

or 120,000 students by 2050 to almost 270,000 students or 2.4% a year. This compares to 2.1% forecast in the Australian Universities Accord Final Report.



Key equity cohorts prevalent in Western Sydney

- Lower socioeconomic groups
- Outer suburban areas
- First Nations students

Fields of growth

Health, Information Technology and Education will grow substantially. While Business and Humanities will grow slower, they will remain as two of the largest three disciplines.

Business

Education

Health

Information Technology

Humanities

56%

2050

2024

Western Sydney currently comprises 56% of higher education demand across Greater Sydney – if participation rates in Sydney City hold constant, then Western Sydney will represent up to 65% of demand by 2050.

65%

Demand for higher education from:



23%

Maturing market and a catchup in participation.

28%

Ongoing economic and occupational trends for greater skilling and productivity requirements.

49%

Population growth and demographic change.

Critical risks to realising this demand are:

- 1 Weakening employer demand due to businesses hiring from a broader labour pool creating pathways that may dampen higher education demand nationally.
- 2 Weakening student demand due to slowing trends in socioeconomic outcomes, student aspirations and readiness.
- 3 Changing and uncertain policy settings which are critical enablers to demand and growth.



Hybrid experience

A hybrid experience is the new standard and expectation – ensuring students receive the best of the on-campus in-person experience and the virtual online experience will be critical. Proximity to those services will be important.



Tech and clean economy workers



Nurses



Teachers

Growth areas

Tech and clean economy workers, as well as teachers and nurses, are growing at faster rates, representing key growth areas.

Occupations with a higher education focus growing by*

57%

Employment growing by

48%

*Noting this doesn't represent all higher education skills, and doesn't reflect expectations for an increasing share of employment to require higher level skills.

Student support

Supporting greater higher education attainment in Western Sydney will be critical for the Government to achieve its policy vision in the Universities Accord for a higher attainment rate among 25-34 year olds (from 45% to 55%).

Student readiness

Student readiness is an important enabler for realising demand and converting demand (or the intent to study) into actual commencements and completions.

Continued supports by providers and governments in developing greater academic capability, study skills and social maturity among school students in Western Sydney will be a requirement for achieving this growth in demand.

Executive summary

With a workforce growing in size and sophistication, Western Sydney is a key economic centre for Australia. Universities will have a critical role to play in skilling Western Sydney's population for the jobs of the future.



Western Sydney's economic prosperity in coming decades will depend on many factors, including the strength of business, investment, social institutions, government policies and more. Universities have an important role too, as employers in their own right, collaborating with industry on research and innovation, and by providing community services and contributing to the local social fabric. Most importantly, they'll be developing the human capital Western Sydney's economy needs, providing workers with the knowledge, skills and experiences for the jobs of tomorrow.

As Western Sydney grows, so too will demand for higher education, growing faster than the rest of Greater Sydney.

By 2050, annual demand for higher education from Western Sydney is forecast to increase to up to 264,000, from 144,000 today (i.e. by 120,000 or 84%). Half of the extra numbers will be driven by sheer population growth, but with the other half coming from specific trends – Western Sydney students matching their peers in the rest of Greater Sydney and more jobs requiring higher education qualifications.

The largest disciplines today – Society and Culture, Health, and Management and Commerce – are forecast to remain key fields of study for students in 2050. Based on job trends, the strongest growth will be in Health, Information Technology and Education.

As of 2021, 66% of workers living in Western Sydney also work locally, and in a post-pandemic environment, there is an increasing expectation for working and studying locally, such that local population and jobs growth will be an important driver for local demand for higher education.

Employment in Western Sydney is forecast to grow by 48% between now and 2050, compared to half as much growth for Sydney City, which means greater demand by industry for workers with suitable education and skills.

Western Sydney employment growth will be especially high for jobs requiring higher education, growing by 57%, compared to 44% for all other occupations. This includes roles in Technology (82% growth for Western Sydney), Teachers (66%), Midwives and Nurses (62%) and roles in the Clean Economy (60%).

Supporting student readiness for university will be an important enabler for growth.

A preliminary analysis of readiness identifies that students, schools and communities in Western Sydney perform less well in key indicators for academic capability, study skills and social maturity. Continued actions by providers and governments to support readiness will be important for enabling demand for higher education, and supporting successful transitions.

Students expect a hybrid learning experience and have greater expectations for both their on-campus and virtual learning.

While a post-pandemic environment has revealed a new normal of hybrid delivery, balancing in-person and virtual experiences will be important, as will retaining a student-centred lens on meaningful interactions among students and staff.

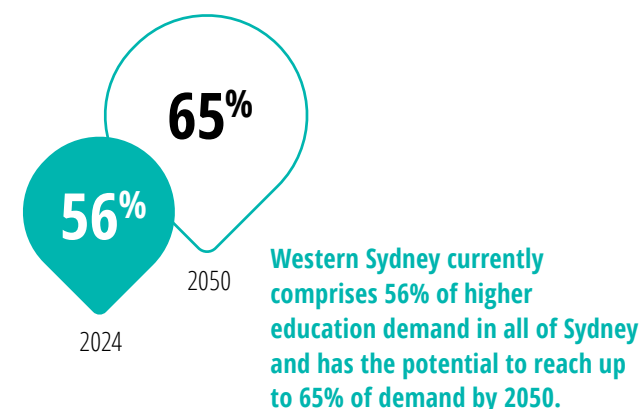
Access to local campuses will be important for supporting and lowering barriers to fulsome on-campus study experiences, including giving students the opportunity to connect, build networks and use critical infrastructure like labs and libraries.

Western Sydney has an important role in meeting the aspirations of the Universities Accord – where supportive policy settings will be required for realising growth in student demand.

Commonwealth policy settings, in particular funding agreements, have been a crucial enabler of realising higher education demand and increasing accessibility and provision to more learners and more diverse cohorts.

The University Accord targets First Nations Australians, lower socioeconomic households and outer suburban areas as priority groups for supporting equity in higher educational attainment – Western Sydney will be an important geography for supporting these aspirations.

Meeting the rising and changing nature of higher education demand in Western Sydney is not a mere incremental policy challenge or regional equity issue. It will require a rethink of what education is needed for the jobs of the future and how it is delivered. It has the potential to deliver transformational economic and social outcomes for the region, but also contribute to a national dividend of higher living standards and a workforce that can help address the climate, technology and other demographic challenges the country will face.



Western Sydney has and will continue to have an important role in the future success of the New South Wales economy and higher education will be a key facilitator of this growth and success.



