

ITEM 9 DRAFT ECONOMIC DEVELOPMENT STRATEGY 2019-2029

A review of the Economic Development Strategy 2013-23 commenced in October 2018. This review has resulted in the Draft Economic Development Strategy 2019-2029, which is now ready to go on public exhibition.

RECOMMENDATION

Council approve the Draft Economic Development Strategy 2019-2029 to be placed on public exhibition from 29 May 2019 to 26 June 2019 (28 days).

REPORT AUTHORISATIONS

Report of: Sue Savage, Manager Community Cultural and Economic Development
Authorised by: Kerry Hunt, Director Community Services - Creative and Innovative City

ATTACHMENTS

- 1 Draft Economic Development Strategy 2019 - 2029

BACKGROUND

The Economic Development Strategy 2013-23 was identified for review in the current financial year. This Strategy has delivered a range of outcomes for the city including:

- Historically Wollongong has had an unemployment rate well above the NSW average. However, in September 2018 this had fallen to just 4.6%, below the NSW average of 4.8%;
- Over \$1.4 billion in investment has been attracted to city centre projects in the last six years;
- The economy has continued to diversify;
- Advantage Wollongong has attracted significant new businesses to the region;
- Over 80 small cafes and bars have opened in Wollongong;
- Streamlining of the major events process has resulted in attracting significant events such as the World Cycling Championships;

To continue this success, the draft Economic Development Strategy 2019-2029 has three goals.

- 1 Jobs target – generate 10,500 new jobs in the next decade to reduce the jobs deficit. This will be more than double the 4,998 net new jobs created in the decade to 2018;
- 2 Lifting median incomes – focus on generating new jobs in industries that are higher-paying, have a greater share of full-time jobs and are expected to grow in the future;
- 3 Targeted sectors align with talent pool – align the target industries with Wollongong’s existing talent pool, in particular commuters and graduates of the University of Wollongong, to create more local job opportunities for residents.

These goals will be achieved via Council working with other stakeholders to deliver key ‘game-changing’ projects and by the implementation of an Action Plan.

Game-Changers

These are major projects that could make a substantial difference to the economic environment of Wollongong and which Council will need to collaborate with multiple regional stakeholders in order to deliver, such as:

- 1 Critical transport projects;
- 2 Western Sydney Aerotropolis;

- 3 Increase office capacity in city centre;
- 4 Develop under-utilised/under-developed lands;
- 5 Attract more major events and tourism infrastructure;
- 6 Completion of Australian Industry Gas Terminal project;
- 7 Establish City Centre University Campus;
- 8 Delivery of Port Kembla as a container port;
- 9 Further evolve as a Smart City;
- 10 Improve effectiveness of advocacy.

Action Plan Areas Identified

These are the policy levers that Council can adjust within its own operations, divided into seven broad areas:

- 1 Civic Leadership;
- 2 Business Attraction;
- 3 Knowledge Hub;
- 4 Infrastructure;
- 5 Planning;
- 6 Business Support;
- 7 Operational Procurement.

PROPOSAL

This report seeks approval for the Draft Economic Development Strategy 2019-2029 to go on public exhibition from 29 May 2019 to 6 June 2019 (28 days).

CONSULTATION AND COMMUNICATION

Extensive consultation with business and government stakeholders has been undertaken to develop this Strategy. This includes establishing a reference group of key external agency representatives, meeting with key peak bodies and organisations, conducting a business survey, hosting an investor roundtable, internal staff workshops and meetings and three Councillor Briefings. The continual feedback from all these consultations has been incorporated as the Strategy has been developed.

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Our Wollongong 2028 Goal 2 – We have an innovative and sustainable economy.

It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2018-2021	Operational Plan 2018-19
Strategy	3 Year Action	Operational Plan Actions
2.1.3 Cross-sector initiatives are coordinated and implemented to increase and attract business investment, supporting small businesses and encouraging jobs growth.	2.1.3.1 Support regional activities and partnerships that promote business investment and jobs growth.	2.1.3.1.1 Review the Economic Development Strategy 2013-23.

RISK ASSESSMENT

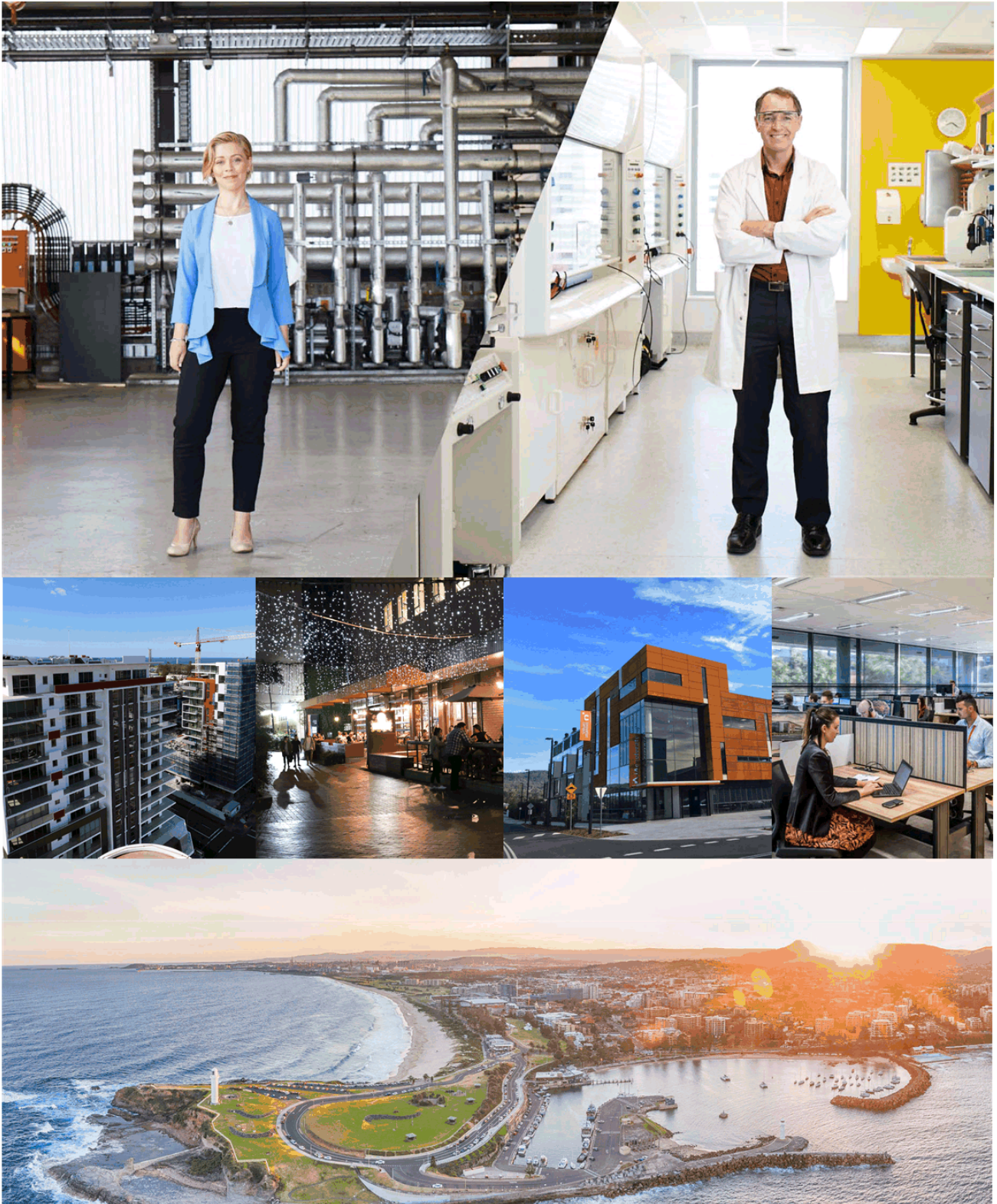
An economic development strategy demonstrates Council's commitment to working with local businesses and the local community to support them in creating more local jobs.

FINANCIAL IMPLICATIONS

Unfunded actions will be considered as part of Council's annual budget planning process. Actions that are funded by current budget allocations will be included in Council's Annual Plan and Delivery Program. Council may seek external funding to deliver actions in the Strategy.

CONCLUSION

The purpose of economic development strategies is to alter the trajectory of employment growth and improve the jobs outcomes above a 'business as usual' trend. Evidence shows that a committed community of private and public sector participants can have an impact.



**Economic
Development Strategy**
DRAFT
2019 - 2029

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Message from the Lord Mayor

I'm pleased to present this Economic Development Strategy 2019 – 2029.

This Strategy builds on the successes and learnings of the 2013 – 2023 Economic Development Strategy. Since 2013, Wollongong has successfully reinvented itself into a service based economy.

Looking ahead this updated Strategy proposes a number of actions to support an innovative and sustainable economy in the city.

The strategy is based on our learnings from the previous Strategy, research into best-practice approaches from other local governments, extensive consultation with



“The strategy proposes a jobs target of 10,500 new jobs over the next ten years.”

key stakeholders and modelling of the projected future growth trajectory of local jobs.

The key theme running through the document is a renewed focus on increasing the number of high-quality jobs in Wollongong. This objective to increase the opportunity for local people to work closer to home will have positive flow on effects such as reducing the individual cost of commuting and helping build a more connected and engaged community.

The Strategy proposes a jobs target of 10,500 new jobs over the next 10 years. This is almost double the amount achieved over the past decade. This may seem ambitious but we believe the actions outlined in the document will provide us with the necessary framework to achieve this positive outcome for Wollongong. The strategy is particularly targeting knowledge-based jobs, to capitalise on the highly skilled talent pool Wollongong has in these areas.

There are a range of ways Council can directly support the growth of our local economy. These policy levers include our local planning policies, local infrastructure, business support and attraction, how we procure goods, sharing of information and our civic leadership and advocacy role.

However, this strategy cannot be achieved by Council working in isolation. In order to achieve our goal we will need the support of both the business community and other levels of government. We will all need to work together to continue to grow Wollongong's local economy and increase employment opportunities for the people of Wollongong and the broader Illawarra region.

Collaboration is vital for our success and this Economic Development Strategy 2019-2029 provides a strong framework for us to work with our key partners.



Executive Summary

The future of Wollongong's economy is not set in stone. The purpose of economic development strategies is to alter the trajectory of employment growth and improve the jobs outcomes above a 'business as usual' trend. Evidence shows that a committed community of private and public sector participants can have an impact.

This Economic Development Strategy ('the Strategy') focusses on the key challenge of creating more jobs in Wollongong. This will both support a more sustainable local economy and build stronger community connections. The central objective of the Strategy is to create an additional 10,500 new jobs in the decade to 2028.

As the regional capital of the Illawarra, Wollongong plays an important role in providing employment opportunities for both residents of Wollongong and the surrounding region. Wollongong provides jobs for 43% of employees from Shellharbour and 23% from Kiama. This role as the regional capital reinforces the need for Wollongong to increase its job generation capability, for the benefit of both residents of the Wollongong Local Government Area (LGA) and residents of the broader Illawarra region. In addition, more than half (60%) of the total value of economic activity (as measured by Gross Regional Product) in the Illawarra occurs within the Wollongong LGA.

In the last decade Wollongong has transformed into a service-based economy, largely focussed on delivering household services. This shift towards services is an Australia-wide trend, but the adjustment has been more dramatic in Wollongong than other locations, as a result of an estimated 6,000 local job losses in the manufacturing sector between 2007 and 2018. This inevitably constrained Wollongong's overall jobs growth, which averaged only 0.5% per annum over the last decade. This was below both regional NSW (0.9%) and Greater Sydney (2.1%).

In the last three years Wollongong has made considerable progress in lowering its unemployment rate. In the three years to 2017-2018, jobs growth averaged 2.1% per year. Subsequently the unemployment rate has fallen to 4.6% (as at September 2018). This result is below the NSW average of 4.8% which is only the second time in the last decade that the Wollongong rate has been below the NSW rate.

But these headline figures and positive trends do not tell the full story about the Wollongong labour market.

Research undertaken by .id indicates the local economy is not generating enough jobs to give all employed residents the opportunity to work locally. This is called a jobs deficit. Without intervention, this deficit is set to continue to grow with more residents needing to leave the LGA for work.

Research also identified that the industry composition of jobs in Wollongong has shifted, which has been a drag on median income growth. Industries that have seen the largest jobs gains are largely lower paying and have more part-time employees. Meanwhile, the industries that have seen the biggest job losses are largely higher paying and have more full-time employees.

The jobs deficit has added to the commuter pool over time, with 33% of residents leaving the LGA for work in 2016. Many of these employees are highly skilled and are often higher paid than local employees. For example, in 2016, 36% of the residents who left the LGA for work were earning \$1,500 or more per week, compared to only 24% of those who worked locally. The other talent pool of the city is the students of the University of Wollongong (UOW), more than half of whom leave the area when they graduate due to a lack of local employment opportunities. Based on these identified trends and challenges, this Strategy sets three strategic objectives.

These objectives are:

1. Jobs target – generate 10,500 new jobs in the next decade to reduce the jobs deficit. This will be more than double the 4,998 net new jobs created in the decade to 2018.
2. Lifting median incomes – focus on generating new jobs in industries that are higher-paying, have a greater share of full-time jobs and are expected to grow in the future.
3. Targeted sectors align with talent pool – align the target industries with Wollongong’s existing talent pool, in particular commuters and graduates of the UOW, to create more local job opportunities for residents.

Based on this analysis the following sectors have been identified as **target sectors** for future growth as part of the jobs target process. There is a particular focus on the knowledge economy.

- ICT/Tech
- Financial and Insurance Services
- Professional, Scientific and Technical Services
- Public Administration and Safety
- Electricity, Gas, Water and Waste Services

These sectors are broadly aligned with those identified by Wollongong’s existing business attraction agency, Advantage Wollongong. Advantage Wollongong is a partnership between Council, the NSW Department of Premier and Cabinet and the UOW. Since 2009 the partnership has focussed on promoting Wollongong to attract new business, investment and jobs.

Additional sectors targeted by Advantage Wollongong include:

- Advance Manufacturing
- Defence
- Health and Wellbeing
- Scale-ups

Going forward, there are multiple mechanisms that will be employed to achieve the strategic objectives.

Firstly, the Strategy identifies a number of game-changing projects that, if delivered, would have a positive impact on the local economy and employment. Council will support and advocate for these, working with key partners and stakeholders, along with both State and Federal Governments, to bring these major projects to reality.

The **game-changing** projects include:

- Critical transport projects to reduce the travel time between Wollongong and Sydney
- Capitalising on the growth of Western Sydney and the development of the Aerotropolis
- Increases to the office capacity in the Wollongong City Centre
- Development of unused and underutilised employment lands
- Attraction of more major events and tourism infrastructure
- Completion of the Australian Industrial Gas Energy Terminal Project
- Establishment of a city centre university campus
- Delivery of the Port Kembla container terminal project
- Further evolving as a smart city
- Improving the effectiveness of our advocacy

Secondly, Council has a number of **policy levers** that it can directly change to increase the city’s employment generating capacity.

- Civic leadership
- Business attraction activities
- Acting as a knowledge hub for businesses
- Council-funded infrastructure projects
- Local planning policies
- Business support activities
- Council’s procurement policy

In summary, the Strategy requires an interventionist approach to economic development, seeking to change the job growth trajectory by undertaking and promoting a series of policy changes and actions to improve the job generating capacity of the local economy.

Delivering more local job opportunities in higher paying jobs is critical to support Council’s main economic goal of having an innovative and sustainable economy.



Part 1 Strategic Context

Economic Development Strategy 2013/2023

On 17 February 2014, Wollongong City Council released the Economic Development Strategy 2013-23, which outlined the key priorities, goals and actions of Council to support economic activity in Wollongong.

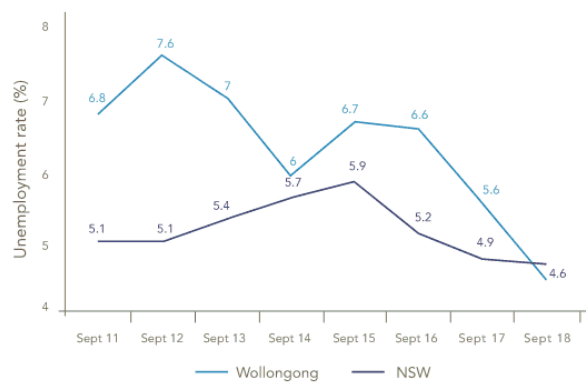
The Strategy is a supporting document for Wollongong City Council's 2028 Community Strategic Plan. The Strategy is focussed on Goal 2 - We have an innovative and sustainable economy.

The Economic Development Strategy 2013-2023 identified six ways Council can influence economic growth across the city.

1. Civic leadership
2. Marketing activities
3. Knowledge hub
4. Infrastructure
5. Planning
6. Business support

The focus of the Strategy was on lifting employment growth and jobs creation, including:

- Bringing the unemployment rate in line with the state/national average, including Wollongong's higher rate of youth unemployment.
- Reducing the number of people forced to commute each day.
- Reducing the 'brain drain' encouraging our best and brightest young people to remain in the region after graduating from their studies.



