Contents

A message from the Minister for Urban Infrastructure 1
Western Sydney is growing 2
About Western Sydney Airport 3
Jobs in the construction phase 4
   The effect of indirect jobs 6
   When construction jobs will be needed 7
Jobs in the operation phase, 2031 8
Jobs in the operation phase, 2041 9
Where to from here? 11
   Industry Participation Plan 11
Getting the right skills 12
Further reading 14
References 15
A message from the Minister for Urban Infrastructure

Western Sydney Airport will be a game changer for jobs in Western Sydney. The airport will result in thousands of jobs for the region, and new economic modelling confirms that Western Sydney locals are well placed to benefit from these opportunities.

In the short term the majority of jobs generated by Western Sydney Airport will be in the construction sector. Electricians, builders, labourers, plumbers and engineers will be just some of the occupations that will benefit from the Government’s $5.3 billion investment in constructing the airport. Economic analysis shows that each construction job will generate another 2.5 flow-on jobs in supporting industries.

While the number of jobs during construction phase is significant, the even bigger prize will come once Western Sydney Airport is operational.

In the early 2030s there are expected to be over 13,000 direct jobs at Western Sydney Airport – and many more at the businesses attracted to the area. Airports are proven attractors of businesses. Already we have seen significant interest in investing near the Western Sydney Airport.

This document summarises the latest economic modelling and steps through the jobs required during construction and when the airport is operational, at 2031 and 2041. The modelling provides a snapshot of the benefits this significant Government investment in Western Sydney will provide.

To maximise these benefits, WSA Co, the Government-owned company building Western Sydney Airport, will set targets for local workers, apprentices and trainees, Indigenous people and other key groups.

Western Sydney Airport is a game changer for jobs and economic opportunity in Western Sydney. We can, and will, build a great airport. But we can do so much more too. I look forward to working with the people of Western Sydney to maximise this opportunity.

The Hon Paul Fletcher MP
August 2017
Western Sydney is one of the fastest growing regions in Australia and will continue to grow rapidly. With a population of around two million, Western Sydney would be Australia’s fourth largest city in its own right.

It is home to NSW’s two fastest growing areas – Bringelly and North Blacktown. This growth is expected to continue, with 65 per cent of Sydney’s population growth in the next 20 years expected to take place in Western Sydney. Infrastructure needs to be planned and built to meet the needs of the growing population.

But while Western Sydney is growing and emerging as a major economic region, the Western Sydney jobs gap continues to slide.

The region is experiencing a jobs shortage where over 300,000 people commute outside Western Sydney for work each day, meaning there are not enough jobs for the number of workers who live in Western Sydney. If things remain the same, this is predicted to grow to a jobs shortage of over 300,000 and around 490,000 people leaving the region daily in the next 20 years.

Western Sydney Airport will be a major generator of business growth and will attract investment to the region. The airport alone will support almost 28,000 direct and indirect jobs in Western Sydney by 2031 and nearly 120,000 in the long term. With the additional investment the airport will bring to the surrounding region, Western Sydney Airport will be a major catalyst to create jobs and reduce Western Sydney’s job shortage.
About Western Sydney Airport

Aviation is important to the growth and prosperity of Australia. Businesses, tourists and residents rely on accessing fast, efficient aviation services. With a population of two million people, a further one million people are set to move to Western Sydney by the 2030s. It will be crucial for the people and businesses of Western Sydney to be connected to Australia’s aviation network.

Western Sydney Airport will be built on around 1,780 hectares of land at Badgerys Creek. Construction will start in 2018 and the new airport will open in 2026.

Stage 1 of the airport will have one 3.7 kilometre runway. It will be able to handle the full range of aircraft, including the Airbus A380.

Catering for up to 10 million passengers a year, the Stage 1 airport will include terminal and runway areas, as well as:

- cargo facilities;
- dedicated maintenance areas;
- a public transport hub;
- easy-access parking from the upgraded road network; and
- areas set aside for an onsite business park.

The airport will grow over time as passenger demand increases. This will include expanding the terminal and other facilities and building a second parallel runway (expected around 2050).

As demand for air travel continues to grow, Western Sydney Airport will cater for more than 80 million passengers a year in the long term.
Jobs in the construction phase

Western Sydney Airport will be a major source of direct employment for thousands of Western Sydney residents in a number of new sectors in the region.

The Western Sydney Airport project comes at a time when the Western Sydney economy faces a transition. Although manufacturing in Western Sydney is following national trends and is declining, the sector has traditionally been one of the region’s biggest employment sectors. This trend is set to change as construction ramps up on the airport site.

The total jobs needed during the construction phase is expected to be 11,346. Initially, the biggest need for jobs at Western Sydney Airport will be in construction, supporting over 4,400 direct and indirect jobs. Manufacturing (around 1,200 jobs) and retail (around 1,050 jobs) will continue to be significant employers at the airport and will support construction efforts and workers on site, as will the professional, administrative, transport and warehousing, and financial sectors (around 2,100 jobs combined).