Deloitte Access Economics was engaged by the University of Sydney to undertake research and analysis into the future demand for higher education from Western Sydney – capturing both the potential volume of domestic higher education demand from individuals living in Western Sydney and the profile of this demand – as part of building the evidence base for understanding the challenges and opportunities for Western Sydney.

With a workforce growing in size and sophistication, Western Sydney is a key economic centre for Australia. Western Sydney is home to around 2.7 million people, representing a third of the NSW population, and home to diverse cohorts of families, with over a third (or 38%) of Western Sydney households speaking a language other than English at home.¹

Over the past few decades, the Western Sydney population has grown significantly and is expected to continue to grow with relatively high birth rates. It is a destination-of-choice for new migrants. It offers affordable housing compared to Sydney's East, and access to jobs and well-established multicultural communities that have genuine influence on local decision making. It attracts investment and has a stock of infrastructure and key assets that improve each year.

This population growth has been a key enabler of Western Sydney's economic growth, with overseas migration bringing young, highly productive and motivated families into the local economy.

Auburn

Baulkham Hills

Bankstown

Blacktown

Blacktown - North

Blue Mountains

Bringelly - Green Valley

Camden

Campbelltown

Canterbury

Carlingford

Dural - Wisemans Ferry

Fairfield

Hawkesbury

Hurstville

Liverpool

Merrylands - Guildford

Mount Druitt

Parramatta

Pennant Hills - Epping

Penrith

Richmond - Windsor

Rouse Hill - McGraths Hill

Strathfield - Burwood - Ashfield

St Marys

Wollondilly



Western Sydney is home to 2.7 million people, representing one-third of the NSW population



Almost two-thirds (58%) of all NSW businesses are in Western Sydney



Over a third (38%) of Western Sydney households speak a language other than English at home

Historically, Western Sydney has relied more on a manufacturing base, but has grown (and continues to grow) with a more diverse and dynamic landscape, delivering key government and commercial services, centred on and around major infrastructure developments. It is the workplace of over 1.3 million workers, accounting for more than half (or 56%) of all employment within Greater Sydney, and now almost two-thirds (or 59%) of all NSW businesses are in Western Sydney.

In supporting this continued growth, the NSW Government has invested significantly, including \$5 billion for better roads, \$21 billion for public transport, and \$140 million to support home building.

Education will be an important enabler of continued growth and the ongoing maturation of the Western Sydney economy – ensuring local access, pathways for all, and continued investments in quality and outcomes. The 2024-25 NSW budget provides more than \$7.2 billion investment for schools and hospitals across Western Sydney.

Alongside early years learning, schools and vocational pathways, the higher education sector and universities will play an important role in supporting and achieving greater education outcomes and providing highly skilled workers for the future of Western Sydney.

Geographic boundaries for Western Sydney are not consistently applied and can often vary by contexts. For the purposes of this work, Western Sydney is defined by 26 ABS statistical regions, decided collaboratively with the University and guided by the *A Metropolis of Three Cities* report by the Greater Sydney Commission. The remaining eastern areas of Greater Sydney are defined as 'Sydney City' (see appendix for more details).



By 2050, demand for higher education from learners in Western Sydney is forecast to increase by up to 84% or 120,000 enrolments – half of this growth is from an increasing population, a quarter from greater participation, and a quarter from productivity trends.



Higher education enrolments from Western Sydney are forecast to grow from 41% up to 84% from 2023 to 2050, from approximately 144,000 domestic enrolments to between 203,000 and 264,000 enrolments. The forecast is underpinned by three cumulative scenarios:

Scenario 1

Base population growth utilises the current volume and participation rates of Western Sydney higher education enrolments to capture the certain growth in demand. Around half of total growth (i.e. cumulatively across all three scenarios) is expected from population growth and demographic changes as Western Sydney continues to grow.