Source: Small Market Labour Force; ABS data

Fig 1: Unemployment rates, Wollongong LGA & NSW, 12-month average, September Quarter 2011 - 18

Since 2013, Wollongong has made considerable progress on addressing its unemployment rate. Historically, the unemployment rate has been stuck around 2 percentage points above the state-wide average. In recent years, this gap has closed with Wollongong's unemployment rate, as at September 2018, at 4.6% compared to the NSW average of 4.8% (See Fig 1).

Improvements have also been recorded around youth unemployment. In 2017-18 the Illawarra's youth unemployment rate was 10.6%, down from 12.9% in 2016-17 and is now broadly in line with the NSW average of 10.4%.¹

In contrast, the proportion of Wollongong residents leaving the region for work has risen slightly over recent years. In 2016, 33% of employed residents left Wollongong for work, up from 27% at the 2011 Census. These residents are largely travelling to the Greater Sydney area.

There is also a need to remain focussed on addressing the 'brain drain'. The share of graduates from the UOW staying in the Illawarra region after completing their studies is estimated to be 41%.²

Key Successes

The 2013-23 Strategy was accompanied by an Action Plan, which included a series of 24 discrete actions, some short term and others ongoing longer term advocacy actions. To date, eight of these action items are already complete. The majority of the remaining actions are longer term advocacy and lobbying items which will continue into the future.

Achievements under the Economic Development Strategy 2013-23 include;

- Ongoing promotion of Wollongong as a superior business location through Advantage Wollongong
- Attracting over \$1.4 billion in investment for city centre projects in the last six years
- Establishing Boxing Day trading in Wollongong LGA
- Joining the NSW Government's Small Business Friendly Councils program/Easy to do Business
- Establishing a dedicated Small Business Assessment team
- Streamlining major events process in place
- Introduction of online application and payment process for outdoor dining
- Establishing an online Wollongong Economic Profile
- Completion of Crown Street Façade Rejuvenation Program
- Implementation of WiFi in the Wollongong City Centre
- Bi-Annual Investor surveys undertaken
- Completion of City Centre Revitalisation Strategy
- Adoption of Evening Economy Action Plan with over 80 small bars and cafes opening in the city centre since 2012-2013



Consultation

As part of developing this Strategy we spoke to a broad range of stakeholders about how Council could lift local job creation.

These consultations, together with the development of the jobs target and extensive research into best practice policy, resulted in the development of a list of actions Council will undertake as part of its contribution to the

10,500 jobs target.

Who we spoke to and what they said

The development of this Strategy included engaging with multiple stakeholders who were able to provide their expertise and insights into the future economic direction of Wollongong. The consultation process covered a range of different approaches from meeting with small groups of interested parties through to conducting a major business survey.

This consultation included establishing a Reference Group of local business and government representatives to guide the development of the Strategy and provide expert advice and feedback.

Full details regarding the consultation and engagement program can be found in the supporting Community Engagement Report – a summary is provided here.

In all, we met directly with over 130 stakeholders and engaged, via a business survey, with almost 300 (predominantly small) business owners.

In addition to these direct engagements we read, reviewed and incorporated over 60 reports including economic development strategies from other Councils and other research papers.

The initial consultation activities, done while the Strategy was being developed, are summarised in Table 1.



Table 1: Initial consultation activities

Engagement type	Details
Reference Group	<ul style="list-style-type: none"> • Adele Fiene, ANZ • Jim Fraser, Illawarra Shoalhaven Joint Organisation • Kirstan Fulton, NSW Department of Premier and Cabinet • Michelle Guido, Property Council of Australia, Illawarra Chapter • Jonas Marcelo, Innovation Campus • Nigel McKinnon, NSW Department of Premier and Cabinet • Debra Murphy, RDA Illawarra • Adam Zarth, Illawarra Business Chamber <p>Met four times during development of the Strategy</p>
Industry groups and peak bodies	<p>Engaged with the following peak bodies:</p> <ul style="list-style-type: none"> • Illawarra Business Chamber • Property Council of Australia, Illawarra Chapter • RDA Illawarra • Destination Wollongong • Urban Development Institute of Australia • i3Net
Business survey	Survey sent to 5,000 local businesses - 292 responses
Investor/developer community	Roundtable held with key commercial investors in the city centre
Start-up community	Discussions with the start-up/scale-up community for perspectives from new businesses in Wollongong
Council staff	Two workshops providing opportunity for staff to have input into action items development
Councillors	Two briefing sessions for Councillors
Other levels of government	Engaged with surrounding LGAs and NSW Government representatives
Other organisations	Engaged directly with NSW Ports, UOW, local Chambers of Commerce



Two of the biggest external consultations we held were a business survey and an investor roundtable.



Business Survey

In December 2018 Council conducted a survey of 5,000 businesses in the LGA to gather their ideas about how Council can support them to create employment.

This survey generated 292 responses and provided valuable insights into their experiences around interacting with Council, what is done well and what areas need extra attention.

The top five industries respondents operated in were:

- Professional and technical services (22.2%)
- Wholesale and retail trade (11.1%)
- Construction (10.7%)
- Health Care (9.7%)
- Financial Services (8.0%)

Who participated?

Most respondents to the survey were micro-businesses who employed less than five people. Almost a third (32.8%) of respondents were sole traders and a further third (32.8%) employed between one and four people. Only 8.5% of respondents had more than 20 employees.

Business Survey Results

Main challenges



Rising input costs eg energy, supplies



Inability to pass on rising costs to customers



Time pressures. There is no time to think about my business and plan



Finding suitable staff



Rising wage costs

How can Council best assist your business?

We asked respondents for three areas Council could best assist their business.

The top five responses were:



Planning
Faster DA approval times



Procurement
More support for local businesses



Red tape
Less paperwork to complete when dealing with Council



Streetscape
More resources for improving public amenity



Marketing/Promotion
More promotion of the capabilities of the region and its businesses



Investor Roundtable

In December 2018 the Economic Development team and the City Strategic Planning team convened a roundtable of representatives from the Wollongong commercial property market. The purpose of this meeting was to discuss the challenges facing commercial development in the city. The key issues discussed included:

Tenant attraction issues

- A-grade occupiers, in particular State and Federal agencies, want 5 Star Green and NABERS (National Australian Built Environment Rating System) rated buildings. However current parking requirements make it harder to achieve these ratings.
- Major tenants want a minimum floorplate size of 1,000-1,200sqm so they can be on one floor which enhances the efficient operation of the business. From a commercial viability point of view, the ideal size of a building in Wollongong is 5,000-10,000sqm. A 10,000sqm building (1,200-1,500sqm floorplates) would require a site of at least 2,000sqm (using a 6:1 FSR).
- Tenants want certainty for when a project will be delivered.
- The current focus on private parking provisions for commercial buildings means less public parking is available outside business hours. Providing more public parking areas is critical.
- Reducing parking requirements was identified as the main measure that would improve the viability of commercial buildings projects.
- Tenants value buildings that have a good provision of public transport accessibility and high public amenity around the building.
- A-grade tenants do not want to be in a mixed use building.

Feasibility of commercial development issues

- There is a conflict between the feasibility of residential development, which significantly outweighs the investment return on commercial development.
- There is a risk of losing the commercial core to residential if the Local Environment Plan (LEP) is left unchanged, due to the current permissibility of shop-top housing throughout the commercial core. This challenge could be overcome with the establishment of a commercial only zone. Similar concerns were raised in a BIS Shrapnel study, Strategic Employment Review: Macquarie Park, which argued "The concern is that, by taking sites, residential development will limit the potential for commercial development when it becomes more financially feasible."³

Discussion around the Development Application (DA) process

- The timeframe for the DA process, so a project can be commercially viable, ideally needs to be 3-6 months.
- There is a need for greater engagement and dialogue throughout the life of the major project, not just at the pre-development/planning stage. This could be facilitated via a mechanism that expedites major employment generating projects to ensure the capacity to accommodate new jobs is delivered as soon as possible.

Other issues

- An opportunity exists for Council to leverage its asset ownership / tenancy in the city to deliver new commercial space in the CBD.
- Section 94 payments and heights are not seen as significant restrictions on commercial development.



Current State of Play

Before outlining the strategic objectives of this Strategy, it is useful to review the state of play as it relates to Wollongong, together with some of the challenges that need to be overcome. Wollongong has a number of advantages, including:

- The city's role as the regional capital and employment centre
- Wollongong's desirable liveability
- The large pool of highly-skilled potential employees including the commuter pool and UOW graduates
- Its world class industry-focussed research institutions
- Its proximity to Sydney and the international airport

There are also some challenges which Wollongong must overcome to improve the business and jobs creation environment. These include:

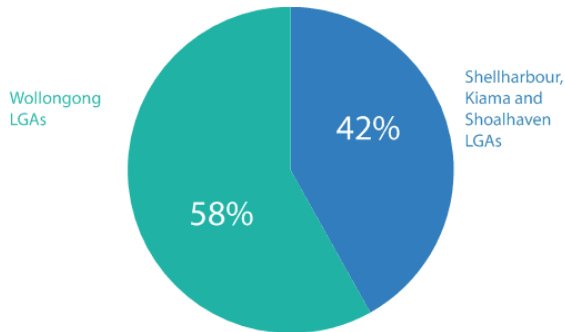
- Improving external perceptions of Wollongong
- Reducing the cost of commuting on individuals and the community
- Encouraging more innovation and entrepreneurship in Wollongong

Wollongong is...



The regional capital and
employment centre

Wollongong is the regional capital of the Illawarra. The size of the Wollongong economy is \$11 billion accounting for around 58% of the Illawarra regions \$19 billion economy (Fig 2).⁴



Source: NIEIR Data compiled by .id

Fig 2: Illawarra-Shoalhaven region, gross regional product, 2017-18

The importance of the Wollongong economy to the region is recognised in the Illawarra-Shoalhaven Regional Plan.

At the economic and cultural heart of the region is Metro Wollongong – a nationally significant city. Much of the future prosperity of the region will be built on the potential to generate jobs from the integration of education, health care, business and tourism precincts in Metro Wollongong.

Building a strong, diversified economy is a priority because it will enable the community to respond to environmental, economic and social challenges. A strong economy will generate the high-quality jobs that will retain and attract young people and university graduates. It will enhance the regions centres and public spaces and offer interesting cultural and recreational experiences that will increase the appeal of the region as a place to live, work and invest.⁵

Wollongong’s city centre and the immediately surrounding suburbs is a critical employment area. It is home to around 26,000 jobs which represents 29% of all employees in the LGA.⁶



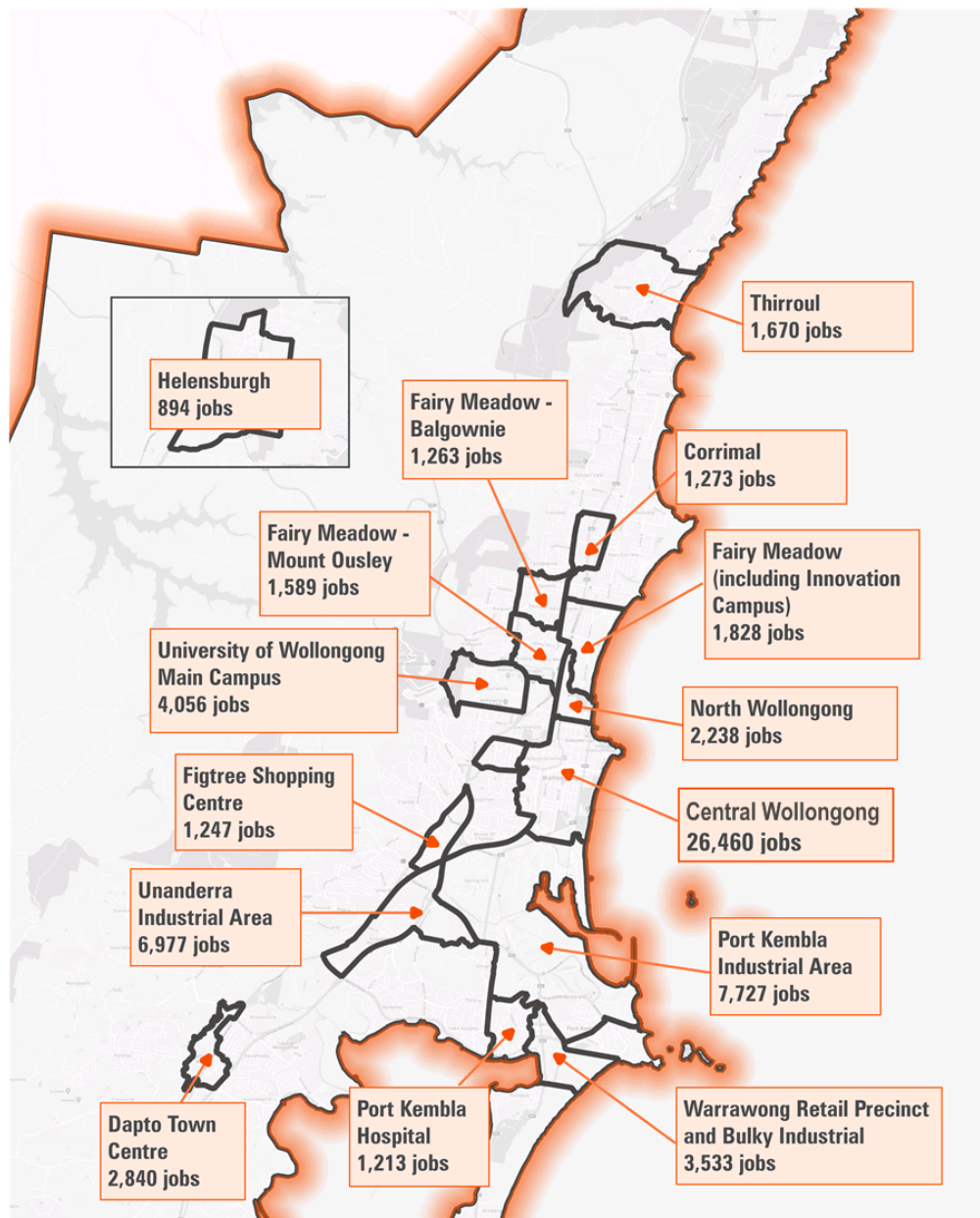


Fig 3. Key employment precincts, Wollongong LGA as of 2016

Fig 3 shows the key employment precincts across Wollongong LGA as at the 2016 Census and Fig 4 shows the change in employment in each area between 2011 and 2016.⁷ Central Wollongong is both the most important area in the LGA for employment and the

area that has experienced the largest jobs gains. This reinforces that strong employment growth in Central Wollongong has positive flow-on impacts for residents across the LGA and the broader region, providing them with local employment opportunities.

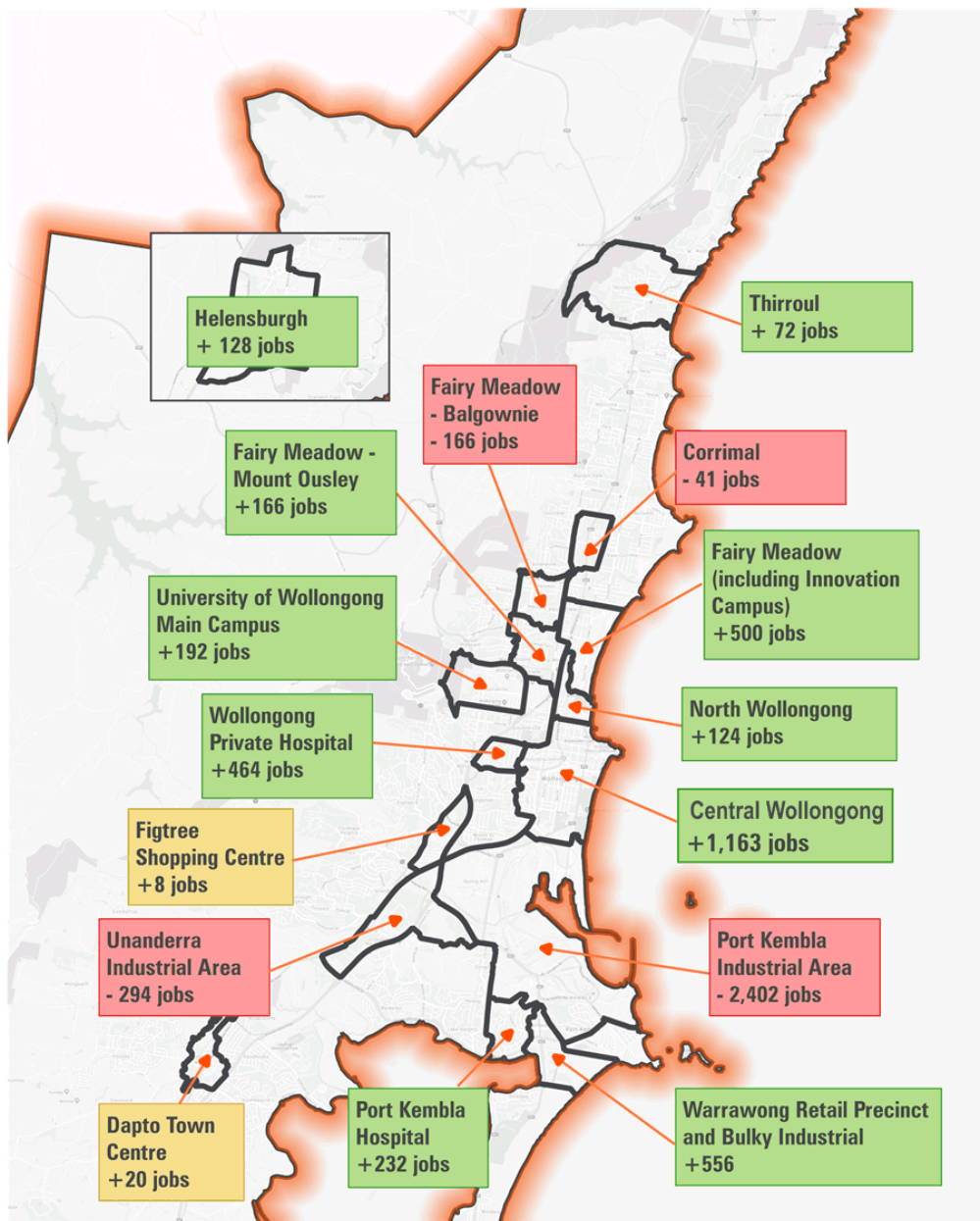


Fig 4: Change in job numbers by location, 2011 to 2016, Wollongong LGA

New developments in the Wollongong City Centre

Council has invested over \$30 million in upgrades to the city centre since 2012. Major projects include the Crown Street Mall revitalisation (\$20 million), Keira Street - Crown Street to Smith Street (\$4 million) and Crown Street West (\$1.5 million).