The need for construction jobs at the airport will continue even when construction on the Stage 1 airport development winds down and the airport operations commence. As the airport grows over time, the terminal building and aviation support facilities will need to expand. Continual expansion of the airport will mean that construction workers will be needed on the airport site to help meet the demands of the growing airport.

In addition to ongoing construction needs at the airport, a number of NSW Government infrastructure projects, such as the planned Sydney Metro West and Parramatta Light Rail, mean that construction jobs would be available in Western Sydney well after initial construction on the Stage 1 airport is finished.

Understanding the terminology

Job numbers during the construction phase are referred to in terms of job-years. A job-year represents one full-time job supported for a full year. Instead of showing the number of individual people who will work in a specific sector, it is more accurate to present the number in job-years to better reflect the true amount of work needed on the airport’s construction.

Direct jobs are jobs directly on the airport site, such as construction workers and supervisors.

Indirect jobs are flow-on jobs that result from the needs of the workers and the resources required on the airport site, as well as the increased spending by these workers in the area.

Once the airport opens, jobs during operations are referred to as full-time equivalent jobs during the relevant year, i.e. 2031 and 2041.
Professional services during construction

In addition to the direct and indirect job needs of the airport construction, professional services will be needed to support the construction of the airport in sectors such as design, architecture and financing to a total of 3,910 jobs. The skills of workers in legal, engineering, accounting, IT, transport, architecture and design, and construction management sectors will largely be needed off site.

Number and proportion of direct and indirect jobs during the construction phase, in job-years, rounded to the nearest 50

Source: Western Sydney Airport Labour Market Analysis, Table 7
The effect of indirect jobs

The flow-on effect from a single direct job on the airport site will create an additional 2.5 indirect jobs down the supply chain. An extra 1.6 jobs would help deliver raw materials and provide services to support workers and construction on site, known as the industrial effect. A further 0.9 jobs—when workers on site spend money in the areas surrounding the airport site and in Western Sydney—would also be created, known as the consumption effect.

Flow-on (indirect) contribution as a result of a direct job

Direct employment + Industrial effect + Consumption effect = Total Employment Contribution

1 job + 1.6 jobs + 0.9 jobs = 3.5 jobs

An example of the industrial effect would be a transport business working elsewhere in Western Sydney supplying building materials to the airport. A consumption effect example would be when workers on the airport project use accommodation or eat at restaurants in the area around the airport site.

This increase in economic activity means a variety of jobs across all sectors will be needed during construction.

Number of direct and indirect jobs during airport construction in Western Sydney, in job-years

Source: Western Sydney Airport Environmental Impact Statement, Figure 24–1
When construction jobs will be needed

To give an idea of when jobs in specific construction areas will become available, it is useful to look at the job mix expected for construction on site. Site preparation activities, such as levelling the 22 million cubic metres of soil to make the airport site flat, will come first. Construction and engineering jobs for airport infrastructure will come after, including the construction of runways and roadways and building the terminal, business park and aviation support facilities.

Civil engineering encompasses design and construction activities. Contract administration and support services include a range of services to support the construction effort, including installation and finishing. Supervisory and management roles, as well as the construction of aviation terminals and buildings, are included separately.

Timing and number of direct construction jobs at the airport during the construction phase, in job-years

Source: Western Sydney Airport Environmental Impact Statement, Table 24–1
Jobs in the operation phase, 2031

Aviation-related jobs, such as pilots and crew, engineers and ground staff, will mean new jobs will arrive in Western Sydney. Aviation-related jobs, such as pilots and crew, engineers and ground staff, will mean new jobs will arrive in Western Sydney. The onsite business park will attract many different businesses into the area, servicing both the airport’s needs and enjoying nearby access to Australia’s domestic and international aviation network. People working in manufacturing (5,100 jobs), transport and warehousing (2,850 jobs), retail (2,550 jobs) and accommodation services (1,650 jobs) are all likely to benefit by being close to the airport.

Located near the airport site, the new Sydney Science Park at Luddenham has received planning approval from the NSW Government. Northrop Grumman, one of the world’s leading high-tech defence and aerospace companies, has also committed to establishing a presence near the airport and will need workers with skills in aircraft and systems maintenance.

Planning outside of the airport will mean the airport can both support the Western Sydney economy and operate efficiently. The NSW Government’s planning initiatives, such as the Western Sydney Priority Growth Area, are already encouraging new and exciting sectors to the area. These new sectors will translate into a range of new jobs becoming available.

Number of direct and indirect jobs during the operation phase in 2031 vs 2041

Source: Western Sydney Airport Labour Market Analysis, Table 7
Jobs in the operation phase, 2041

Jobs in the aviation sector will continue growing at the airport in its second decade of operation, with demand in the sector reaching around 12,900 jobs. As more kinds of businesses and sectors move into the business park onsite and into the surrounding area, the number of professional, scientific and technical jobs will increase from around 900 jobs in 2031 to around 5,600 jobs in 2041—over a 500 per cent increase in jobs in 10 years. These new sectors will be part of the diversity and mix of jobs contributing to the operation of the airport.