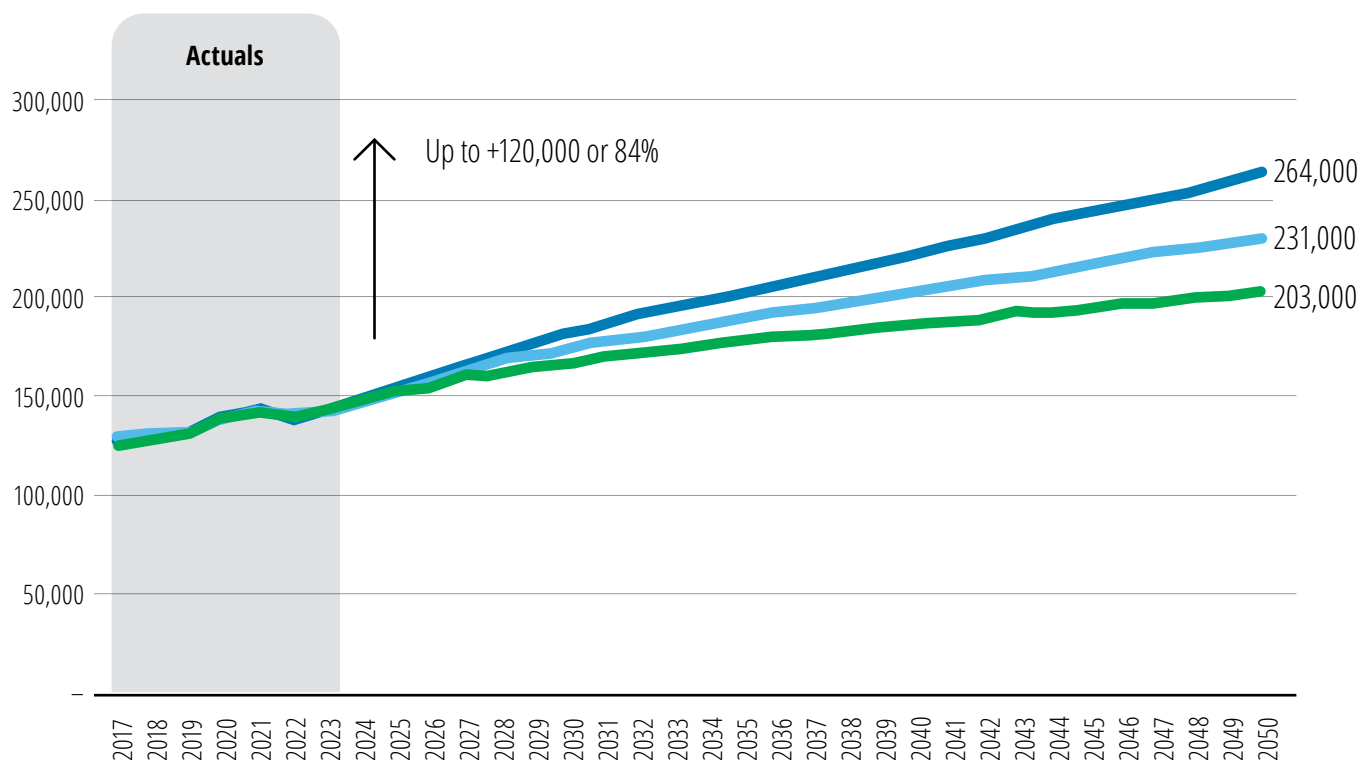
Scenario 2

Maturing market and participation is extending the base population growth scenario by converging higher education participation rates in Western Sydney to 90% of the current rates in Sydney City by age and gender cohort. Around a quarter of total growth is expected from 'catching up' in participation rates relative to Sydney City, reflecting both increasing aspirations for higher education and increasing focus on equity cohorts by government.

Scenario 3

Future productivity trends further extend Scenario 2 by modelling additional increases in participation to reflect an expected increasing requirement for more highly skilled workers with higher education qualifications. Another quarter of total growth is expected from ongoing trends in the economy for more highly skilled workers and trends in lifelong learning.

Chart 1: Forecast higher education enrolments from Western Sydney, 2017 - 2050



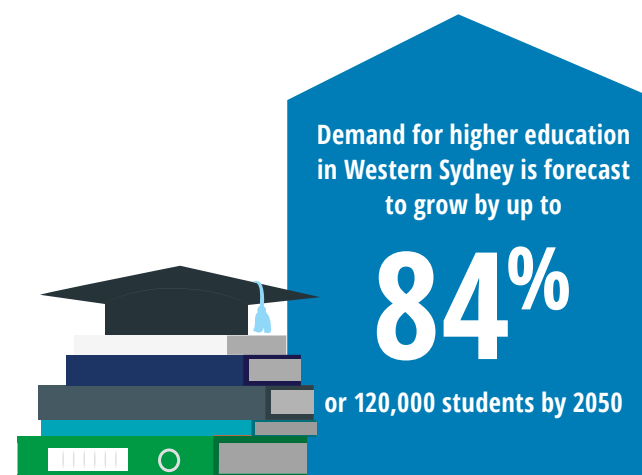
- Scenario 1** Base population growth
- Scenario 2** Maturing market & participation
- Scenario 3** Future productivity trends

Source: Deloitte Access Economics. Note: Enrolments calculated as headcounts and for domestic students only. Data points on the chart represent the average growth rate per year.

The forecast for higher education demand from Western Sydney is founded by the Deloitte Access Economics Population and Demographic forecast model, which measures the expected size of the population and demographic composition by age and gender, and accounts for key demographic drivers including natural increases (net birth and death rates) and intrastate, interstate and international migration movements, and as part of this incorporates employment forecast trends to account for worker mobility.

To put this growth in context, the Universities Accord presents forecast modelling for a national compound growth rate of 2.1% per year, whereas this report forecasts a rate of 2.4% per year for communities in Western Sydney.

Recognising the uncertainty and complexity in modelling individual decision-making to study, this work adopts a scenario-based approach whereby each subsequent scenario adds additional assumptions to the previous scenario and 'builds onto' the previous demand estimate.



Western Sydney is over half of all higher education enrolments in Sydney. By 2050, it could be up to 65%.

Western Sydney currently accounts for 56% of domestic higher education demand across all Sydney. This demand is being driven by population growth and demographic changes alone (i.e. Scenario 1). It is forecast that this share will increase to up to 65%. This is driven by a forecast average annual growth rate of 1.3% for Western Sydney compared to 0.9% for Sydney City.

Despite the growth in higher education demand, not all enrolments will translate into completed studies and skilled graduates.

Over 2014 to 2018, the rolling four-year completion rate (i.e. how many students successfully completed their studies within four years) was 41% among university students in NSW. Applying this rate implies that Western Sydney is forecast to have up to 40,000 completing students in 2050 (from commencing students in 2047).



Western Sydney is over half of all higher education enrolments in Sydney

Of course, there are also risks to achieving these levels of demand, in particular, the potential of:




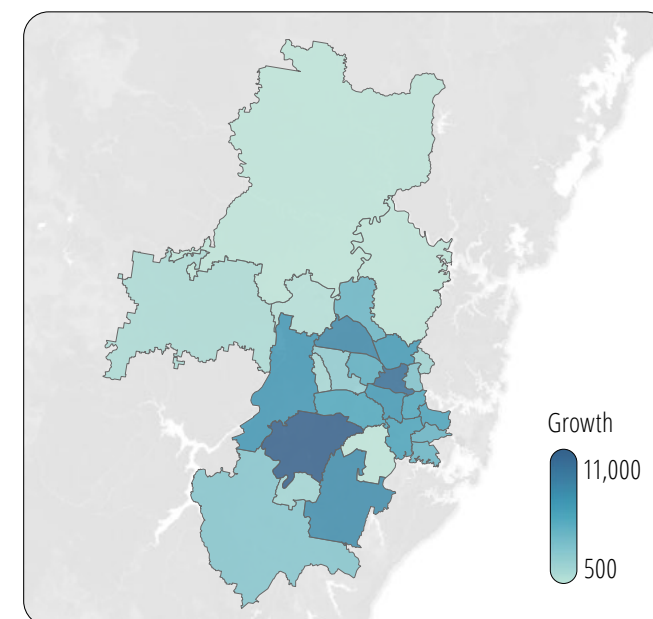
-  **Weakening employer demand and increased on the job training**
-  **Weakening student demand and preferences**
-  **Changing policy and funding settings**

Figure 1: Enrolment volume growth in Western Sydney by SA3, 2023 - 2050



Source: Deloitte Access Economics. Note: Enrolments calculated as headcounts and for domestic students only.

Note: SA3s are areas of regional towns and cities with a population more than 20,000 or clusters of related suburbs around urban commercial and transport hubs within the major urban areas.

Job growth in Western Sydney is forecast to grow by 48% between now and 2050 – double the growth for the rest of Sydney

Industry demand for skilled workers and the higher returns to skilled employment are key motivators for students engaging in higher education.