In addition, Council has also invested in ancillary city centre roadworks, car parks, bus shelters, drainage, lighting, events and traffic studies. Council has also invested \$40 million upgrading the city's foreshore from the Entertainment Centre to North Beach and Stuart Park.

Over the same period the city centre has seen \$1.4 billion in predominantly private investment since 2012. Major investments have included the \$268 million upgrade to Wollongong Central by the GPT Group; the new \$120 million Wollongong Private Hospital, operated by Ramsay Health Care; and the \$134 million expansion of the Wollongong Public Hospital.

There is currently 70,000 sqm of DA approved commercial space in the city centre, including the four largest office developments representing over 30,000 sqm in A-grade office space which could be completed within the next 24 months.

There is currently strong demand for commercial office space. The 2019 Office Market Report, published by the Property Council of Australia, found that there is currently a shortage of office space in the city centre. The vacancy rate for A-grade is low at just 1.4%.⁸

The city centre has seen a dramatic increase in demand for inner city living, with close to 1,500 dwellings forecast to be delivered between 2016 – 2021. This could increase the inner city population by around 80%.⁹ The city centre has also experienced a cultural renaissance with over 80 new small bars, eateries and cafes since 2012.¹⁰ It has a strong evening economy, attracting people to visit, socialise, eat and listen to live music.

Wollongong is also an important employment hub for residents of surrounding LGAs. Over 20,000 workers commute into Wollongong from other LGAs for work.

Over three-quarters (77%) are from the surrounding Illawarra-Shoalhaven LGAs with the remainder from Greater Sydney¹¹. This demonstrates that policies that support employment within Wollongong city centre, or more broadly Metro Wollongong, will deliver flow-on benefits across the LGA and across the Illawarra.



Fig 5: New Developments in Wollongong City Centre



A vibrant coastal city

The city boasts affordable living, a coastal lifestyle, a strong bar/café culture and quality infrastructure. Wollongong is located only an hour south of Sydney, and offers a great lifestyle close to the Sydney CBD without the congestion and high cost of living. Liveability is a key factor in Wollongong's superiority as a business location.

- Affordable living - Wollongong offers a generally lower cost of living, particularly with residential housing which is currently priced around 47% less than the Sydney median¹². Travel costs are also significantly lower due to reduced commuting times.
- Coastal lifestyle - Located immediately south of the Royal National Park, Wollongong's spectacular natural environment includes 17 patrolled beaches framed by the backdrop of the Illawarra escarpment, offering an abundance of recreational activities to enjoy. Wollongong is also known as an adventure city, with many high energy activities on offer for locals and visitors.
- Thriving arts, festivals, music, bar and foodie culture - Wollongong also attracts major concerts at its entertainment centre and hosts several music festivals.
- Quality public infrastructure – Wollongong has quality health infrastructure including a major teaching hospital and a number of private hospitals. Its education infrastructure includes a major TAFE institute and world-class university in the UOW.



Home to a large talent pool

Wollongong has a large, experienced, multilingual workforce with skills ranging from traditional manufacturing expertise through to creative industries and new economy digital technology based capabilities. This skill base is one of the key attraction for businesses considering locating in Wollongong.

Wollongong's local workforce is highly educated, with around two thirds of the workforce holding tertiary qualifications. This is on par with the NSW average in terms of post-school qualifications. Over a quarter (26.3%) of the workforce has a Bachelor degree or higher, a further 11.9% have an Advanced Diploma/

Diploma and 28.5% have a post-school Certificate qualification. Between 2011 and 2016 the number of people with a Bachelor degree or higher increased 18%.¹³

Around 23,000 residents across the wider Illawarra region travel to Greater Sydney for work, with a mix of skills in both white and blue-collar occupations. These skilled residents represent a talented pool of potential employees for any new business relocating to Wollongong.

Case study:

Wollongong's Knowledge Services Sector

Wollongong has a well established knowledge services sector, with approximately 6,000 people working in the industry across 85 locations in Wollongong. Major international and national corporations that are currently located in Wollongong include NEC, Mercer, SES NSW, PeopleCare, ahm, iag, ATO, Dept of Human Services, IMB, Stellar, Accor Hotels, Suncorp.

In 2018 Advantage Wollongong commissioned Fifth Quadrant to investigate the shared services capability of Wollongong and the financial benefit shared services firms can gain by relocating to Wollongong.¹⁴

The study found the operating costs of a 150 seat contact centre were considerably lower in Wollongong than in other comparable locations. The table below highlights the breakdown of costs for Wollongong versus three other metropolitan locations. Wollongong is the least expensive location with the lowest salary and real estate costs for an indicative 150 seat Knowledge Service centre operation, delivering savings in the range of 29% to 32% relative to comparable locations.

Table 2: Comparative operating costs for a 150 seat shared services facility

	Wollongong	Sydney CBD	Melbourne CBD	Parramatta
Total Salaries	\$7,090,000	\$9,640,000	\$9,635,000	\$9,640,000
Cost of Staff Turnover	\$64,615	\$211,010	\$211,010	\$211,010
Real Estate @ 1,750m2	\$700,000	\$1,750,000	\$1,225,000	\$962,500
Total	\$7,854,615	\$11,601,010	\$11,071,010	\$10,813,510
Being located in Wollongong would result in a saving to companies of		32%	29%	28%

In addition, the study found staff turnover rates are only 8% in Wollongong compared to 19% throughout Australia. The findings of this report have also been supported by real-world experiences from companies that have chosen to locate in Wollongong, such as Accelo.

"It's been awesome to be part of a global company having offices in San Francisco and Denver, while still being able to service the whole world from Wollongong. A huge advantage of being based in Wollongong is the talent pipeline coming from UOW has been really important to us"

- Eamonn Bell, co-founder of Accelo



A world-class research hub

UOW is a research-intensive university with an outstanding reputation across a broad range of disciplines.

UOW ranks among the top 2% of universities in the world with an enviable record in teaching and research. UOW has over 36,000 students, more than 2,400 staff and contributes around \$2 billion to the region annually¹⁵. These graduates are recognised for their capability, quality and success in the global workplace.

Graduates come from a range of disciplines, as outlined in Table 3.

Table 3: 2018 UOW Graduate Numbers

	Undergraduate	Postgraduate
Faculty of Business	795	585
Faculty of Engineering and Information Sciences	598	550
Faculty of Law, Humanities and the Arts	768	88
Faculty of Social Sciences	550	441
Faculty of Science, Medicine and Health	755	343

UOW is ranked in the top 1% in the world of universities for the quality of graduates in the 2019 QS Graduate Employability Rankings¹⁶.

UOW has been particularly successful with respect to Engineering & Technology which has a world ranking of 177, comfortably in the top 200 worldwide. At the subject level, Engineering – Mineral and Mining is ranked 17th worldwide for university courses in this discipline.

Research and industry collaboration

UOW has a strong research focus, with over 270 academic and research collaborations worldwide. The UOW Innovation Campus is a dedicated technology precinct where organisations can co-locate with leading research institutions and access an ecosystem to create connections, build networks and fast track their growth. UOW has an impressive track record in collaborating with industry to drive new products and processes, giving local companies a competitive edge internationally.

The links between business and researchers are further supported by Advantage SME, UOW's in-house industry matchmaker. Advantage SME helps businesses and researchers find their ideal partners and build beneficial relationships. Collaboration between UOW researchers and industry solves complex, real-world problems, helping businesses grow and prosper.

Fostering entrepreneurship

iAccelerate is UOW's business incubator and accelerator, dedicated to helping innovative businesses and start-ups build and grow, as well as support an innovative business culture in the region.

The iAccelerate 2018 Economic Statement showed iAccelerate has:¹⁷

- Delivered 517 new jobs to the region since 2012;
- Supported 74 companies in 2018 in a range of fields including tech, hardware, service, education, health, wellbeing and social; and
- Launched 210 new products and submitted 40 IP protection applications in 2018.

In 2019, iAccelerate has added short three day courses targeting businesses looking to improve their business planning processes and learn about entrepreneurial techniques. These are shorter versions of the full incubator program and are targeted at existing business owners looking to scale-up their businesses.

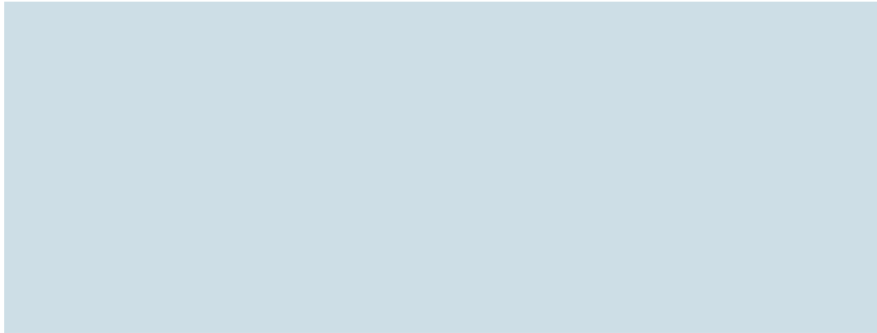
For technical skills, Illawarra TAFE has four campuses in Wollongong which delivers post-school education across a variety of industries and occupations including school-based training, short courses, certificates, diplomas and degrees.

Case study: SMART Infrastructure Facility

Established in 2011 by UOW, the SMART Infrastructure Facility brings together experts from fields such as transport, water, energy, economics and modelling and simulation and provides a state-of-the-art facility to support this important research.

The dedicated team of researchers tackle infrastructure issues from an integrated and multi-disciplinary perspective, with a focus on how infrastructure and social behaviour intersect to ensure more liveable cities and regions.

An international leader in applied infrastructure research, the SMART Infrastructure Facility is helping to address the challenges of infrastructure planning and management both now and into the future.



Close to Sydney and international connections

Wollongong is just one hour south of Sydney, Australia's largest city which means international airport connections are only an hour away at Sydney's Kingsford Smith Airport. Looking ahead, Wollongong is also only an hour away from the future Western Sydney Airport.

Wollongong needs to...



Change external perceptions

Advantage Wollongong is working to change outdated perceptions about Wollongong so that people understand the many benefits of locating a business in the city.

Advantage Wollongong is a partnership between Wollongong City Council, UOW and the NSW Department of Premier and Cabinet. The partnership has a long term, strategic approach to creating sustainable new jobs and productive investment for Wollongong achieved through the facilitation of significant new business investment projects.

Business Perceptions Study

In 2017, Advantage Wollongong commissioned IRIS to undertake a business perceptions study to assess perceptions of doing business and investing in Wollongong. Overall, the study identified external awareness of Wollongong as a place to do business is still generally weak. Wollongong was not on the

radar for most respondents. The study highlighted the outdated perceptions of Wollongong as a steel city and the associations with both ICAC and industrial disputes.

Strengths of Wollongong identified by the study included its proximity to Sydney, its great liveability, and UOW.

The findings of this study highlight the importance of the ongoing work being undertaken by Advantage Wollongong in changing perceptions and helping the business community to understand the many advantages of setting up in Wollongong.

Reduce the impact of commuting

Wollongong has a large commuter pool, with around 23,000 residents across the wider region travelling to Greater Sydney for work each day.¹⁸

On the one hand, the large commuter base means Wollongong has a high-skilled ready-made workforce for new or existing businesses to draw upon. It also means local residents can access jobs in Sydney that may offer higher levels of job satisfaction and/or salaries. On the other hand, this daily loss of talent from the region is associated with a number of negative externalities - including high economic and social costs borne by individual commuters, families and the broader community. Reducing the size of the commuter pool will also deliver a more connected and engaged community.

The undesirability of long travel times is well recognised by urban planners. For example, the Greater Sydney Commission's plan for Sydney is built around the idea of a '30 minute city'.¹⁹ This means most residents living within 30 minutes of where they work, access services and enjoy recreational activities. Most Wollongong residents already enjoy this lifestyle – but those in the commuter pool do not.

The concept of the 30 minute city is based on multiple studies (beginning with Yacov Zahavi²⁰ in the 1970s and built on by Cesare Marchetti²¹ in the 1990s) which found that over the entire history of cities people are willing to spend only up to an hour a day travelling for work (ie 30 mins each way). Initially this meant as far as someone could walk in 30 mins and then, as transport systems evolved, it shifted to as far as people could drive.

Beyond this 30 minute limit these studies observed fewer people were willing to travel for work. Having a large commuter base has a direct and immediate cost to the Wollongong economy. The salary of a commuter is still largely spent in Wollongong, where they live, on everyday household needs. But a commuter is more likely to also make purchases outside the region near their place of work, such as groceries and discretionary shopping, than a resident who also works in the Wollongong LGA.

But the real cost of commuting is the direct cost on the individual commuter such as the high social or health-based costs associated with long journeys to work. This includes a range of issues such as missing out on family time, sleep deprivation, lack of time for exercise/sport and a generally lower level of overall happiness and well-being (see case study).

There is also a broader community cost of having such a significant share of employees making long commutes for work. These people are not as available to participate fully in their local community through volunteering, participating in sporting clubs, community associations and cultural activities.

As a result of these high costs, regional planning strategies across the world place considerable focus on providing jobs close to where people live and reducing the burden of commuting.

Case study:

Cost of commuting: academic research findings

Examining the cost of commuting is an area that has been well researched by behavioural economists and psychologists.

A 2014 study by the UK's Office of National Statistics²², based on responses from a sample of 60,200 people to the Annual Population Survey, found significant impacts on the mental health of commuters compared to non-commuters.

The key findings of the study were:
Holding all else equal, commuters have lower life

satisfaction, a lower sense that their daily activities are worthwhile, lower levels of happiness and higher anxiety on average than non-commuters. The worst effects of commuting on personal well-being were associated with journey times lasting between 61 and 90 minutes. On average, all four aspects of personal well-being were negatively affected by commutes of this duration when compared to those travelling only 15 minutes or less to work.



Encourage innovation and entrepreneurship

Entrepreneurship

An emerging area of entrepreneurship in Wollongong is the growing start-up community, which often involves tech-based businesses. One way this has been encouraged is through programs such as iAccelerate. There has also been a less structured formation of new tech-based businesses that are choosing to locate in Wollongong, develop their ideas and solutions and then export them to the world.

This Strategy is not only about attracting new businesses to the region, but also wants to encourage more local residents to start a business, or encourage existing businesses to expand. Wollongong is lagging behind other LGAs in supporting entrepreneurship. Regional Australia Institute²³ research found that Wollongong has lower levels of business owner-managers, at 12.1%, versus 15.9% for regional NSW.

The Regional Australia Institute study findings are supported by a business survey conducted by Wollongong City Council which suggested even established businesses in the LGA are cautious when it comes to expanding their business.²⁴

The survey question, which received 248 responses, asked business owners about their plans for growing their business over the next year. Most (81%) said they were planning on either not growing their business at all (38%) or only modestly and without taking on risk (43%). Only 16% said they expected to experience strong growth (such as growing sales and workforce) and only 3% said they would aggressively grow their business (eg doubling the size of their workforce and turnover).

Innovation

Today in Wollongong, local business owners display high levels of innovation in their business operations. This was also highlighted by recent research by the Regional Australia Institute²⁵ which found, based on their matrix of innovation measures, that Wollongong ranked third out of 95 LGAs in regional NSW in terms of innovation.

Innovation can take many forms and does not need to involve a major change in operations. Finding new ways of completing an existing task is just as innovative as launching a completely new product. Innovation is significant because of the role it plays in driving productivity and lifting potential economic growth. One of the biggest influences on innovation in recent years has been the incorporation of digital capabilities into business operations.