As the area around the airport grows and attracts more businesses and institutions, the proportion of retail jobs (at around 6,460 jobs) is expected to eclipse manufacturing to become the second largest sector after aviation. Manufacturing jobs will increase to 5,600 jobs—the same as professional and scientific jobs—as the airport grows to meet the needs of aviation activity by directly supplying airport users such as airlines and catering.

Number of direct and indirect jobs during the construction and operation phases, in job-years

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Jobs in the construction phase</th>
<th>Jobs in the operation phase, 2031</th>
<th>Jobs in the operation phase, 2041</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct jobs</td>
<td>3,231</td>
<td>13,169</td>
<td>24,046</td>
</tr>
<tr>
<td>Industrial effect</td>
<td>5,281</td>
<td>8,292</td>
<td>12,821</td>
</tr>
<tr>
<td>Consumption effect</td>
<td>2,834</td>
<td>6,486</td>
<td>10,607</td>
</tr>
<tr>
<td>Total</td>
<td>11,346</td>
<td>27,947</td>
<td>47,474</td>
</tr>
</tbody>
</table>

Source: Western Sydney Airport Labour Market Analysis, Table 6

Business park on the airport site

The business park on the airport site will complement airport operations and expand the range of employment opportunities. It is expected to house substantial office-based employment in professional, scientific and technical services, as well as the manufacturing industry. The diverse industry mix in the business park could also include wholesale trade, information technology and media services, retail, financial and insurance services, as well as education and training services.

Some 4,440 full-time equivalent jobs are expected in 2031 in the 191-hectare business park. As the airport grows, so too will the onsite business park. By comparison, the Norwest Business Park in north-western Sydney has an area of 221 hectares and accommodates over 20,000 workers, with plans to grow to over 35,000 workers.
Where to from here?

Western Sydney is well positioned to match the demand for jobs at the airport. Preparing, designing, building and operating the airport project will need workers across a diverse range of sectors, providing an important source of employment closer to where Western Sydney residents live. The airport and its business park will create opportunities for local businesses and workers.

For each of the job sectors identified, there will be a demand for both skilled and unskilled workers. In the construction phase, there will be a demand for around 190 architecture and building jobs, 235 jobs in engineering and related technologies, with information technology, management and commerce representing the next largest amount of workers.

Industry Participation Plan

A priority of the airport development is to engage and employ residents of Western Sydney so they can make the most of the job opportunities presented by the airport. Jobs at the airport will be made available to people in the surrounding area and in Western Sydney more broadly, ensuring support for the direct job needs onsite and the material needs of the airport construction and operation. Services to support the workers onsite will bring further benefits indirectly to businesses across Western Sydney.

Coordinating these opportunities will be critical to the airport’s success. The Government-owned company that will build the airport, WSA Co, will draw up an Australian Industry Participation Plan. The plan will address ways in which local employment and business opportunities can be maximised and must consider local industry participation in the development of the airport. Targets for local workers, apprentices and trainees, and workplace diversity will also be set.

An equal opportunity policy that includes training and suitable employment opportunities for young workers, Indigenous people and people with disadvantages will also be implemented.
Getting the right skills

There is a challenge to ensure Western Sydney residents can be equipped with the right skills at the right time for the new job opportunities to come.

Broadly, a range of civil engineering, construction labour, management and supervisor, and administration jobs will be needed as soon as construction commences. Study or training through universities, TAFE or other vocational education institutions provides the knowledge and skills needed for the job opportunities to come in the construction of the airport. Studies in architecture, building and construction, engineering, IT, and management and commerce will also be useful to prepare for construction jobs.

NSW Infrastructure Skills Centre

To help build skills and opportunities for Western Sydney residents, the Australian and NSW governments have opened Australia’s first one-stop shop for infrastructure jobs and skills training to meet the demands of large infrastructure projects underway across Sydney, such as the airport and the Sydney Metro. In a partnership between the Australian Government, the NSW Government’s Sydney Metro and TAFE NSW, three Infrastructure Skills Centres in Annandale, Nirimba and Ingleburn will provide opportunities for residents in Western Sydney and beyond to receive quality training to meet the job needs of Sydney’s infrastructure projects.
Further reading

A range of reports and analyses have been undertaken to inform the development of Western Sydney Airport. The following documents are available online at www.westernsydneyairport.gov.au.

The Environmental Impact Statement (EIS) is a comprehensive study of the environmental, social and economic impact Western Sydney Airport would have on the airport site and the surrounding area. Finalised in September 2016, the EIS draws on a number of specialist studies and site investigations undertaken as part of the environmental assessment.

The Airport Plan sets out the vision for the airport and provides detail on the concept design of the airport. The Airport Plan was determined in December 2016. More than 40 strict environmental conditions have been placed in the Airport Plan. These conditions must be complied with in the development of the airport.

The Western Sydney Airport Labour Market Analysis, conducted by consulting firm EY, provides a deeper understanding of what job opportunities will look like during the construction phase, five years after opening in 2031, and 15 years after opening in 2041.

The development of Western Sydney Airport has also generated much discussion at Western Sydney institutions. Western Sydney University discussed employment in the region in its report Addressing Western Sydney’s Jobs Slide available online at www.westernsydney.edu.au.
References