In 2023, there was an estimated 1.3 million workers in Western Sydney. This is expected to grow by 48% by 2050 and is more than twice the forecast for Sydney City which is expected to grow by 21%.

Employment in the Information Media and Telecommunications industry is forecast to grow the fastest by a total of 72% from 2023 to 2050.*

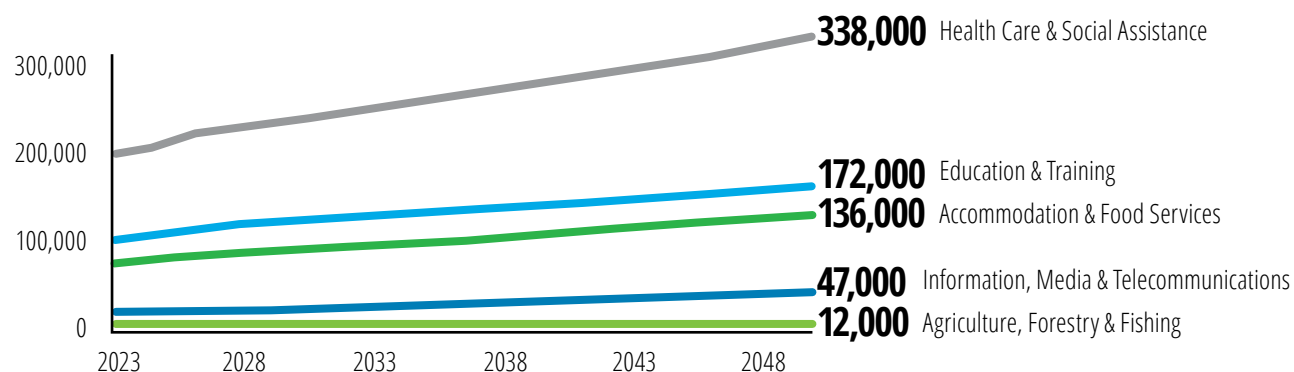
Health Care and Social Assistance will continue to be the largest employer and will grow relatively fast, increasing its share of total employment in Western Sydney from 16% to 18%.

Retail Trade (1.2% per year) and Construction (0.9% per year) will grow relatively slowly but remain as key employers.

The fastest growing industries driving this change in Western Sydney industries include:

- Information, Media & Telecommunications**
(Auburn will support 16.3% of employment in this industry in Western Sydney in 2050)
- Health Care & Social Assistance**
(Parramatta will support 17.8% of employment in this industry in Western Sydney in 2050)
- Accommodation & Food Services**
(Bringelly – Green Valley will support 13.4% of employment in this industry in Western Sydney in 2050)
- Education & Training**
(Bringelly – Green Valley will support 11.4% of employment in this industry in Western Sydney in 2050)

Chart 2: Forecast employment volume of the top five fastest growing industries in WS, 2023 - 2050



Source: Deloitte Access Economics Notes: data points represent the average annual growth rate from 2023-2050

These growth areas are consistent with the 'megatrends' expected to influence the economy in coming decades. CSIRO's seven megatrends framework includes digital, cyber and AI, climate and sustainability, rising health needs, and a rising expectation of trust from citizens and customers.²

* This is a composite industry that includes growth in both traditional media and telecommunication sub-industries and other sub-industries such as motion picture and sound recording activities and internet publishing and broadcasting.

Skilled occupations requiring higher education are forecast to grow faster than all other occupations.

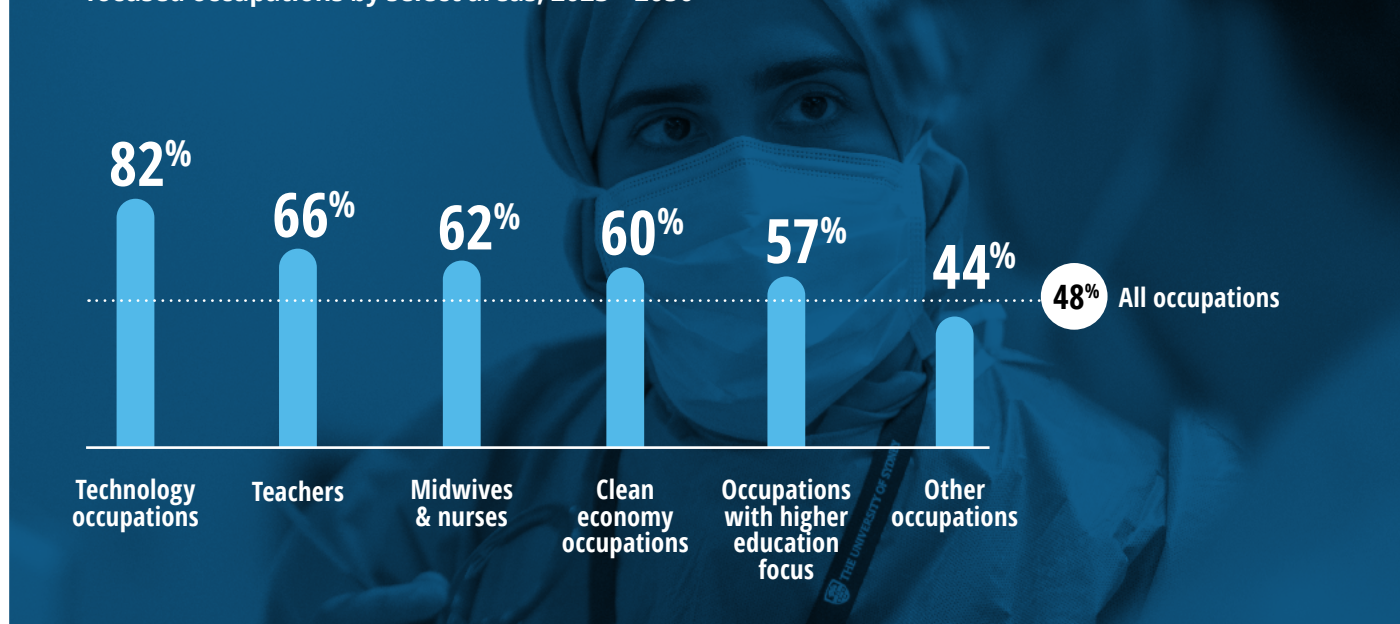
Alongside industry change, the mix of occupations will also transform in coming decades. We'll need more people with skills to use technology, address the climate challenge, and service the needs of a growing and ageing population. Higher education institutions will have a big role to play in the upskilling effort.