In the last decade, there has been exceptional growth in the number of small, largely tech based, entrepreneurial ventures. These businesses seek to grow rapidly by utilising opportunities provided by lean methodologies, digital applications, decreasing barriers to entry, abundance of skilled labour, readily available Venture Capital funds (in some countries), and ready supply of low rent office space.

Recent Australian Government research (see case study) has also highlighted the benefits of having a business community, especially a small business community, willing to use digital-based innovation.

The Small Business Digital Taskforce released its report to the Australian Government in March 2018²⁶. This report recommended the establishment of an independent government-funded body to disseminate digital information, via trusted advisers, to small businesses about the benefits of going digital. The Taskforce found digitisation offers the best opportunity to lift productivity amongst small businesses.

Based on these findings, Wollongong's large base of SMEs (98% of all businesses) could stand to benefit substantially from taking their businesses digital, with flow-on impacts through the broader local economy. Council, along with other partners and independent government bodies, have an important role to play in assisting businesses to embrace greater digital transformation.

Case study:

Key findings of Small Business Digital Taskforce

Productivity enhancements associated with adopting digital technologies contributed over \$104 billion to Australia's GDP over the decade to 2014.

Those small businesses with advanced levels of digital engagement were 50% more likely to be growing revenue and 60% more likely to have more revenue per employee, than businesses with basic levels of digital engagement.

One third of their time – the amount of time the average Australian small business spends dealing with admin tasks

\$56 billion – amount of money wasted per annum by Australia & New Zealand businesses on unnecessary, time consuming admin tasks

81 – the number of working days per year the average small business spends on admin tasks





Strategic Objectives

Against the backdrop of these positive attributes and identified challenges for Wollongong, this Strategy is seeking to intervene in the current direction of the local jobs market to achieve three key strategic objectives.

1. **Jobs target** – generate 10,500 new jobs in the next decade to reduce the jobs deficit. This will be more than double the 4,998 net new jobs created in the decade to 2018.
2. **Lifting median incomes** – focus on generating new jobs in industries that are higher-paying, have a greater share of full-time jobs and are expected to grow in the future.
3. **Targeted sectors align with talent pool** – also align the target industries with Wollongong’s existing talent pool, in particular commuters and graduates of UOW.

This section outlines these objectives in detail, including the underlying economic data used to develop them.

Jobs target – 10,500 in ten years

The central objective of the Economic Development Strategy is to boost the number of jobs generated within the Wollongong economy which, in turn, will create more local job opportunities for the LGA’s residents. Lifting local employment opportunities will have a broad positive impact on the Wollongong community, both economically and socially.

As illustrated in Fig 1 (see page 8), there have been significant improvements in the unemployment rate in Wollongong in recent years. The challenge is to continue these positive improvements within a changing and volatile labour market.

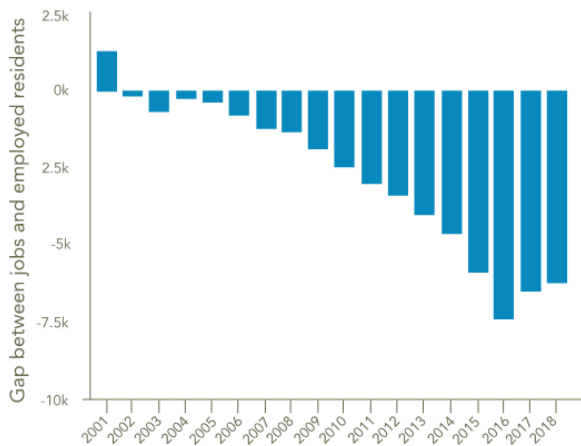
Not enough local jobs

Ideally, the Wollongong economy would generate enough jobs to give all employed residents the opportunity to work locally. Insufficient local jobs generation leaves some of our residents with no choice but to look outside Wollongong for work (details of the size and impact of the commuter pool are discussed on page 37).

Currently, there are 94,554 local jobs in the Wollongong LGA compared to 100,787 employed residents of Wollongong.²⁷

This gap between local jobs and employed residents, known as the jobs deficit, has been present since 2002. After peaking at 7,378 in 2016 (see Fig 6, page 32) this number fell to 6,233 in 2018.

Another way of thinking about the jobs deficit is the employment capacity of the economy. Currently, for every 100 employed residents in Wollongong there are 94 local jobs available.



Source: .id

Fig 6: Jobs deficit (local jobs v employed residents), 2000/01 – 2017/18

Manufacturing job losses

One of the main drivers in the Wollongong labour market over the past decade has been the decline in manufacturing employment. Manufacturing jobs effectively halved over the decade from just over 12,000 in 2007-2008 to around 6,000 in 2017-2018. This was triggered by workforce changes at local steel operations which then had flow-on effects throughout the supply-chain of the local economy, impacting engineering services firms which had businesses heavily geared towards servicing the city's major steel manufacturer. Manufacturing now represents just 6.6% of employment in Wollongong, which is only just above the NSW average of 6.5%. It remains, however, an important sector in terms of its contribution to the local economy and is still the largest export sector.

Jobs deficit still grows under 'business as usual'

.id was commissioned to undertake an assessment of the jobs deficit and provide analysis on the scope for improvement over the next decade.²⁸

Initially they estimated a 'business as usual' jobs growth projection, based on demographic and economic forecasts. Both the NSW and Australian economies are forecasting slower growth than has been experienced over the previous decade. Forecasts were then produced for how many jobs would be required to maintain the employment capacity ratio of Wollongong at its current level of 94 local jobs per 100 employed residents.

The final stage of the estimation then calculated the number of jobs that would need to be created to improve the employment capacity and make inroads into the jobs deficit.

Fig 7 is the business as usual scenario which shows, based on demographic trends and base-case economic forecasts, by 2028 there will be 109,510 employed residents of Wollongong for 100,359 local jobs. That is, the modest improvements in the jobs deficit of recent years is not forecast to continue, causing the jobs deficit to widen to around 9,000 and the employment capacity to fall to 0.92 (ie 92 local jobs for every 100 employed residents). This represents annual average employment growth of 0.6%, just above the 0.5% experienced over the past decade.

In short, this scenario would see Wollongong's resident workforce have proportionally fewer local employment opportunities than currently.

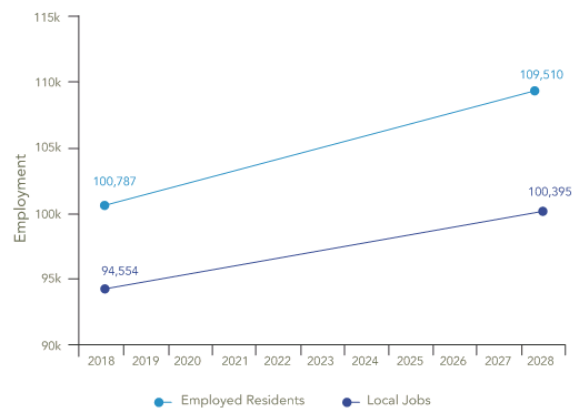


Fig 7: Business as Usual Employment residents V local job projections

Changing the jobs trajectory

The research concluded that, in order to improve Wollongong's employment capacity, the economy would need to grow local jobs by 10,500 over the next ten years (or 1.1% per year).

As shown in Fig 8, page 33 the Wollongong economy has created a net new 4,998 jobs in the ten years to the end of 2018 (or 0.5% per year). Under the business as usual scenario, outlined above, the number of new local jobs is projected to grow by 5,805 in the decade to 2028 (a growth rate of 0.6% per year). This equates to 92 local jobs per 100 employed residents.

If we were to aim to just keep the employment capacity at its current level of 0.94, we would need to create 8,184 local jobs in the next ten years. This would lift the annual average employment growth to 0.8%. To make inroads into the jobs deficit, and lift the employment capacity to 96 local jobs for every 100 employed residents, the Wollongong economy needs to create 10,576 jobs in the next decade. This would require lifting the annual average employment growth to 1.1%.

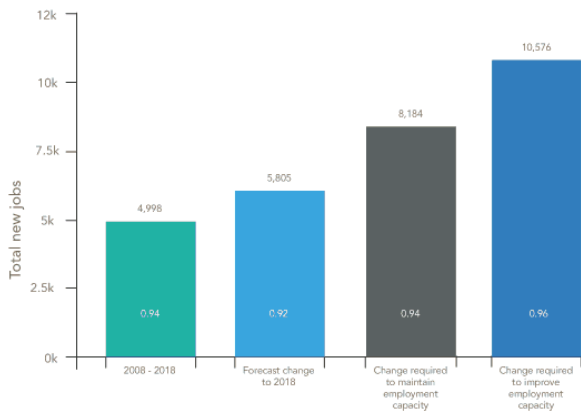
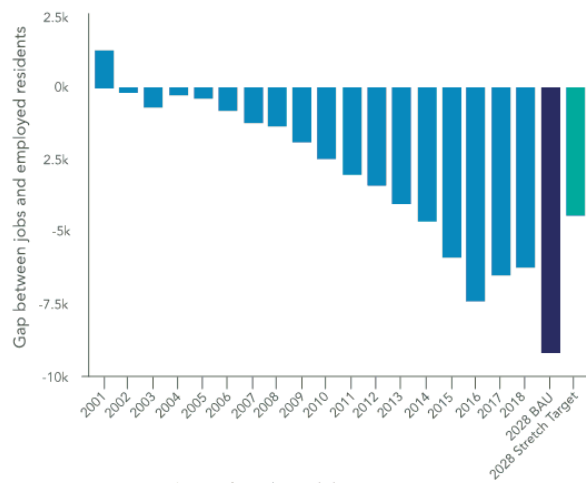


Fig 8: Jobs target and employment capacity ratios



Source: based on .id data

Fig 9: Impact of jobs target on jobs deficit

If achieved, this jobs target would have a significant impact on the jobs deficit. Fig 9 shows the two scenarios facing Wollongong in 2028. Under business as usual with no interventions, the deficit will widen to 9,151 (the navy column). If the jobs target is achieved then the jobs deficit will fall to 4,380 (aqua column) and be broadly in line with where it was in 2013.



Is such a turnaround possible?

This target of 10,500 is more than double the job creation results the Wollongong economy has achieved in the past ten years. Consequently, it is important to understand how achievable the jobs target is. We reviewed the performance of similar cities and regions in Australia to see if they had been able to achieve such gains and deliver growth in local jobs that was faster than growth in the employed residents of their city.

These findings are summarised in Table 4.²⁹

Table 4: Benchmark LGA Jobs Growth VS Employed Residents Growth, 2006-2018

LGA	Local jobs growth	Employed residents growth	Difference
Greater Geelong (C)	2.6%	2.3%	0.3%
Greater Bendigo (C)	2.1%	1.8%	0.3%
Cairns (C)	2.0%	1.8%	0.3%
Bathurst Regional (A)	1.3%	1.1%	0.1%
Tamworth Regional (A)	1.0%	0.9%	0.1%
Toowoomba (R)	1.5%	1.4%	0.1%
Ballarat (C)	2.2%	2.1%	0.1%
Sunshine Coast (R)	2.8%	2.9%	-0.1%
Townsville (C)	1.4%	1.5%	-0.1%
Newcastle (C)	1.6%	1.8%	-0.2%
Gold Coast (C)	2.6%	2.8%	-0.2%
Rockingham (C)	3.8%	4.0%	-0.2%
Orange (C)	1.1%	1.3%	-0.2%
Wollongong (C)	0.9%	1.4%	-0.5%

Benchmark analysis, Average annual growth in local jobs and employed residents, 2006 to 2018 Source: NIEIR, 2018

In short, there are a number of cities/regions across Australia which did grow local jobs faster than the growth in employed residents and thus narrowed their jobs deficit.

As an example, the City of Greater Geelong experienced similar falls to Wollongong in manufacturing employment during the last decade but managed to grow jobs faster than residents in key high-income professional areas. This was largely due to focussed public investment at a state and federal level that contributed hundreds of millions of dollars in new

office construction during this period and almost 2,000 ongoing white-collar jobs.

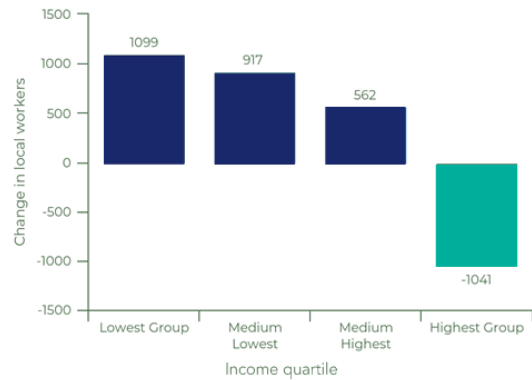
In addition, the Wollongong economy is unlikely to face the strong headwinds of the manufacturing job losses of the previous ten years. If manufacturing job losses are excluded, Wollongong's local jobs growth would have averaged 1.3% per year between 2008 and 2018. This makes the 1.1% annual jobs growth required to reach the jobs target look more achievable, even taking into account the slowdown in macro-economic projections that are forecast until 2028.

Lifting median incomes

This Strategy also seeks to improve median incomes across the LGA, which will have a direct positive impact on residents. Consequently, we are targeting jobs that can deliver a sustainable income into the future.

Most job losses have been in higher paying jobs

Looking at income quartiles data between 2011 and 2016 (each quartile contains 25% of incomes) most of the new jobs created between the census periods had income levels at the lower end of the scale (see Fig 10). There has also been a decline in over 1,000 local workers from the highest income quartile (ie those earning > \$1,750 per week or \$91,000 per year).



Source: ABS Census 2016 compiled in .id

Fig 10: Change in local worker individual income quartiles 2011-2016

Gains and losses

The slower growth in median incomes is related to the types of jobs Wollongong has been gaining and losing in recent years. Fig 11 highlights the top 5 sectors for job gains and losses.

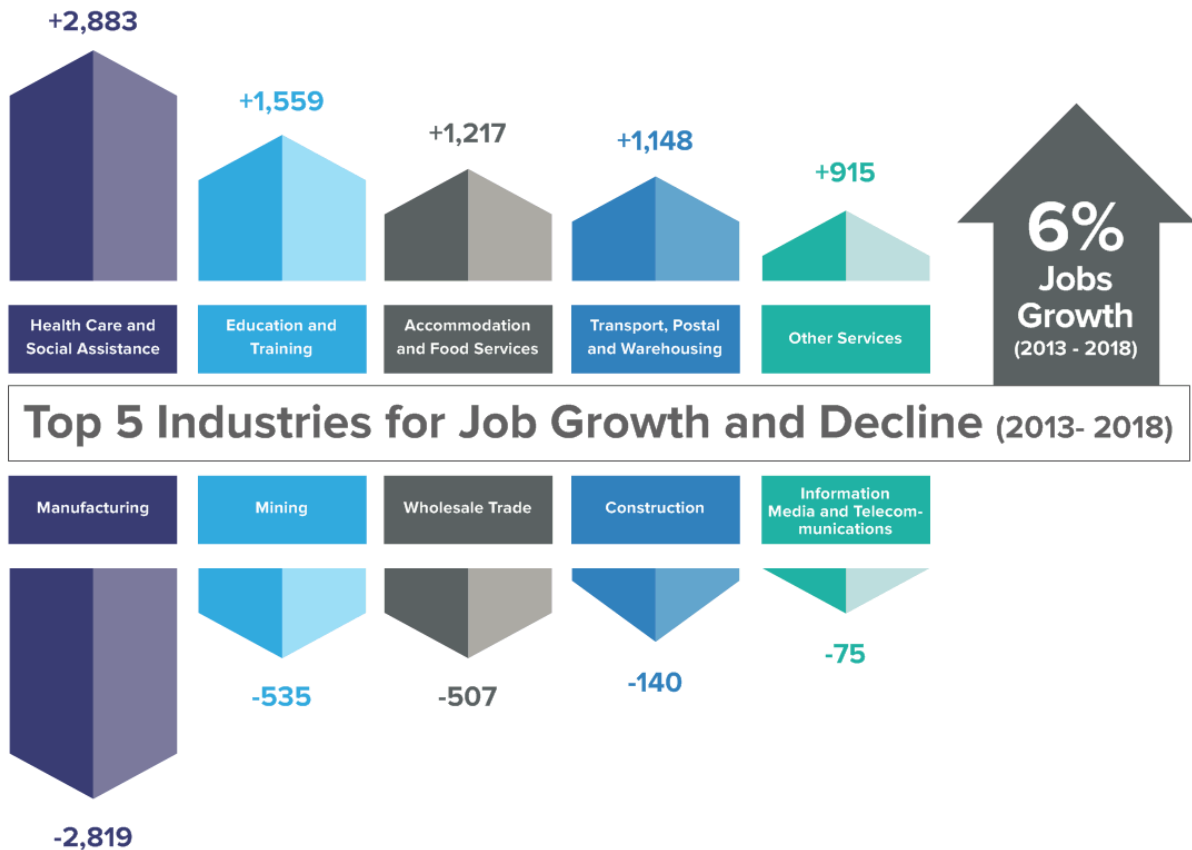
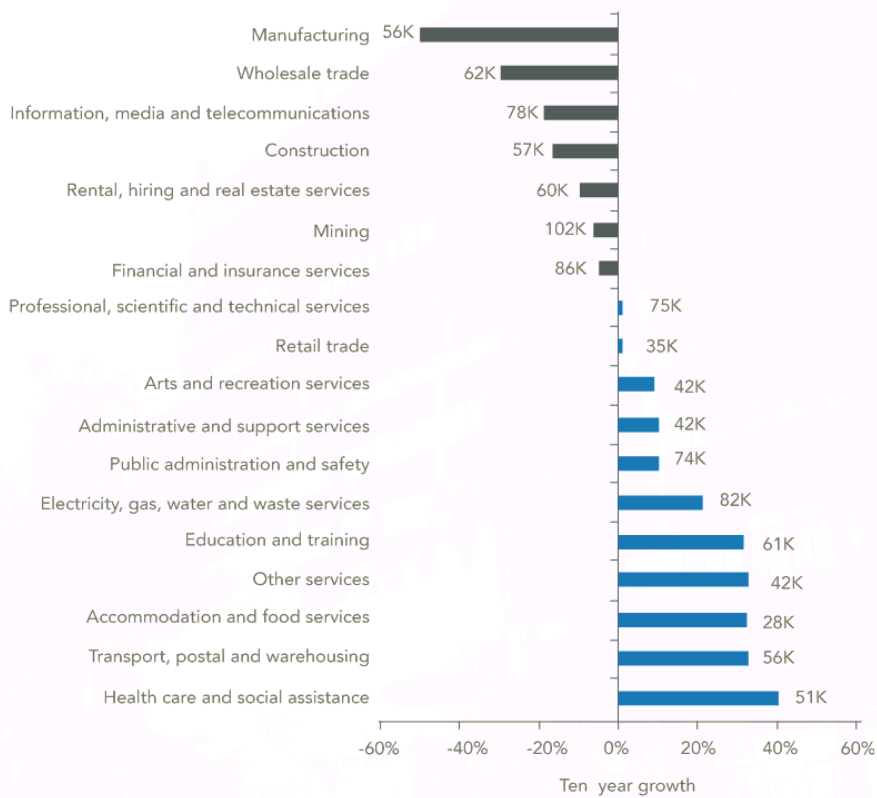


Fig 11: Top 5 Industries for Job Growth and Decline (2013-18)

The sectors that have seen the biggest job losses tend to be those with a higher propensity for higher-wage full-time jobs (such as manufacturing and mining). In contrast, the biggest employment gains have been in sectors that have a higher share of part-time/casual employment (social assistance, education and food services).

Fig 12 highlights this point further, comparing the change in jobs in a sector with the average wages produced by the sector. Many of the sectors which have had strong jobs growth also have low wages growth and vice versa. Four out of the top five growing sectors have median incomes less than \$60,000 and six out of the nine sectors with median incomes above \$60,000 experienced decline or little growth.



Source: based on .ID data

Fig 12: Sector employment growth (2007/08 – 2017/18) and median incomes (2017/18)

The talent pools

The final strategic objective of this Strategy is to target growth in those industry sectors that align with the two large pools of skilled workers Wollongong has – the commuter pool and UOW graduates. The target sectors identified above largely meet this criteria and could potentially employ people from the commuter and graduate pools.

The skills of the commuter pool cover a range of blue collar (8,000) and white collar (14,000) industries. Almost two thirds of commuters work in predominantly white-collar occupations, including nearly 9,000 managers

and professionals. Of these, the largest occupation group is specialist managers (2,000+ commuters), covering a range of sectors including advertising, public relations, human resources, tech, finance, logistics and construction – highlighting the talent pool available for any business looking to locate or grow in Wollongong.

There are also over 8,000 blue-collar workers, including technicians and trades workers, sales workers, machinery operators, drivers and labourers.

Table 5: Illawarra Commuter Pool

Occupation	Number of Commuters	Share of Total (%)
White Collar Workers	14,189	62.2
Managers	3,272	14.3
Professionals	5,715	25.0
Community and Personal Service Workers	2,439	10.0
Clerical and Administrative Workers	2,763	12.1
Blue Collar Workers	8,291	36.3
Technicians and Trades Workers	3,642	16.0
Sales Workers	1,292	5.7
Machinery Operators and Drivers	1,933	8.5
Labourers	1,424	6.2
Inadequately Described/Not Stated	357	1.6
TOTAL	22,830	100

Source: ABS Census 2016

In terms of the graduate pool, more than half (59%) leave the Illawarra after they have graduated. This pool of talent, like the commuters, is a valuable resource for current and potential employees in Wollongong.³⁰

These graduates are recognised for their capability, quality and success in the global workplace. Details of the key strengths of these graduates are outlined earlier in this Strategy (page 25) but include IT and engineering-based disciplines.



Targeted future sectors

In order to shift the job mix in Wollongong towards higher incomes, more full-time jobs (and therefore support welfare outcomes), targeting growth in specific sectors is required. We identified a number of sectors that:

- Provide high median incomes,
- Have a high full-time employment ratio in the local job market
- Currently provide employment for a higher share of residents than they do for local jobs (suggests resident labour force has the skills and could fill opportunities if they arise), and
- Are expected to experience growth over the next decade.

These are summarised in tables 6 and 7.

The opportunities for job uplift from each of these sectors is summarised in Table 6. Overall, these broadly align with the sectors identified by Advantage Wollongong.

Table 6: Potential sectors to target to lift incomes

Industry Sector	Income >\$65,000	Full Time Ratio >65%	Higher Share of residents	Forecast Growth
Agriculture, Forestry and Fishing	N	N	Y	Y
Mining	Y	Y	Y	N
Manufacturing	N	Y	N	N
Electricity, Gas, Water and Waste Services	Y	Y	Y	Y
Construction	N	Y	Y	N
Wholesale Trade	N	Y	N	N
Retail Trade	N	N	Y	Y
Accommodation and Food Services	N	N	N	Y
Transport, Postal and Warehousing	N	Y	N	Y
ICT/Tech	Y	Y	Y	Y
Financial and Insurance Services	Y	Y	Y	Y
Rental, Hiring and Real Estate Services	N	Y	Y	Y
Professional, Scientific and Technical Services	Y	Y	Y	Y
Administrative and Support Services	N	N	Y	Y
Public Administration and Safety	Y	Y	Y	Y
Education and Training	N	N	Y	Y
Health Care and Social Assistance	N	N	N	Y
Arts and Recreation Services	N	N	N	Y
Other Services	N	N	N	Y

Table 7: Where are the jobs coming from?

Sector	Opportunity	Enablers
ICT/Tech	Build on growth of existing tech industry and growth in start-ups	<ul style="list-style-type: none"> • High capacity broadband connections • Secure data storage facilities • Diversity of office space and/or rentable studios
Financial and Insurance Services	Attract auxiliary finance firms based on local expertise, better support potentially disruptive fintech companies.	<ul style="list-style-type: none"> • High capacity broadband connections • Start-up/venture capital • Available quality low rent office space
Professional, Scientific and Technical Services	Attraction of new regional offices of private companies and enabling high growth of start-ups	<ul style="list-style-type: none"> • Boosting the range (specialisation and scale) of incubators and accelerator programs • Leveraging recent establishments for investment promotion • Providing a mixture of A-grade and low rent office space • Improving accessibility to Sydney and the airport
Public Administration and Safety	Decentralisation of major government agency	<ul style="list-style-type: none"> • Improving accessibility to Sydney and the airport • Upgraded Illawarra Airport • Available high-grade commercial space • Quality convention and training facilities
Electricity, gas, water and waste services	Attraction of headquarters or major office of utilities authority/company	<ul style="list-style-type: none"> • Improving accessibility to Sydney and the airport • Available high-grade commercial space

Professional, Scientific and Technical Services

Wollongong has strong potential to boost its jobs generation in this sector and there is a substantial resident labour pool to draw on from both the commuter and graduate talent pools.

Many residents with expertise in these areas are currently commuting outside the LGA for work. There are currently 9,000 managers and professionals who live in the Illawarra region but work outside the LGA across Greater Sydney.

UOW is also a provider of talented employees to fill jobs in this sector. UOW ranks above or world standards for research in Mathematical Sciences, Chemical Sciences, Earth Sciences, Engineering, Law, Cultural Studies and History/ Archaeology.³¹ Jobs gap analysis by field of occupation, undertaken by .id, reinforces UOW's acknowledged strengths by highlighting there are key gaps between residents and job numbers in:

- Engineering
- Law
- Creative Industries (Communication and Media; Graphic Design).

The other key target in this sector would be in Computer System Design and Related Services industries building on the existing specialisation Wollongong has in this area.

Public Administration

Decentralisation of federal or state government administrative offices have a history of supporting the retention and attraction of qualified residents and encouraging new investment. For example, Geelong has secured the following government offices in recent years:³²

- The Transport Accident Commission was successfully relocated to Geelong in 2009 supporting 650 employees in a purpose-built building;
- WorkSafe Victoria started relocating in 2016 and in 2018, 700 employees moved into a brand new \$120 million A-Grade Office building.
- The National Disability Insurance Agency which currently supports 300 jobs and is expected to rise to over 500 upon completion of a new dedicated office building.

Wollongong already hosts the Australian Taxation Office (400 employees) and the state headquarters

of the SES. High quality transport and communication infrastructure, low office rental costs, and access to a skilled labour force means a transfer of additional operations could happen comparatively easily.

Electricity, Gas, Water and Waste Services

The city is well placed to support the commercial operations of a large utilities company. These offices often provide a substantial boost to jobs and local incomes. For example, Port Macquarie is home to the headquarters of Essential Energy supporting over 600 jobs in the city with the median income of these jobs being just over \$98,000 in 2016.

Financial and Insurance Services

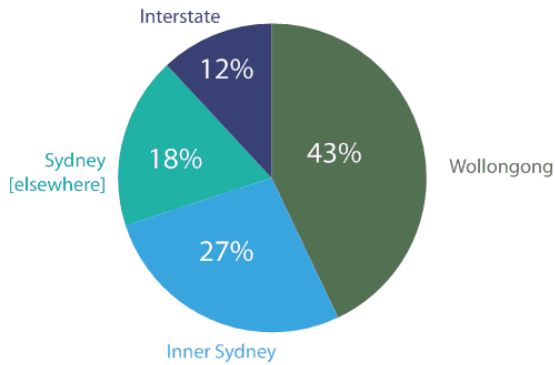
Wollongong has an acknowledged specialisation in superannuation funds administration with organisations such as Mercer and PeopleCare calling Wollongong home. The value of this sector is expected to continue to grow due to raises in the super guarantee. Wollongong is also uniquely equipped to deal with the significant disruptions the industry faces over the next five years, due to competition from non-traditional entrants to the sector.

The combination of existing expertise in funds management and a pool of educated IT workers could spur a number of Fintech start-up enterprises if supported by venture funds and adequate mentorship (eg accelerators).

ICT/Tech

Wollongong is already home to several successful ICT based companies that have established presence in national and international markets and UOW is obviously a recognised producer of IT talent. ICT companies located in Wollongong include NEC, Accelo, iTree, Easy Agile, Evanscorp and Internetrix.

The talent pool of graduates represents an ongoing source of future employees for the tech sector. For example, in 2016 more than half (57%) of young graduates in this field who were living in Wollongong in 2011 were working elsewhere by 2016 as they left Wollongong to gain employment elsewhere. Fig 13 outlines the employment destination of Wollongong IT graduates.³³



Source: ABS Census 2016

Fig 13: Employment destinations of Wollongong IT degree educated young adults

Advanced Manufacturing

Continued transformation in local manufacturing will influence the ability to generate or maintain jobs. Wollongong has expertise and capabilities in a number of specific sub-areas combined with UOW's research base in advanced materials and technologies. Advantage Wollongong is also targeting the following industries as future drivers of employment growth.

Wollongong has strong supply-chain linkages through the advanced manufacturing sector, as a result of its 90-year history in heavy manufacturing. Wollongong's advanced manufacturing sector is fast changing and diversifying, with significant operations in industrial, chemicals, mining, defence, construction, textiles and food and beverage, as well as exploring opportunities in emerging fields such as renewable energy.

Local companies compete locally, nationally and internationally by targeting niches which value high-quality, high-performance manufactured product.

Additional Advantage Wollongong identified sectors

Along with the sectors identified by .id, Advantage Wollongong is also targeting the following additional industries as future drivers of employment growth. These additional industries have been identified based on the experience developed during the 10 year Advantage Wollongong partnership.



Defence

Wollongong has a well-developed ecosystem of organisations involved with defence related manufacturing, research services. Wollongong companies offer a wide range of capabilities including:

- Military-grade communications systems
- Armoured steel plate
- High-end welding and engineering
- Engineered plastics and polyurethane
- Electrical isolators and enclosures
- Specialist protective coatings
- Base safety systems
- Ruggedised medical computing devices
- Specialist labour services

The armoured steel for the Collins-class submarines, Adelaide-class frigates and the Hobart-class Air Warfare Destroyers (AWD) projects was manufactured in Wollongong. Leading defence research and development organisations in Wollongong include:

- Defence Materials Technology Centre (DMTC)
- The SMART Infrastructure Facility
- The Steel Research Hub
- The Centre for Computer and Information Security Research

UOW continues to produce excellent health graduates in fields including medicine, nursing, Medical and exercise Science, nutrition and dietetics and Indigenous health.

Advantage Wollongong will be targeting organisations who provide support services and innovative products/technology. Advantage Wollongong will also target allied and mental health companies that have a strong focus on R&D and innovation in treatment.

Scale-ups

Wollongong already has a reputation for being an incubator city to start-ups through iAccelerate. While Sydney hosts the nation's largest collection of tech start-ups, our proximity to and support of the start-up ecosystem is a major advantage.

Wollongong's supportive business networks, along with access to a highly skilled workforce, including a large graduate pool, attract entrepreneurs who have successfully commercialised their business, secured investment and are ready for accelerated growth.

Medical Science and Technology

Wollongong's growing medical science and technology sector is supported by a network of service partners including leading researchers and education providers linked to UOW, and private and public health practitioners.

Case study:

Illawarra coal used for steel making not energy

The sector analysis (Table 6) highlights that mining offers well paid jobs that are largely full-time, which are the industry characteristics this Strategy is seeking to capitalise on.

The challenge for the sector is that climate change, and the resulting trend towards the decarbonisation of the energy sector, is reducing the attractiveness of the broad mining sector for investors. Hence, the analysis flags mining as an industry that may not display high growth going forward.

For the Illawarra-based mining sector, however, the outlook is more positive. Coal mined in the Illawarra is metallurgical which is coal used in the steel-

making process rather than in power stations. This means that the impact of the decarbonisation of the energy sector will be more muted on the Illawarra than those regions that predominantly mine coal used in power stations.

The coal mined in the area also has important linkages across the local economy, via its direct use in steel making and its shipment to export markets via Port Kembla. These supply linkages, through high-skilled well-paying largely full-time jobs, also support economic growth across the broader population-serving sectors of the economy.



Part 2 Achieving the objectives

This Strategy takes an interventionist approach and looks to change the trajectory of business as usual jobs growth in Wollongong. This will require multiple policy changes to achieve, which are outlined in further detail in the remainder of this Strategy.

Firstly, there are a number of potential game-changer projects that, if delivered, will contribute to reaching the jobs target and achieving the secondary objectives around lifting median incomes and increasing local

employment opportunities for people currently commuting for work or forced to leave the region once their tertiary studies are completed.

Secondly, Council has its own policy levers that will contribute to place a higher priority on jobs growth within Council's own actions and priorities. The specific actions Council can take are detailed in the Action Plan section of the Strategy.

Potential game-changers

As well as Council's direct actions, there are a number of external 'game-changers' - significant projects or activities - that could have a major impact on Wollongong's labour market if delivered.

The game-changers we have identified are:

1. Critical transport projects to reduce the travel time between Wollongong and Sydney
2. Capitalising on the growth of Western Sydney and the development of the Aerotropolis
3. Increase the office capacity in the Wollongong city centre
4. Development of unused and underutilised employment lands
5. Attraction of more major events and tourism infrastructure
6. Completion of the Australian Industrial Gas Energy Terminal Project
7. Establishment of a city centre university campus
8. Delivery of the Port Kembla container terminal project
9. Further evolving as a smart city
10. Improving the effectiveness of our advocacy

1. Critical transport projects

Wollongong to Greater Sydney connections

Historically the focus has been on moving freight and people between Wollongong and the Sydney CBD. However, in line with the work of the Greater Sydney Planning Commission, there is now recognition that Sydney is three cities – Eastern (around the CBD), Central (around Parramatta) and Western (around the new Western Sydney airport). Consequently, transport planning needs to also focus on improving connections between Wollongong and the Central and Western cities, both of which will be experiencing rapid population and employment growth in the future. Hence there needs to be a focus on infrastructure projects that head west – such as the South Western Illawarra Rail Line (SWIRL) – and not just those that head north to the traditional Sydney CBD.

In 2016, 65% of Illawarra commuters to Greater Sydney travelled to work by private motor vehicle. Another 20% travelled by public transport, the majority by train.³⁴

There are a number of transport projects that are critical to Wollongong and the broader region, at various stages of planning, which have the potential to boost employment growth in Wollongong. These projects are largely focussed on reducing travel times and congestion on the key arterial road and rail links between the Illawarra and Greater Sydney.