While the demand for workers will come from employers and industry, the demand for education will come from individuals seeking skills for jobs and occupations. Across the 357 ABS ANZSCO 4-digit occupations across the Australian economy, employment will grow by 48% to 2050 in Western Sydney (as per industry demand, see previous page), but the fastest growth will be among higher skilled workers (growing by 57%), considerably faster than for all other jobs (44%).

Then within these higher skilled occupations, some will grow even faster again. To help illustrate this change, this work identifies technology jobs, teachers, midwives and nurses, and clean economy jobs as four large and key growth clusters – jobs expected to continue to be critical as part of Australia's future economy.

The National Skills Plan launched by the Skills Ministers identify 8 national priorities including supporting the Net Zero Transformation and ensuring Australian Digital and Technology capability.³ The Future Skills Organisation established by the Australian Government to address the current labour and skills shortages released Workforce Plan earlier this year that aligns with the National Skills

Chart 3: Total employment growth for higher education focused occupations by select areas, 2023 – 2050



Source: Deloitte Access Economics.

Note: Technology occupations are defined by 14 unique jobs relying on previous research for the ACS Australia's Digital Pulse to identify roles with a technology focus, such as software and applications programmers and ICT manager. Clean economy occupations are defined by 16 unique jobs relying on the Clean Energy Generation study released by Jobs and Skills Australia.

Plan to help pave the way for a technology-driven workforce and is in broad alignment with the types of jobs in demand.

And so, continuing to deliver the skills and education for these workers and jobs will be important for meeting the needs of the local economy and industry.

Consultations with local business and policy leaders provide insights to understanding the growing demands for more highly skilled local technology and health workers for Western Sydney.

For example, Vitex Pharmaceuticals is a local business in Western Sydney which expects to expand its sites and more than double its workforce from almost 400 today in just the next two years.

However, according to their CEO Dr Aniss Chami, NSW's higher education system must be seriously improved to make graduates job ready.

While the top areas of study are not expected to change, an increasing share of students are expected to study in areas of Health, Information Technology and Education.

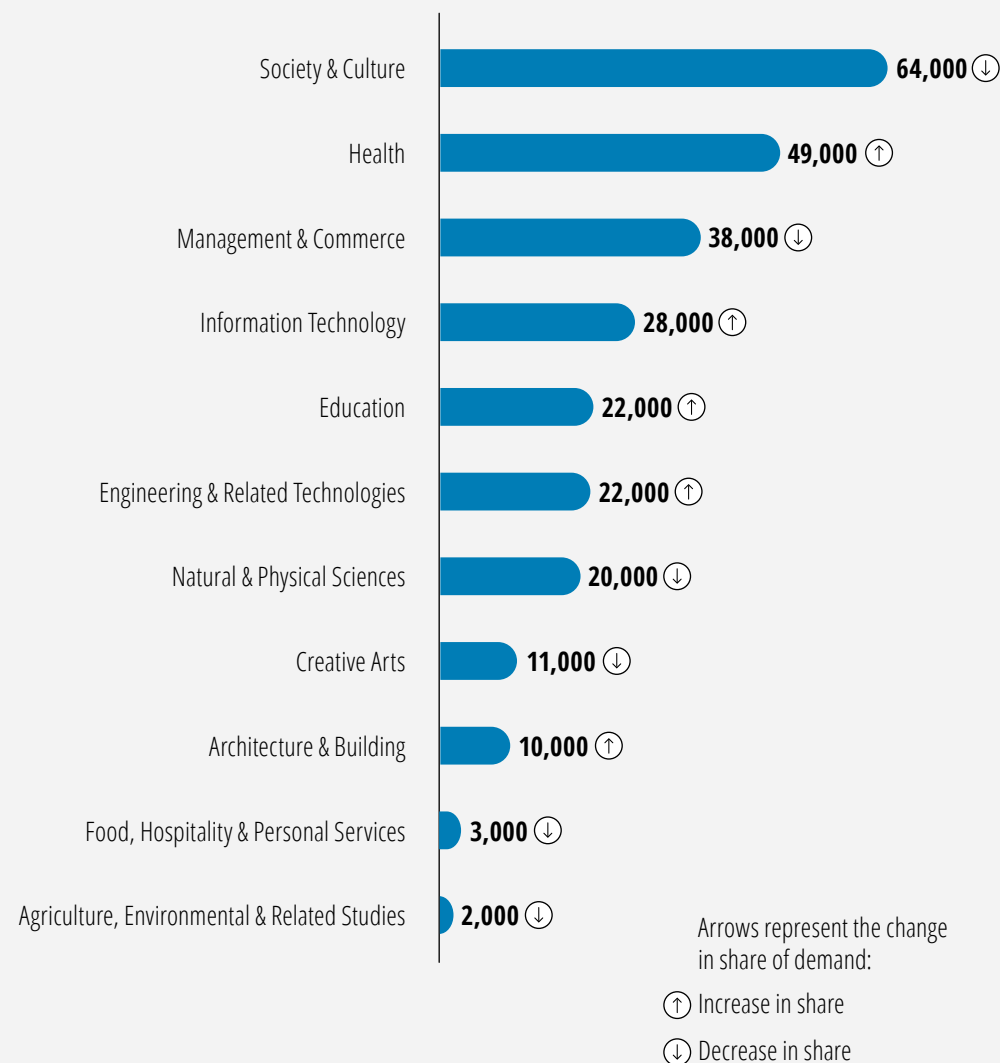
Among the broad fields of education, five disciplines are expected to increase the share of student demand, including Health, Information Technology, Education, Engineering and Related Technologies, and Architecture and Building.

While Society and Culture and Management and Commerce are expected to grow more slowly, these two disciplines will remain among the largest destinations for students.

Forecasting demand among fields of education is challenging, and this work has relied on a combination of backwards-looking analysis of enrolment trends, alongside a forward-looking review of trends in student preferences and trends in industry demand (see pages 11 and 12), where changes in industry composition are expected to have the strongest influence on these results.

Lastly, it is recognised that higher education is becoming increasingly multidisciplinary in nature, with learners and employers alike seeking more diverse knowledge and skillsets – meaning a greater share of enrolments are likely to be delivered across fields of education.

Chart 4: Forecast higher education demand from Western Sydney by field of education, Scenario 3, 2050



Continued actions by providers and governments to support student readiness will be important for successful participation in higher education.