The 360 Illawarra Shoalhaven Economic Outlook, completed in 2018, notes the importance of improving connections between Sydney and Wollongong as critical to enhancing employment options, business opportunities and liveability for the region.³⁵

SWIRL

The SMART Infrastructure Facility at UOW undertook an examination into measures to improve the speed and reliability of rail connectivity between the Illawarra and Sydney.³⁶ A primary recommendation of the report was the construction of the passenger and freight South West Illawarra Rail Line (SWIRL), by completing and electrifying the Maldon-Dombarton line and the electrification of the Moss Vale – Unanderra line. The SWIRL link will provide an important connection to the growth area of South West Sydney. The estimated cost for this project was \$1.7 billion. Economic modelling found a benefit-cost ratio of 1.13 and would add \$2.6 billion in GRP for the Illawarra.

The new Western Sydney Airport, which was approved after this study was completed, would further enhance these benefits and provide a significant economic opportunity for the Illawarra region. The delivery of

SWIRL also makes sense from a risk management perspective. It will provide an alternate passenger and freight link to Sydney should the South Coast Line either reach capacity or experience temporary service disruptions.

South Coast Line upgrades

Duplication of the South Coast rail line is essential to cater for both growing freight and passenger demand to the CBD and Port Botany/Airport regions. The NSW Transport 2056 report estimates this line will reach capacity by 2031.³⁷

In addition, improvements to the track, such as removing bends, could increase both speed and capacity.

Mount Ousley interchange and widening

This important arterial link down the Illawarra Escarpment already operates at capacity during certain periods of the day, making this upgrade project a major priority.

The NSW Government has committed funds to improving the interchange at the bottom of Mount Ousley. However, the current lack of capacity at peak times suggests the road also needs to be widened so that the southbound carriageway is three lanes for the whole length of the descent down the escarpment. The NSW Government has not yet committed to funding the widening project.

Picton Road

Picton Road is a major freight connection between the M1 Princes Motorway and the M31 Hume Motorway. The SMART Infrastructure Facility estimates this road is likely to reach capacity by 2025 and needs to be upgraded to a full four-lane divided highway.³⁸

Almost a quarter of its 20,000 daily vehicle movements are heavy vehicles. Currently the 27km stretch of road between the two major motorways is largely single lane, with 8kms of passing lanes in various sections. To date, funding has only been allocated to convert 3km of the road to dual-carriageway (Hume Motorway to Almond Street). Improvements in recent years have focussed on safety enhancements.

F6 Extension

There is currently no motorway standard route between the Sydney motorway network and the M1 Motorway at Waterfall. Demand for road travel along this corridor is high and the arterial network is at capacity during peak periods. The three crossings of the Georges River, which together accommodate almost 200,000 trips per day, are at or close to capacity.

This leads to long travel times, because of slower speeds and intersections on arterial roads, and congestion. The initiative proposes a motorway connection between the Sydney motorway network and the M1 at Waterfall. The New South Wales Government has committed to construct Stage 1 of the link between WestConnex (New M5) and President Avenue at Kogarah.

Cost-benefit estimates

The Illawarra Business Chamber has undertaken a number of studies to estimate the benefits of infrastructure projects in the region, which are detailed in Table 8. The table also includes the government views expressed in the current NSW Transport 2056 and Infrastructure Australia Priority List.

As outlined in Table 8, many of these projects are only listed for investigation over the next decade by the NSW Government in its Transport 2056 plan. More recently the NSW Government announced in December 2018 that it is investigating the opportunity for high-speed rail links along four corridors between Sydney and regional NSW, including the Nowra-Wollongong corridor. This process will begin in 2019 with the initial focus on how to make existing infrastructure work better and accommodate trains travelling up to 200km/hr. Further funding, beyond the \$4.6 million for the initial feasibility study, has not yet been committed.

Table 8: Critical Transport Projects for the Illawarra Region

Sector	Reduce travel time by	Benefits Illawarra/yr	Project cost	Required by (IBC)	Transport 2056	2019 Infrastructure Australia priority list
South West Illawarra Rail Link (SWIRL)	31 mins (Campbelltown) 34 mins (Liverpool)	\$74m	\$1.7b	2028	10-20 years investigation	0-5 years (freight component - rail access for Port Kembla)
Mt Ousley interchange and widening	Unavailable	\$46m	\$220m - \$330m (Widening)	2025	0-10 years committed (Interchange only)	No comment
Picton Rd upgrade (Dual Carriageway)	Unavailable	\$42m	\$180m - \$220m	2025	0-10 years investigation	5-10 years (not full dual-carriage way)
F6 extension (Stages 1,2,3)	27 mins (Sydney CBD)	\$67m	\$8.6m - \$10.4m	2025	0-10 years committed (Stage 1) 0-10 years investigation (Stage 2 & 3)	5-10 years
South Coast Line upgrade	15-30 mins (Central Station)	\$55m	\$2b	2030	0-10 years investigation	10-15 years

Source: Illawarra Business Chamber (2017) Upgrading rail connectivity between Illawarra and Sydney; Illawarra Business Chamber (2018) Upgrading road connectivity between the Illawarra and Greater Sydney; NSW Government (2018) Future Transport Strategy 2056; Infrastructure Australia (2019) Infrastructure Priority List

Improving inter-city connectivity times

This idea of improved connectivity between the regional cities around Sydney – Wollongong, Central Coast and Newcastle – has also been explored by the Committee for Sydney.³⁹ This analysis found that by reducing travel times between Wollongong and Sydney to 60 mins (from around 90 mins currently) could result in a shift in housing demand, populations and employment out of Sydney and towards the regional cities which offer more affordable and attractive lifestyles. This report estimated that by 2036 the 60 min train connection could result in an additional 10,000 dwellings in Wollongong.

Furthermore, after an initial increase in employment flows towards Sydney (as new residents kept working in Sydney), ultimately the 60 min shift would result in this trend reversing as businesses were also attracted by the benefits of locating in the regional cities. The study found that by 2036 an additional 4,725 jobs could be created in Wollongong. For context, this represents just under half of the 2028 jobs target outlined in this Strategy.

Regional transport infrastructure

Significant employment opportunities could also be delivered to Wollongong via improvements in regional infrastructure. Investment in neighbouring LGAs has an impact on potential jobs growth in Wollongong.

The Illawarra Regional Airport currently has a single operator offering commercial flights between Wollongong and Melbourne/Brisbane. Topographical challenges, caused by the proximity of the airport to the escarpment, mean there is only limited opportunity to land larger commercial jets. Nevertheless, the expansion of routes and/or operators would have a positive impact on both tourism and business travel to Wollongong. The recently announced upgrade to the airport (\$16 million) highlights the important role this transport connection has for the broader Illawarra region.

The Moss Vale - Unanderra freight line delivers a critical link between the Main South Line, which connects through to Sydney, and the Port of Port Kembla. It too has geographic challenges because of the steep nature of the climb. Upgrades to the line, even if the SWIRL project is delivered, are critical for the future of logistics and freight transport in Wollongong and the broader region.

These upgrades are becoming increasingly important as the Illawarra Line (a joint freight and passenger line) gets closer to reaching capacity. This issue was most recently highlighted by Infrastructure Australia, which listed this project, as part of rail connectivity of the Port of Port Kembla, as a Priority Initiative in its February 2019 update.⁴⁰





Another key freight and passenger connection in the region is the Princes Highway, which runs through the Illawarra and into Victoria. The South East Australian Transport Strategy (SEATS) group has advocated for many years to have the highway raised to dual-carriage way standard. Substantial work has been done south of Nowra and to the Jervis Bay area in recent years. The Australian Government (in partnership with the NSW, Victorian and South Australian governments) is preparing a corridor plan for the Princes Highway, including releasing an issues paper in early 2019.⁴¹

Most recently, the current NSW Government has committed \$1 billion to the Princes Highway on the NSW South Coast which will cover converting a 20km section between Sussex Inlet and Jervis Bay to dual-carriage way and by-passes for Milton and Ulladulla.

The soon to be opened \$150 million Shell Cove Marina is a major piece of tourism infrastructure that could deliver region-wide benefits if encouraged to grow. When completed, it will create around 3,000 prime residential lots, a 300 berth marina constructed within an in-shore boat harbour, an 18-hole championship-standard golf course, community parks and playgrounds, cycleways, and a range of quality commercial, retail, tourist, community and recreational facilities.

In summary, all these transport projects, linking Wollongong and the broader region with opportunities in Greater Sydney and regional NSW, have the potential to be major game changers for job creation in Wollongong and should continue to be a major focus of advocacy for Council in its civic leadership role.



2. Western Sydney Aerotropolis

The new Western Sydney Aerotropolis presents a significant opportunity for the Wollongong economy. It will provide support for an estimated 200,000 new jobs and establish a new high-skill jobs hub across aerospace and defence, manufacturing, healthcare, freight and logistics, agribusiness, education and research industries.

There will be direct opportunities for Wollongong-based businesses during the construction phase of the airport and the Aerotropolis over the next decade. Once operational, Wollongong-based businesses could continue to service the airport and those operating out of the Aerotropolis. There will also be opportunities for UOW to engage in the educational components of the new city (see case study). The emergence of this new city in Western Sydney provides further evidence why enhanced connectivity between Wollongong and Western Sydney is critical.

The 360 Illawarra Shoalhaven Economic Outlook⁴² notes that the Western Sydney Airport will provide long term economic and employment opportunities and accelerate the development of critical infrastructure and urban development. Industries in freight, logistics, tourism and construction services are set to significantly benefit from the development.

Wollongong will need to take active steps to capitalise on this game-changing opportunity, recognising that options to improve road and rail connectivity between the two areas will be essential to allow the region to capitalise on this development and open it up to a new market.



Case study: UOW joins 'Super Campus'

UOW will join the University of Newcastle, the University of NSW and Western Sydney University to develop a combined 'Multiversity' at the new aerotropolis in Western Sydney.

The four universities will create one campus that has a focus on science, technology, engineering and mathematics (STEM) education.

Stage 1 of the development is expected to be completed around the time the airport opens in 2026.

3. Increase office capacity in city centre

The Property Council found that there is currently a shortage of office space in the city centre. The vacancy rate for A-grade is 1.4%.⁴³

Office space that is available is often low grade and in buildings that, for a variety of reasons, are not being upgraded or improved. This limits the options for businesses to expand or start-up and places a constraint on job creation in the city centre.

Looking ahead, there is a current pipeline of projects, with 70,000 sqm of DA approved commercial space in the city centre, including the four largest office developments representing over 30,000 sqm in A-grade office space. These could come on line within the next 24 months.

The future capacity of Wollongong city centre is currently being examined by Wollongong City Council via a project looking specifically at the future planning needs of the city centre. Preliminary findings from this project suggest at least 120,000 sqm of new office space will be needed by 2036 to accommodate future employment demand. That is, four times the capacity of the new buildings currently under construction.

The role of Metro Wollongong as a key employment precinct, as outlined earlier in this Strategy, is likely to continue into the future. Currently, Metro Wollongong accounts for 29% of employment in the LGA.⁴⁴ The sectors this Strategy is targeting for the future are also likely to be located in and around the city centre, again highlighting the importance of future strategic planning decisions to ensure there is sufficient office space in the

city centre to accommodate new jobs.

A significant game-changer for Wollongong would be if the current investments in office space were followed by further major developments. This would mean existing businesses could easily find bigger premises to grow and new businesses would have no concerns about finding a suitable location.

**Wollongong's
future office needs**

The Illawarra Shoalhaven Regional Strategy identifies the need for more office space in the Wollongong CBD.

Action Item 1.1.1 notes:

“More high-quality office space is needed in the commercial core to build Metro Wollongong’s reputation as a nationally significant city and as a location to do business – one that can capitalise on its proximity to global markets in Sydney and an increasing number of skilled workers. The priority is to make more high-quality office space available and increase the quality of public spaces in the commercial core so that it becomes more attractive for investment and a place to do business.”



4. Develop unused and underutilised employment lands

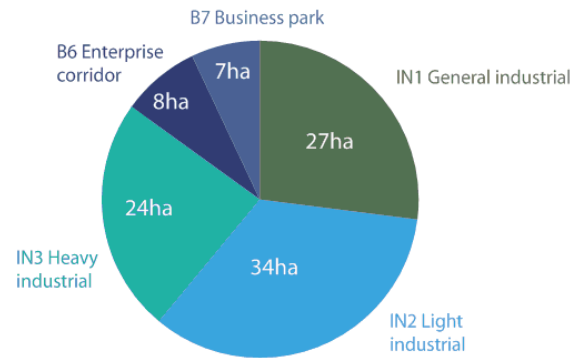
The NSW Government's Illawarra Shoalhaven Regional Plan notes the importance of developing vacant employment lands.⁴⁵ It states;

"The growth of Port Kembla is driving demand from port related industries for large industrial land sites and warehousing facilities, such as new logistics and freight handling facilities at Kembla Grange. Demand is expected to continue as the development plans for the outer harbour precinct are realised and the port opens up to containerised trade."

Development of these employment lands, which are largely privately owned, represent a significant opportunity for the region's manufacturing industry. Wollongong City Council regularly receives interest from manufacturers located in Southern & Western Sydney who are being squeezed out by demand for rezoning of industrial land to residential land.

Those looking for larger parcels, in particular, are unable to be assisted based on the current supply of serviceable industrial land. This inability to provide suitable land for new businesses represents a lost employment and investment opportunity in Wollongong.

According to the NSW Government⁴⁶, there is currently 282 hectares of undeveloped employment land zoned in the Wollongong LGA of which 85% or just over 239 hectares is zoned industrial, with the remaining reserved as enterprise corridor/business park (see Fig 14). The majority of this land is around the Port of Port Kembla, Unanderra and West Dapto.



Source: NSW Department of Planning and Environment 2018, Employment Land Supply Monitor, Illawarra-Shoalhaven Region

*NB -there is a small proportion of employment land zoned Special Purpose (SP1) that has been left out of the above figure due to insignificance

Fig 14: Undeveloped employment land, 2018, Wollongong LGA

Work is currently being undertaken by the NSW Government, working with the private land owner, around the identification of potential surplus sites.

An audit⁴⁷ in 2014 found that sewer services are not provided to 67% of vacant industrial land. Potable water is not provided to 42% of vacant industrial land. Electricity is not provided to 22% of vacant industrial land. Releasing and servicing these lands would be a significant game-changer for local manufacturers in particular.



5. Attract more major events and tourism infrastructure

Major Events

Hosting more, and higher profile, major cultural and sporting events would deliver both short and long-term benefits to Wollongong.

The direct short-term benefit is the economic impact of visitors to the event who spend on accommodation, activities and hospitality. This provides an immediate, but short-term, injection of economic activity across a range of businesses including accommodation, restaurants and transport.

Major events also provide longer-lasting benefits. They showcase the city to a new audience and provide invaluable publicity. For Wollongong, hosting major events plays a significant role in changing external perceptions about the city.

Events such as surf lifesaving's Ocean 6 series have proven to be an effective way of showcasing the city to the world, with the 2018 edition beamed into 1.7 million households across the world according to Destination Wollongong. Similarly, social media exposure is also crucial to changing perceptions about Wollongong. According to data compiled by Destination Wollongong, the Corona Sunsets music festival held on Wollongong's North Beach in late 2018 directly resulted in an estimated \$1.9 million in tourism spending but, more importantly, it was beamed to the world on a ten-hour live stream, viewed by an estimated 500 million people.⁴⁸

The future focus on major events is outlined in Destination Wollongong's Major Events Strategy 2016-2020. This document outlines the organisation's intention to attract a 'pyramid' (see Fig 15) of events each year – ranging from 1-2 signature events through to unlimited numbers of community based events.



Fig 15: Destination Wollongong's events pyramid

Business-related events, or events that attract significant numbers of senior business executives, also support the focus of Advantage Wollongong. The right type of event can encourage visiting business owners to reconsider Wollongong as a place to establish a business. However, the lack of a dedicated Convention Centre in Wollongong is a major inhibitor to attracting business events (see case study on next page).

Case study: UCI World Road Cycling

Wollongong has been awarded the UCI Road World Championships in late 2022. The week-long festival of cycling will encompass more than 1000 of the world's best cyclists racing across Under 19, Under 23 and Elite categories for the coveted rainbow jerseys in the individual time trial, road race and mixed team relay.

The event is expected to attract 300,000 spectators, 500 media outlets and a global viewing audience in excess of 200 million people and directly deliver up to \$100 million in tourism spending.

In addition to the week-long event in 2022, being host also includes multiple warm-up events and team training camps leading up to 2022 and being designated a world cycling city for the three years after the event.

Case study: Wollongong Convention and Entertainment Centre

In March 2017 MacroPlanDimasi were commissioned (by Wollongong City Council, RDA Illawarra, Destination Wollongong and the NSW Dept of Industry) to undertake a market assessment, economic impact assessment and benefit-cost assessment of an upgrade to the current entertainment centre facilities.

The report considered a \$60.4 million upgrade which included two new levels of 1600sqm of function rooms, a 1,000sqm sky deck, a café, environmental improvements, upgraded back-of-house facilities, major building construction works and a new AV system.