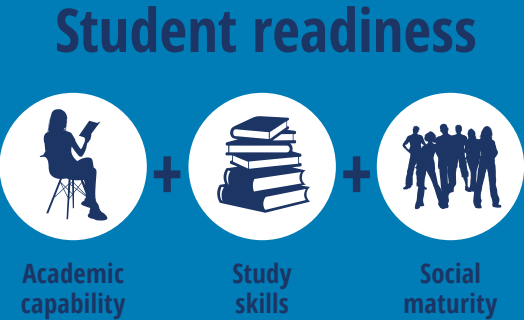
Broadly, student readiness is the preparedness of an individual to effectively and successfully participate in and complete their university studies.

It influences how an individual approaches the decision to study and what to study (i.e. the level of complexity and the disciplines), and their likelihood of transitioning from a commencing student to a completing skilled graduate.

Student readiness is a complex and multifaceted concept, with limited academic research in the Australian context, and this work has not sought to complete that exercise, but rather identify three indicators – academic capability, study skills, and social maturity – as a starting point for understanding student readiness.

Table 1: Assessing student readiness in Western Sydney

Indicator	Definition	Assessment of student readiness in Western Sydney
Academic capability	Academic capabilities of a student capture the strength of their foundational skills (i.e. literacy, numeracy and digital skills), their ability to write and problem solve effectively and critically, and of course, the depth of their technical and subject matter knowledge.	Schools in Western Sydney score consistently lower in Year 9 NAPLAN testing (2022) ⁴ Western Sydney regions score lower for digital inclusion (2022) ⁵
Study skills	Study skills of a student recognises the importance and ability of independent research and unsupervised academic investigation, as well as more general time management and organisational skills.	Schools in Western Sydney have higher absenteeism (2022) ⁶ Children in Western Sydney are less likely to be on track in communication skills (2021) ⁷
Social maturity	Social maturity of a student includes their social competence to interact successfully in and with diverse settings and cohorts, and their capability to work in groups, to ask for help and to communicate clearly and concisely. Student readiness is also underpinned by a student's broader emotional maturity, resilience and conscientiousness to independently navigate adult settings and university studies.	Social resilience measured lower in Western Sydney (2022) ⁸ Children in Western Sydney are less likely to have no developmental vulnerabilities (2021) ⁹



Source: Deloitte Access Economics analysis supported by the literature.



There are challenges in student readiness for all cohorts, and while these challenges are on average greater for students living in Western Sydney, they are not insurmountable and will be supported by providers and government:

Continuing to support and invest in academic quality,

including targeting school funding and continuing professional development to improve teaching and learning, and equipping students with the skills, capabilities and knowledge required to succeed post-schooling.

Continuing to elevate student aspirations and improve access to careers advice,

including engagement and provision of careers counselling and resources, academic information and advice services, mentorship, and communications and messaging to build awareness of tertiary education choices.

Continuing to invest in and integrate alternative entry pathways,

in particular bridging programs and wraparound supports, and transition from vocational training, as well as a more integrated tertiary education sector more broadly.

Where student readiness can be lifted, the preconditions for realising not only this future demand for higher education can be achieved, but moreover, realising the individual, community and wider benefits from greater educational outcomes.

Students will continue to demand flexible and hybrid study options that support a blend of experiences.

Students have shown a preference for a blend of on-campus and online learning, with increasing interest for virtual and more innovative options.^{10,11} While there are issues with data measurement, there has been a longer-term trend towards more online and mixed mode delivery.*

Professor Andrew Norton's *Mapping Australian Higher Education 2023* reported on the impact of the pandemic on student satisfaction, noting that while satisfaction on teaching quality remained broadly level, there were large falls in campus and social aspects.¹² These trends underscore the importance of the on-campus experience and feelings of connectedness.^{13,14}

While the new normal of post-pandemic study is hybrid delivery, achieving a quality hybrid experience and balancing in-person and virtual experience remains a challenge for providers across a variety of student and campus contexts.

Hybrid learning offers greater timetable flexibility, greater access for regional and remote learners, and more options for students to access a wider variety of services.

Ultimately, while some elements of online and hybrid will be expected in every course, these will need to be purposefully delivered to enhance and complement the in-person experience.

* The most recent data points during the pandemic are complicated by inconsistent reporting by universities. They are likely to underestimate the volume of online and hybrid study delivered over this period. Nevertheless, despite these caveats, there is a consistent longer-term trend to more online and hybrid study. The share of on-campus students has fallen from 79% in 2010 to 62% in 2019. While 2022 post-pandemic data is still to be seen, the sector expects a rebalancing back to on-campus learning, particularly for undergraduate students who have a greater emphasis and expectation for the campus experience.



A hybrid experience
is the new standard and expectation of students



Local study options are important for a fulsome on-campus experience. Students in Western Sydney will generally face longer travel times to city centres.

The on-campus experience provides a breadth of services and offers important opportunities for connection and socialising, as well as access to important in-person support and wraparound services.

Students frequently also cite being part of community and feeling included as key supports behind their success in studying. What this looks like can vary widely among students, emphasising the need for universities to provide diverse offerings to support a sense of community. This has in-part motivated the Australian Government's announcement to establish up to 14 Suburban University Study Hubs in support of providing greater access to physical learning spaces in outer suburban areas.

On-campus study presents opportunities for students to connect with peers and educators, build networks and experiences through on-campus activities, and use infrastructure like labs and libraries.

Many students have a preference for local study. Being close to infrastructure like libraries, gyms, venues and community centres is crucial to a sense of place and community, and thereby people's wellbeing. Lack of physical access to

education infrastructure presents barriers to participation, and creates challenges to engagement, retention and completions.