This report demonstrated a strong case for the upgrade. MacroPlanDimasi concluded that: Having regard for the low project cost, conservative methodology, the strong cost benefit ratio of 2.6 to 1, the extraordinarily strong competitive advantages of the project and the broad economic, social and cultural penetration of the project outcomes that this project should be funded.⁴⁹



Tourism infrastructure

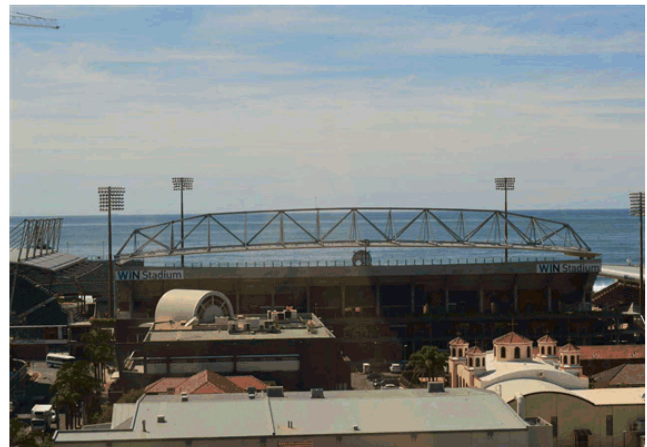
Wollongong needs to invest in its tourism infrastructure if it is to build on the impact of major events and expand its tourism industry. This includes investment in additional beds and new attractions.

Destination Wollongong estimates that Wollongong currently has around 2,000 beds available each night (within 30 mins of the CBD). However, Destination Wollongong is concerned about the imminent loss of 150 beds and the loss of up to 400 beds over the next 5 years. Destination Wollongong has raised its concerns about this situation and the need for a Tourism Lands Review.

Destination Wollongong is building on Wollongong's marine-related tourism credentials by establishing the Cruise Wollongong initiative. This focusses on attracting cruise ships to the city.

The NSW Government's Cruise Development Plan recognised that while Sydney will remain the preferred cruise port for the State, a network of smaller regional ports is also needed to maximise the benefit of the industry to the State economy. This includes Port Kembla, which can be used as a transit port, but would benefit from infrastructure to support cruise visit calls to welcome and process passengers.⁵⁰

Another key infrastructure asset of the city is the Wollongong Entertainment Centre (WEC). This



venue has a maximum capacity of 6,000 with flexible configurations that can host various events, including concerts, dinners, seminars, conferences, school formals and exhibitions. It is also home to the NBL team, the Illawarra Hawks. Venues NSW is currently developing a Master Plan for the venue which will provide a blueprint for potential uses and investment into the future (see case study.)

In summary, the attraction of major events and major tourism infrastructure investment would be a game-changer for the local tourism industry and has the potential to deliver benefits throughout the broader economy via improved perceptions about Wollongong.

6. Australian Industrial Energy Gas Terminal

Australia's first Liquefied Natural Gas (LNG) terminal with Australian Industrial Energy (AIE) Group has recently received development consent to build a \$250 million floating import terminal at Port Kembla. The Port Kembla Gas Terminal will, in its first phase, supply around 100 petajoules of natural gas per annum to gas users - equivalent to approximately 75% of NSW's total gas needs.

Advantage Wollongong and local business groups worked closely with AIE Group leading up to the announcement and subsequently the project has strong support from the broader business community.

This project was recently declared Critical State Significant Infrastructure by the NSW Government, which will assist in fast tracking the approval process. In terms of direct benefits, the proponents of the project estimate it will create around 130 to 150 jobs during construction and between 40 to 50 ongoing roles during operations. Such a facility would act as a major attractor for advanced manufacturing businesses, many of which are gas intensive operations.

Wollongong was one of three NSW industrial ports considered for the location of the LNG gas terminal. In choosing Wollongong, AIE Group acknowledged strong local support for the project, access to existing pipeline infrastructure, Port Kembla's berth configurations and the proximity of large industrial consumers as key factors in choosing Wollongong.

7. City centre university campus

International trends have been to locate universities into downtown areas to capitalise on the proximity benefits of placing students near the business community that will employ them as graduates.

University campuses have the capacity to act as catalysts for business growth, particularly when located in a city centre alongside the businesses who are potential future employers and research collaborators.

A 2017 study by the Property Council of Australia⁵¹, looking specifically at the option of locating a CBD campus in Darwin, a featured case study highlighted the benefits that flowed to Newcastle when it built a CBD campus (see case study). It is still too early to directly measure the benefits of the CBD campus decision but the report noted commercial vacancy rates have fallen to 4% from 20% in 2008 and building approvals in the CBD have risen from \$73 million in 2013-2014 to \$289 million in 2015-2016.

Currently, Wollongong's only university campus is located 5km to the north of Wollongong's city centre. The benefits of a city centre campus are already recognised by the UOW, which has recently undertaken a CBD-campus project in Liverpool.

A city centre campus would play a critical role in adding to the ongoing revitalising of the city centre in terms of encouraging students to live in the city and enjoy the high levels of amenity city-based living can offer.

The UOW already recognises the role of international campuses to a university, with its own two international campuses. The presence of multiple university campuses in the city centre would also aid in improving the external perception of Wollongong and reinforce the key messages of Advantage Wollongong around the areas skilled workforce.



Case study: CBD university campuses in Newcastle

Newcastle University recently opened NeW Space, a \$95 million landmark education precinct in the heart of Newcastle's CBD. NeW Space harnesses the latest in technology and innovation in teaching and learning to deliver a world-class student experience by engaging students in new and exciting ways.

The precinct is also home to the Conservatorium of Music, the Newcastle Legal Centre and the Newcastle Graduate School of Business. The city campus provides opportunities to strengthen relations with the business community and increases the number of opportunities for students to integrate their studies with work placements.

Newcastle has also attracted an international university, with Japan's Nihon University purchasing an old court house facility in late 2017 to be used to initially support around 200 law students. This site is still being refurbished.

Based on the success of this project, the Greater Newcastle Metropolitan Plan 2036 has set a target for four university campuses in Greater Newcastle by 2036.



8. Port Kembla Container Terminal

The Port of Port Kembla is a significant economic asset for Wollongong and the broader Illawarra. It contributes \$760 million per year to the NSW economy and supports 5,200 jobs.⁵² The NSW Government's Freight and Ports Plan 2018-2023 describes the Port of Port Kembla as:

NSW's largest terminal for vehicle imports and grain exports, and the second largest terminal for coal exports. Port Kembla has been identified as the location for the development of a future container terminal to augment capacity of Port Botany when required.⁵³

The NSW Government's commitment to the Port of Port Kembla was recently renewed against the backdrop of emerging pressure from the Port of Newcastle to promote it to be the State's next container port. The role of the Port of Port Kembla as the second container port was also reiterated in a February 2019 KPMG report, Quay Conclusions.

This report found that⁵⁴:

- Port Kembla offers the lowest overall costs and highest overall benefits for an additional container port.
- Port Kembla's proximity to the population and employment growth areas in Greater Western Sydney and South Western Sydney enhance its attractiveness as a second container port, when required.
- Port Kembla is circa half the distance relative to Newcastle from the five largest container consumption areas in 2046, as projected by Transport for NSW – which all reside in Western and South Western Sydney.

The report put the timeframe around the need for the second container port at 2046.

The private operator of Port Kembla (which also operates Port Botany) noted in its 30-year Master Plan⁵⁵ that:

"When completed, Port Kembla's Outer Harbour Development will cater for NSW's future container trade volumes. Planned for operation once Port Botany nears capacity, the Outer Harbour Development may be completed sooner if an operator wishes to develop a container terminal at Port Kembla prior to this time."

The joint ownership of Port Botany and Port Kembla also positions the local operation well as a future container port once Port Botany has reached capacity.

Any further expansion at both Port Botany and Port Kembla will require substantial investment in transport infrastructure which has not yet been committed to by any level of government.

Prior to the 2045 timeframe, there is an opportunity for Port Kembla to expand its operations in non-container businesses, for example around bulk exports including building materials such as gypsum and concrete.



9. Further evolving as a Smart City

A key part of future planning is around making the city a place that integrates technology with lifestyle benefits to deliver a great place to live. That is, using data to make better, smarter decisions about the future direction of Wollongong.

Smart Cities use technology (eg sensors, devices) to collect and analyse data (eg big data) and deliver improved asset management outcomes (eg Internet of Things) for the benefit of their residents (eg reduce congestion, reduce water waste, lift citizen engagement). This combination of technology, data and management will deliver high liveability outcomes, creating the types of cities people want to live in.

Smart Cities not only deliver positive outcomes for residents but they also allow local governments to do more with their scarce resources. For example, parking management can be done using a combination of apps to pay parking fees and sensors to monitor car rotations. This allows parking rangers to have better data around problem areas and target specific spots, rather than the traditional approach of physically circulating the city.

Smart Cities are also highly collaborative, with partnerships between residents, businesses and local government needed to deliver projects that have a meaningful positive impact.

Wollongong needs to ensure it is not left behind and fast-track the delivery of the six pillars outlined in the Illawarra-Shoalhaven Smart Region Strategy (see Case Study). Some Australian cities are already implementing these Smart City strategies – such as Brisbane (see Case Study over page) and Adelaide.

Case study: Illawarra Shoalhaven Smart Region Strategy

The Illawarra Shoalhaven Joint Organisation, RDA Illawarra and RDA Shoalhaven have recognised the significant opportunities that can be reaped by joining forces to embark on a journey to become a smart region. Facing increased citizen expectations and constrained budgets, all four councils are seeking to leverage Smart technology such as Internet of Things sensors and digital connectivity to address pressing challenges, compete on national and global stages, and ultimately deliver a superior experience for citizens and visitors alike.

The Smart Region Strategy⁵⁶, released in 2018, is based around six pillars that each council will then take and adapt to their own needs and capabilities.

1. Smart Economy
2. Smart Mobility
3. Smart Living
4. Smart Governance
5. Smart Environment
6. Smart Community

As part of this program Wollongong City Council and SMART have been successful at securing a Smart Cities and Suburbs Federal Government grant (\$0.5 million) to establish a flood management system to help improve outcomes for residents during major storm events. The project involves placing sensors across the storm-water system to detect flooding risks in times of heavy rain. These risks can then be quickly attended to, thus reducing the damage to public and private landowners.



Case study: Smart, Connected Brisbane

The City of Brisbane has embraced the Smart City concept and it now underpins its Brisbane Vision 2031 – the city’s plan for the future. The vision is a combination of six components.

- Efficient Digital technologies are employed to make activities efficient and effective.
- Personalised People have a personalised human, experience within the city.
- Inclusive Everyone has the chance to get involved, be empowered and participate in city life.
- Prosperous Smart, connected thinking leads to prosperity and economic opportunities.
- Insightful Analytics creates insight that enables data-driven decision making.
- Transparent Open shared data and collaboration creates an environment of trust and innovation within the city.

Using this framework, Brisbane City Council is now developing multiple key projects that deliver on this vision. These include;

- **Brisbane Innovate** - Council’s annual open innovation event, bringing together private industry, academia, local start-ups and the community to generate ideas to solve citywide challenges.
- **Brisbane Metro** - will boost the capacity of the busway network to carry up to 22,000 people per hour ensuring the wider bus network has the capacity to meet current and future transport demands.
- **Emergency Vehicle Priority (EVP) system** - detects oncoming emergency vehicles and gives them priority through an intersection with a green light.
- **Open Data** - Brisbane City Council releases open data free of charge to encourage third parties to develop apps, websites and tools that can benefit Brisbane residents and business.
- **Smart watering** - water monitoring devices digitally linked to weather stations and installed to monitor and report water flow, usage trends and environmental data, enabling clubs to better manage their water usage on sports fields and improve their playing surfaces.
- **Food truck website** - an interactive map enabling food lovers to locate their favourite gourmet food truck, find out what’s on the menu and check operating hours.
- **Free WiFi** - residents and visitors to stay connected as they move around many parks and public spaces across the city, as well as the Central Business District, major shopping malls, libraries, Mt Coot-Tha Summit Lookout and on CityCats.

10. Improving the effectiveness of our advocacy

Wollongong has many stakeholder representative groups, covering business, government, institutions and the community sector. These groups work together, and with local MPs from both State and Federal Parliaments across the political spectrum. There is regular collaboration on projects to advance the cause of Wollongong in terms of attracting public and private investment. Despite an abundance of good will and effort in this collaboration, we have not been as effective as other cities or regions, such as Geelong, when it comes to securing government funding for major projects.

For example, the Maldon-Dombarton freight/SWIRL project has been a focus of concerted local advocacy

since work halted on the line in 1988. Yet it is still only listed as 'for investigation in the next 10-20 years in Transport 2056. The Restart NSW fund is another example of the Illawarra not being as effective at arguing for an equitable share of funds (see case study).

Other cities or regions are placing considerable time and money into fostering relationships in Sydney and Canberra to ensure projects are pushed up priority lists, for example Geelong (see case study) and Newcastle. This Strategy represents an opportunity for Council to learn from other regions and contribute to lifting the effectiveness of our region-wide advocacy efforts.

Case study: Wollongong Regional Status?

Wollongong is not a region according to the NSW government and so is excluded from all but one of the six Regional Growth Fund programs (except Resources for Regions) and must compete against the large pool of Sydney and Newcastle Councils for Restart NSW funds.

This regional/metro classification problem also means the Illawarra is unable to collectively apply for funding for major projects because either Wollongong is not

permitted to be an applicant or, for metro-based funding, the other councils are not permitted to be applicants.

Illawarra Business Chamber analysis found the classification approach resulted in just 0.22% of the revenue flowing from the sale of NSW public assets had flowed to Wollongong – compared to the 2% share of the NSW economy represented by the LGA.



Case study:

Effective advocacy models: G21 - Geelong Regional Alliance

G21 - Geelong Regional Alliance is a forum that brings together five local councils with business and community leaders. Like Wollongong, Geelong has in recent years experienced a similar level of impact from job losses in manufacturing. But through organisations such as G21, Geelong has been able to attract State and Federal Government support to counteract some of these job losses.

Since its inception in 2001 the Alliance has proven to be an effective advocate for the region, culminating in helping to secure a Geelong City Deal in 2018. This is expected to deliver millions of dollars in investment from both the Victorian and Australian Governments which will drive growth and employment.

Other successes include attracting the Transport Accident Commission (650 jobs), WorkSafe Victoria (700 jobs) and the NDIS (500 jobs).

More broadly, Geelong has secured a \$355m City Deal – a partnership between all three levels of government which will see major investment in the city, including \$170m for a new convention centre.

In the 2019/2020 Federal Budget, Geelong received \$2 billion for a faster rail connection to Melbourne.





Council Policy Levers

In developing this Strategy we asked a broad range of stakeholders about the actions they thought Council could take to lift local job creation. These consultations, together with the development of the jobs target and extensive research into best practice policy, resulted in the development of a list of actions Council will undertake as part of its contribution to the 10,500 jobs in a decade target.

We have grouped these actions into seven broad categories.

1. Civic leadership
2. Business attraction
3. Knowledge hub
4. Infrastructure
5. Planning
6. Business support
7. Procurement

1. Civic Leadership

Leadership and advocacy are important roles of local councils, who can develop, communicate and implement a vision for the future of the city. Wollongong City's Lord Mayor and Councillors are the public voices of the city, representing the local community both nationally and internationally. Council also collaborates with political representatives and bureaucrats from other levels of government, securing external funding, delivering jointly funded projects and undertaking strategic planning.

An important part of Council's advocacy role is contributing to regional-level groups and facilitating joint projects. For example, the City of Wollongong Lord Mayor is the Chair of the Illawarra Shoalhaven Joint Organisation (ISJO), a collaboration of local governments which provides a cohesive advocacy platform for the region to speak to other levels of government.

Council regularly works with other stakeholders involved in economic development in Wollongong including industry, business and community groups and local State and Federal elected representatives. Collaborating with these partners serves the dual purposes of pooling scarce financial and time resources towards a common goal and presenting a unified voice from the region. This collaboration includes joint submissions, reports and representations to other levels of government and businesses outside the region.

As the voice of Wollongong, Council can clearly influence, via its civic leadership, economic outcomes and job opportunities for local residents.

2. Business Attraction

Councils have an important role in promoting their city outside the region as a desirable place to live, work and play. The importance of business attraction has been recognised by the current Council, which has this as one of its five Councillor priorities. This commitment is reflected in the additional \$600,000 investment made by Council over 3 years in the activities of Advantage Wollongong.

Business attraction includes taking a proactive approach to marketing the region as a place to invest, providing business marketing material and information about the city and supporting Wollongong's visitor economy. Council supports both Advantage Wollongong and Destination Wollongong.

Advantage Wollongong

Advantage Wollongong is a partnership between Wollongong City Council, UOW and the NSW Department of Premier and Cabinet. The partnership has a long term, strategic approach to creating sustainable new jobs and productive investment for Wollongong achieved through the facilitation of significant new business investment projects. Advantage Wollongong focusses on attracting new businesses by promoting Wollongong as a superior business location in key growth sectors and has developed a range of promotional resources and activities, aligned to the target sectors.

Advantage Wollongong has been promoting Wollongong as a superior business location since 2009. It is recognised as a best practice approach to business and investment attraction and has generated significant momentum over the past decade. Advantage Wollongong focusses on changing perceptions and attracting new businesses.