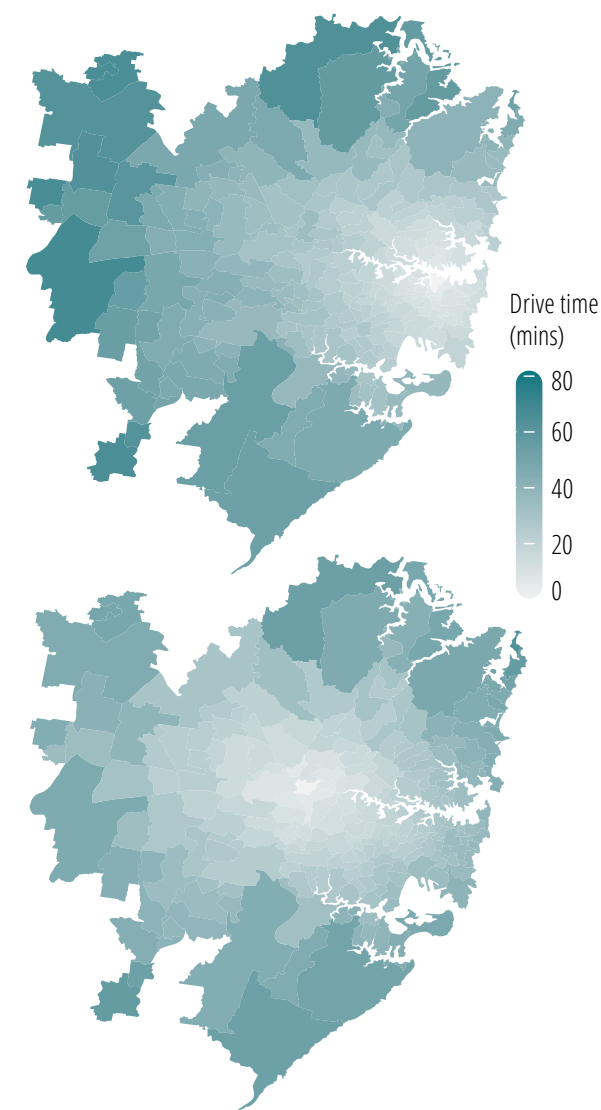
Western Sydney suburbs can have long commute times to Sydney CBD. Travel time from Western Sydney to the CBD tends to be longer, at 46 minutes, compared to travel from Sydney City locations where the average commute to the CBD is 21 minutes.

However, travel times to Parramatta CBD can also be substantial for many locations across Western Sydney, reflecting the geographic dispersity of the region (Figure 2), which can be significant barriers for learners accessing higher education and for universities to deliver the fulsome on-campus experience.

○.....● **21 min**
commute from Sydney City
locations to Sydney CBD

○.....● **46 min**
commute from Western Sydney
to Sydney CBD

Figure 2: Travel time by driving to Sydney CBD (top) and Parramatta CBD (bottom) by postcode



Source: Deloitte Access Economics analysis using OpenStreetMap (2023)

The Universities Accord emphasises the importance of growth among equity cohorts – Western Sydney is expected to have an important role in these aspirations.

Government policy over the decades has been an important driver of supporting more students from more varied backgrounds to access higher education, in particular for students from more diverse and disadvantage cohorts and communities.

The Universities Accord sets the framework for the future of Commonwealth policy and key targets for government and the sector to achieve.

The Accord aims to build a plan for expanding Australia's higher education sector and making it accessible, affordable and sustainable. This includes ambitious targets to increase the number of places in tertiary education:

- Lifting the tertiary attainment rate of all working age people (with at least one Certificate III qualification or higher) from 60% currently to at least 80% by 2050
- Increasing the proportion of university educated Australians aged 25 to 34 from 45% currently to 55% by 2050
- To achieve this increase, the system will need to more than double the number of Commonwealth supported students in universities from 860,000 currently to 1.8 million by 2050

It notes that existing participation is already very high in some cohorts and concludes that the additional growth must come from greatly growing participation among key equity cohorts, including:

- Regional and remote areas (as well as outer suburban areas)
- Lower socioeconomic cohorts
- First Nations people

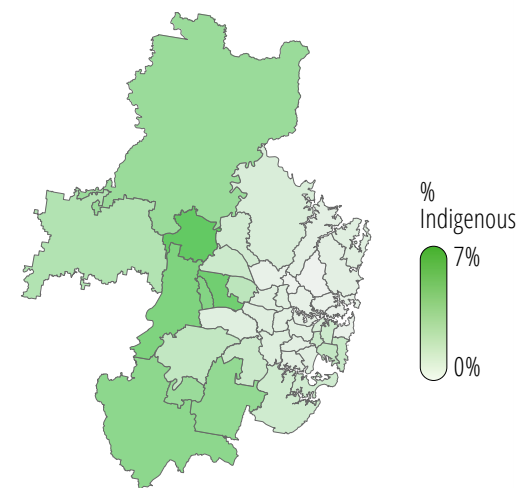
These key cohorts are prevalent in and characterise many households in Western Sydney.

Western Sydney is home to around 57,000 First Nations peoples, representing 7% of all First Nations peoples across Australia and around 20% of First Nations peoples in Greater Sydney.

Western Sydney is also home to a higher share of lower income households (22%), compared to Sydney city (16%).

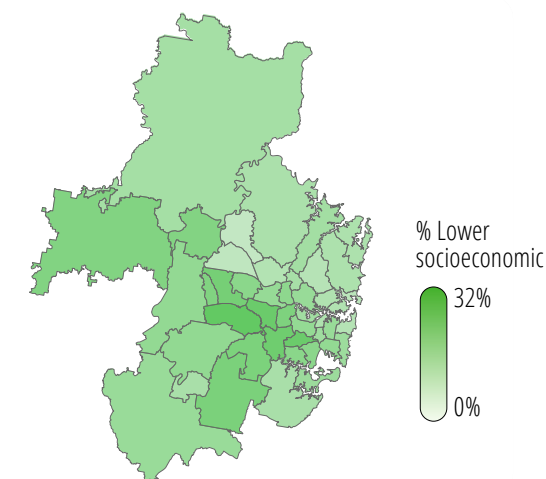
And beyond this, other key equity groups are also more likely to reside in Western Sydney, such as recent migrants, households speaking a language other than English, and children who may be their 'first in family' to attend university.

Figure 3.4: Share of Indigenous Australians by SA3



Source: ABS (2023)

Figure 3.5: Share of lower socioeconomic households by SA3



Source: ABS (2023). Note: Lower socioeconomic households defined by the bottom household income quartile.

Conclusion

Over recent decades, Western Sydney has grown with a scale and trajectory to become its own distinct economic region with – just like any other city across Australia – its own unique characteristics and traits.



The increased and ongoing investment by both government and business recognises the importance of this economic centre to the ongoing prosperity of the broader New South Wales and Australian economies.

While in more recent years, Western Sydney has been able to attract major assets (such as airports and hospitals), and has seen both business and government shift services and workers to the west, there remains far fewer local options for on-campus study, relative to the rest of Sydney and other Australian cities.

This report presents an analysis of the future demand for higher education from Western Sydney and expectations for significantly more demand for study at university.

Growth in local businesses for Western Sydney will see jobs for 628,000 more workers (between 2023 and 2050), of which 278,000 will need to be highly skilled and trained. In capitalising for this growth and supporting the broader economic vision for Australia for a more sophisticated economy and skilled workforce, there will be a need to support local learners to study and train in their local community to support employment within Western Sydney – this will underpin demand for up to 264,000 student enrolments from Western Sydney each year by 2050.

In particular, there will be increasing demand for more qualified workers in key technology, health and engineering roles. Ensuring local access and choice to a range of high quality post-schooling experiences in

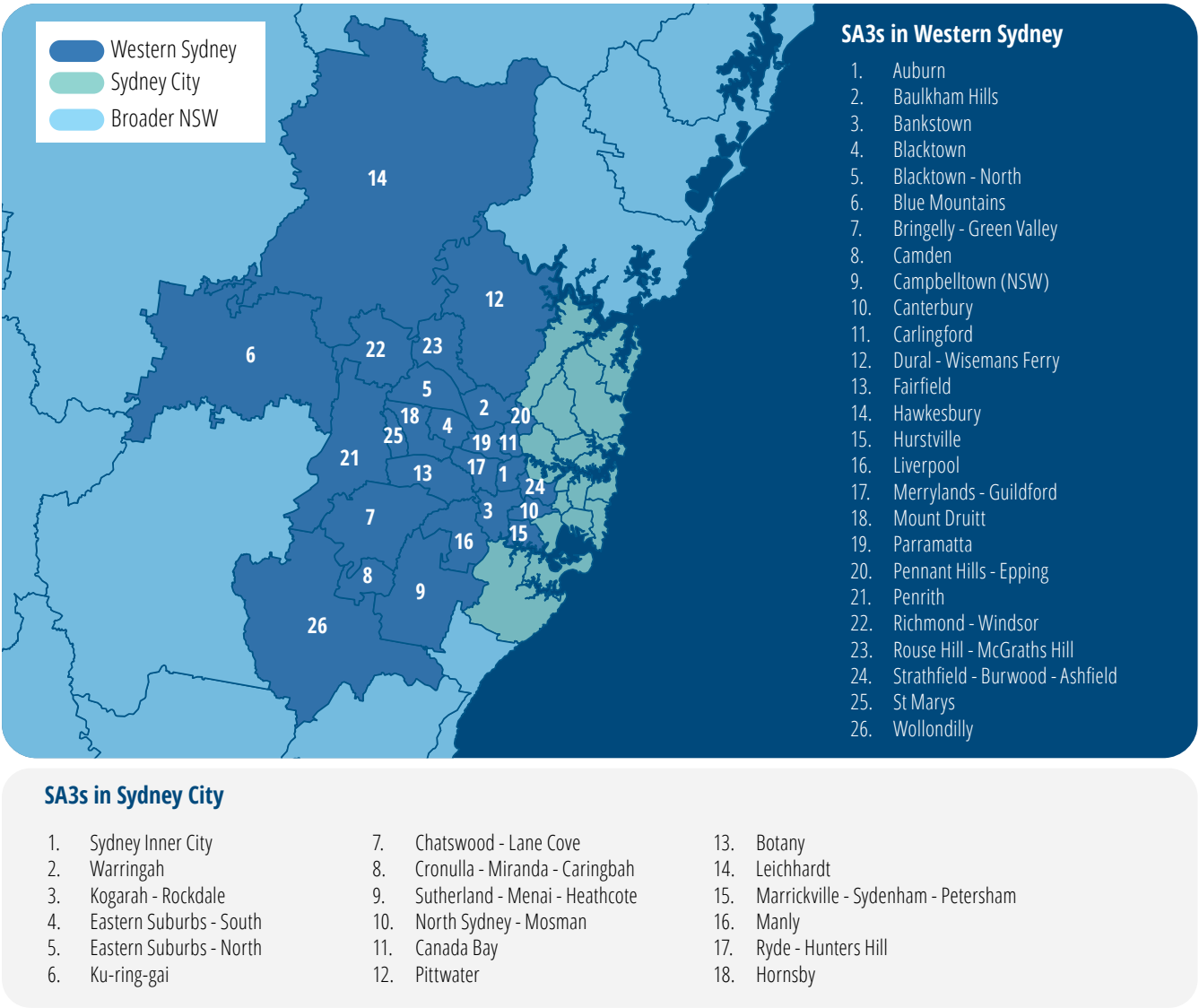
both educational attainment and skills development will be important for underpinning a prosperous and productive Western Sydney.

Meeting the rising and changing nature of higher education demand in Western Sydney is not a mere incremental policy challenge or regional equity issue. It will require a rethink of what education is needed for the jobs of the future and how it's delivered. It has the potential to deliver transformational economic and social outcomes for the region, but also contribute to a national dividend of higher living standards and a workforce that can help address the climate, technology and other demographic challenges the country will face.

Appendix A | Defining Western Sydney

Geographic boundaries for Western Sydney are often not consistently applied and can vary across contexts. This analysis defines Western Sydney by 26 ABS SA3 statistical regions (Figure A.1), which provides practical boundaries for forecasting demand. This definition was decided collaboratively with the University and is guided by the *A Metropolis of Three Cities* report by the Greater Sydney Commission. ABS SA3 regions are a commonly used structure by researchers and policy-makers. The remaining eastern areas of Greater Sydney are defined as 'Sydney City'.

Figure A.1: Defining Western Sydney by SA3



Source: Deloitte Access Economics

Appendix B | Informing the forecast scenarios and risks to growth

Broadly, this work was organised across two components: (1) A forecast exercise to *size the volume* of demand, and (2) A series of research exercises to *characterise the nature* of demand.

The **forecast exercise** seeks to understand how many individuals are likely to seek to study and is organised by the inputs, scenarios, research exercises and additional considerations in the schematic (Figure B.1).

Importantly, there are a range of risks to achieving this growth, in particular:

- Potential weakening of employer demand as a general trend that could dampen demand nationally. Businesses may hire from a broader labour pool, creating pathways that do not necessarily require higher education and placing more importance on mindsets, abilities and skills gained in life experiences.
- Potential weakening of student demand as a general trend in terms of the value proposition for individuals, but also in determining the ‘catch up’ rate informing Scenario 2. While there has been convergence between the west and the east, this could stagnate.
- Changing policy settings as an ongoing uncertainty, particularly given that undergraduate study is highly contingent on supportive government policy and funding settings. Moreover, the balance of demand and policy settings between vocational education and training and higher education is still to be seen with live policy reforms to tertiary education policy and better evidence required on the preferences of students and businesses in Western Sydney.

Figure B.1: Approach schematic for future education demand for Western Sydney



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