A major win for Advantage Wollongong was the decision by global IT giant NEC choosing to set up their new corporate headquarters in Wollongong (See case study on page 63).

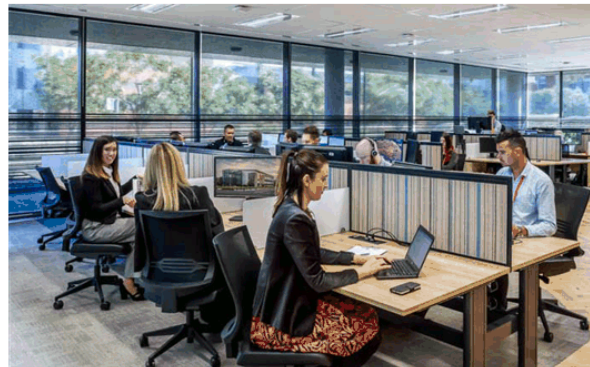
Wollongong has several key advantages that make it a superior business location.

- 1. Large talent pool
- 2. Vibrant coastal lifestyle
- 3. Enhanced work-life balance
- 4. Supportive business environment
- 5. Proximity to Sydney, just 1 hour south
- 6. Industry-focussed global University

Advantage Wollongong has developed tailored sector strategies and promotes the following seven key growth industries.

- 1. Professional services
- 2. Financial services
- 3. Tech (see NEC case study page 65)
- 4. Advanced manufacturing
- 5. Defence
- 6. Health & wellbeing
- 7. Scale-ups.

These future-proof sectors generate important external income for the region. The targeted sectors are also broadly consistent with the work done by .id on this Strategy to identify the potential for high-skills/high income jobs out to 2028.



Case study: Advantage Wollongong Success Story: NEC Australia

After a thorough investigation of options, NEC Australia, a leading Australian ICT solutions and services firm chose to locate its newest corporate office and support centre in Wollongong in 2017. Today it employs 140 staff, up from 70 initially.

NEC Australia was impressed with the quality of the workforce in Wollongong and tapped into the many experienced senior IT professionals and executives located within the region along with the UOW IT Graduate Pool.

Wollongong has provided NEC with the opportunity to develop strong links with the local and business community. Being located in Wollongong also provided staff with access to greater work-life benefits, the cosmopolitan city centre, a reduction in commuting times, and significantly lower staff turnover.

Destination Wollongong

Destination Wollongong is charged with delivering visitor economy growth by positioning Wollongong and the surrounds as a premier tourism, events and conference destination. In 2016, Council entered into a five year funding agreement with Destination Wollongong.

In 2018, the Wollongong LGA welcomed around 3.6 million overnight and day trip visitors. The tourism industry⁵⁷ is estimated to support a total of around 2,800 local jobs or 3% of Wollongong's local workforce.

A key focus of Destination Wollongong has been the attraction of major events. According to Destination Wollongong major events tourism resulted in an estimated \$53 million in spending in 2017-2018 from 31 events. This resulted in a Return on Investment (ROI) of \$162 for every \$1 spent on attracting events to the city.⁵⁸ The types of events Destination Wollongong targets cover sport, adventure, the arts, innovation, food & beverage and motoring. Events held in 2018 included Elton John, Cher, Wigan Warriors and Yours & Ows. Wollongong has also recently secured the hosting rights to the prestigious 2022 UCI Road World Championships, which will attract 1,000 competitors and 300,000 spectators to Wollongong.

'Blue tourism' is also increasing in importance to Wollongong as the city takes advantage of its coastal location. Over the last two years, Wollongong has had six cruise ship visits. According to Destination Wollongong, this resulted in over \$3 million worth of regional economic benefits and 17,000 visitors to our city.



3. Knowledge Hub

Council's Economic Development team is dedicated to promoting Wollongong as open for business. The team looks to support sustainable economic growth for the Wollongong economy, through supporting business expansion and attracting investment.

As the first point of contact for businesses looking to establish, grow or re-locate to Wollongong, the Economic Development team assists with general business and investment enquiries, facilitates discussions with internal and external stakeholders and undertakes economic impact modelling.

Information on Wollongong's economy is available through .id which includes access to the latest economic data about the city on Wollongong City Council's website.

4. Infrastructure

Council is a major investors in the city through their capital work programs. In turn, these investments in public space encourage and facilitate private investment in the city.

Wollongong City Council is the custodian of infrastructure, property, plant and equipment assets valued at approximately \$2.57 billion on behalf of the community. During 2017-2018, Council delivered a capital works program worth \$95.9 million, completing, commencing and working on 650 projects across the local government area. This includes \$56.4 million on renewing and replacing existing ageing assets, and \$39.4 million on upgrading or constructing and purchasing new assets.⁵⁹

Major projects

Since 2012, Wollongong City Council has invested over \$30 million in upgrading the Wollongong city centre's infrastructure. The announcement by GPT group, post the global financial crisis in 2008, that it would be investing \$200 million in the Wollongong city centre was a significant turning point for Wollongong. This announcement was the impetus for change, as it signalled to the market that a large publicly listed company was willing to invest significantly in Wollongong.

Wollongong City Council invested \$20 million for the refurbishment of the Crown Street Mall, along with a substantial renewal of the city centre footpaths and street-scaping. This included public art projects in the city centre and the rollout of different activation activities to draw people into the city centre. Weekly markets are now held in the city centre, including the Thursday night Eat Street Markets and the Friday Foragers Market.

In addition, Council invested \$40 million in upgrading the Blue Mile foreshore area between the entertainment precinct and Stuart Park.

Wollongong City Council administered the Crown Street and Inner City Building Façade Rejuvenation Program to improve the public domain. The program resulted in a \$1.5 million total investment - including \$900,000 by the private sector and \$600,000 by Council. The project was completed in September 2015, resulting in 38 façade rejuvenation projects, including 9 heritage listed buildings. Free WiFi was also rolled out along key pedestrian routes within the city centre in 2013.



'Incubator' infrastructure

Council provides infrastructure that directly assists sole traders and small business in their early stages of development, when the cost of renting a premises is prohibitively high. For example, Council libraries (in particular Thirroul library) are used by small businesses and commuters as basic co-working spaces. Council also hires out its community spaces to a range of users including some small creative-based businesses (eg dance, drama and art groups). Some of these expand to

the extent that they can move into larger, commercial rental spaces.

Council supports the expansion of more co-working space, particularly given the large commuter pool and for micro and small businesses establishing themselves in Wollongong. This could be either through the encouragement of new co-working spaces or directly investing in co-working spaces (see case study).

Case study:

NSW Smart work hubs (SWH) Pilot Program

In 2015, the NSW Government supported the establishment of five smart work hubs (SWH) as part of its SWH Pilot Program. The five pilot locations were: Rouse Hill, Oran Park, Wyong, Penrith and Gosford. The program was successfully completed in 2016 and involved 478 overall users.

An evaluation of the success of the program in 2017, aimed at building evidence around demand, operating models and potential benefits. Key findings of the research were:

Demand

- There are a range of potential users, including individuals, micro businesses and SMEs
- Surveys of actual usage by individuals showed they accessed the hub once or twice per week, which would not have been enough demand alone to sustain the hub.
- However, additional demand from SMEs and micro-businesses provided promising emerging demand.

Benefits

- Hub users reported expected and actual time and cost savings as a result of hub usage, spending on average 27.7 minutes and 41.3 kilometres less commuting per day. This translated to improved health and well-being benefits for the participants.
- Users reported new opportunities for networking and collaboration.
- Increased labour force participation was also identified.
- Interviews with hub operators indicated that additional employer benefits could be realised in the longer term through business savings in direct and indirect real estate costs.

Summary

Findings showed clear benefits, emerging demand and basic characteristics of a sound SWH operating model.

Fitzgerald, M., Malik, A., and Rosenberger III, P. J (2017) NSW Smart Work Hub Pilot Program: Final Report

Leveraging Council's own assets

One of the issues raised in consultations was around the potential for council to leverage its own asset base and invest in new commercial assets for the broader benefit of the city. This would potentially encourage further private investment in commercial space in the city centre. There are many examples of Councils around NSW and Australia currently undertaking similar strategies. One such example is Liverpool Council which is currently undertaking such a project (see case study).



Case study:

Council-led Liverpool CBD regeneration

As major investors, councils have the opportunity to use their investments strategically to regenerate areas and increase the provision of commercial space.

Liverpool City Council was to leverage their asset ownership in the CBD to deliver additional office capacity and drive the regeneration of the CBD area.

The new Civic Place project, worth a total of \$300 million, will provide a mixed-use development incorporating a combination of residential, commercial, retail, cultural, educational, hotel and dining functions. By partnering with a commercial developer and utilising State Government funding, the cost to Council of this project will be \$75 million.

Council works

- A new Liverpool City Centre Library; (2,800 sqm)
- New Council offices/Chambers (as part of a total of 13,000 sqm in commercial office space);
- University of Wollongong South Western Sydney campus;
- Council and Public Parking;
- A new and exciting Civic Plaza.

Developer works

- Residential apartments within two towers;
- Student accommodation – providing approximately 140 rooms;
- A 3.5 to 4 star hotel – providing approximately 140 rooms.

The old library building will be used for community facilities in the future. The old Council offices will either be sold or leased on the open market, delivering additional office space to the CBD. Proceeds of such a lease/sale will contribute towards the delivery and operation of Liverpool Civic Place.

5. Planning

The planning role of councils has a direct impact on jobs growth across the city. Planning covers a diversity of activities including the approval of individual development applications, high-level strategic planning around precincts and using zoning controls to protect important employment lands. The operation of the planning approval system also directly influences the capacity of the city to attract new investment and assure potential investors that projects can be delivered in a timely manner.

Planning was a major issue raised in the consultations both with businesses and investors in Wollongong. The need for greater dialogue between Council planners and investors/businesses was needed to ensure job-creating projects are progressed in a timely manner. In particular, there is an opportunity to build on the excellent work of Council's Small Business Planning team (see case study) and develop a model for improving the experience of major commercial developments that will deliver long-term benefits to the city and contribute directly to achieving the jobs target (see case study).

Case study: Small Business Planning team

Council's dedicated Small Business Planning team provides specialist advice to small businesses on navigating the development approvals and licencing process and also periodically hold free workshops on the topic. Navigating the planning system can be daunting for business owners, especially as they rarely have any expertise in this area.

In a recent example the team assisted a not-for-profit organisation, who noted:

"I cannot speak highly enough of the Small Business Team's assistance and excellent communication throughout my complicated DA process. It may have seemed a straightforward process for you, but to a novice like me, bumping into issues of zoning and traffic /parking issues, the Small Business Team's advice in how to navigate the process was invaluable. The Small Business Team's expertise and knowledge of the compliance requirements and his ability to "dumb it down" for a layperson was so appreciated."



6. Business Support and Development

Councils have an important role in supporting existing businesses to expand, upskill and grow. Wollongong City Council participates in a range of business support and business development activities.

Small Business Friendly Councils Program

Wollongong City Council joined the Small Business Friendly Council's Program in August 2015, demonstrating Council's commitment to supporting and building the capabilities of local businesses. The program includes several initiatives, which endeavour to eradicate red tape within local government across NSW.

Economic Gardening Program

Economic Gardening Illawarra is a business development program supported by Wollongong City Council, in partnership with Shellharbour and Kiama Councils.

The program focusses on helping local business operators to grow their enterprises by providing them with a package of professional business tools and assistance that is designed to help them fast-track the sustainable expansion of their business.

Since 2006, more than 500 businesses from a range of industry sectors have participated in the program. The program has helped Illawarra businesses increase turnover by more than \$40 million and created over 210 full time jobs⁶⁰. Many businesses have expanded operations locally, nationally and globally after participating in the program.

Support of business networks and local groups

Council supports local business networks, including i3net - a network of industry based Illawarra organisations who promote the collective capability of industry to local, national and international markets. Council recently entered into a new three year funding agreement with i3net and was a major sponsor of their annual showcase, held on 8-9 November 2018.

Council also works with the NSW Government's Business Connect program, which provides personalised advice to help businesses establish and/or grow. Council works with the Business Connect Bus, who provide subsidised face-to face business advice to town centres across the Wollongong LGA during the year.

Wollongong City Council is working with the start-up community, who are choosing to locate in Wollongong due to incubators such as iAccelerate, the liveability benefits of the city and the geographical flexibility available to digital businesses. These entrepreneurs have a less structured approach to collaboration than traditional businesses and have formed important networks across their community. They are more focussed on informal meet-ups and podcasts and require a different kind of business support to traditional models. As part of this engagement with the start-up/ scale-up community, Wollongong City Council has joined the iAccelerate program.

Workshops for business community

Wollongong City Council partners with other levels of government and local business groups to deliver workshops and seminars for businesses looking to learn new skills and grow their business.

Creative industries

The multiple ways in which Wollongong City Council supports creative industries is outlined in the *Creative Wollongong 2019-24 Strategy*, including specific programs such as *Renew Wollongong* and *Made in Wollongong*.



7. Operational procurement

Local councils are major purchasers of goods and services in the economy via extensive procurement programs. In 2017-2018 Council spent \$53.7 million on materials and contracts. This includes major contracts, such as waste management, road works, building, parks, cleaning and security.

The size of this spending is significant and provides an opportunity to directly support local businesses, presenting a significant opportunity to ensure that this capital spend and its associated multiplier effects are retained in the Wollongong LGA, to provide a boost for jobs, investment and local businesses.

Many state/territory governments and local councils around Australia have a local preference policy in place to support their local economies. There are a number of benefits from implementing such a policy, including:

- Retaining local government spend (and its expansive multiplier effects) within the local area;
- Supporting local businesses, employers and employees;
- Encouraging businesses to relocate/establish in the area;
- Creating jobs in the local area and helping reduce unemployment;
- Investing in the local community;
- Shorter supply chains and greater predictability of delivery times and lower cost; and
- Growing a prosperous economy and increasing Gross Regional Product.

Council has a current local procurement policy "Strengthening of Local Economic Capacity" for tenders (ie contracts over \$150,000) which include up to a 5% weighted criteria for all local suppliers.

The following five criteria must be considered in all tenders:

1. An existing legitimate business premises in WCC local area;
2. Locally sourced materials (grown, manufactured, assembled, made within the WCC local area) specific to the contract;
3. Locally sourced services as a result of the contract (eg maintenance);
4. Locally sourced labour (people domiciled within the WCC local area), either sub-contractors or employees; and
5. Locally sourced labour and materials from a business premise in the WCC local area.

An alternative approach has been taken by Gold Coast (see case study) which has had a significant positive impact on local businesses and now 80% of procurement spend is done with local suppliers.

One challenge in implementing a local procurement policy is ensuring that local businesses are aware of the opportunities and have the skills and accreditation to complete the tender process. There is an opportunity for Council to address these issues, alongside a review of the procurement policy, to maximise the uplift in local employment from Council's purchasing power.



Case study:

Gold Coast Council procurement policy

The City of Gold Coast developed an Economic Development Strategy 2013-23. In this Strategy Council set a target of 80% (from 50% initially) of procurement spend with local suppliers by 30 June 2017, which was achieved. This procurement policy helped the city fully capitalise on hosting the Commonwealth Games.

This policy resulted in approximately \$136 million additional spending directed to local businesses in 2016-2017 and \$340 million in the five years to June 2017.

This commitment is delivered by the 'Buy Local' Procurement Policy. The objective of this policy is to proactively support local business and industry to create jobs on the Gold Coast. Local procurement recognises and factors local supply in determining the winning offer through application of the 'buy local' preferential factors; local content weightings and local pricing advantage.

A major component of Council's buy local policy is the provision of a 15% pricing advantage to local suppliers for tenders under \$1,000,000 per annum, and 20% to 30% pricing advantage for quotations up to \$200,000.

In planning for this project, Council anticipated that it may result in a slight increase in its procurement costs and so established a fund to cover the anticipated extra costs. For 2016-17 the pricing advantage is capped at a total of \$250,000 but only \$31,888 was actually drawn down from this fund. In other words, the 'buy local' procurement program didn't cost the city what it expected to have to pay in extra procurement costs.





Part 3 Action Plan

This section of the Strategy outlines the key actions Council will take to achieve the jobs target, reduce the size of the commuter pool, lift median wages in Wollongong and retain a greater share of the graduating student population in the city. The Action Plan highlights the key actions, the delivery stream that will be responsible for the action and a timeframe around the delivery.

Wollongong City Council recognises that this Strategy cannot be delivered by Council alone. In order to deliver our goals we will need to partner with other levels of government, peak bodies and the broader business community.

The list of actions is derived from the research and analysis undertaken in Part 1 and Part 2 of this Strategy around the current economic position of Wollongong, the internal and external challenges and opportunities and best-practice lessons from other councils. Indeed, many of the action items have already been successfully implemented at other councils, presenting Wollongong with the opportunity to learn from others and tailor already successful programs for our city's needs.

1. Civic Leadership

Number	Draft Action Item	Delivery Stream	Short Term (1-3)	Medium Term (4-6)	Long Term (7-10)	BAU
1.1	Adopt an LGA-wide jobs target of 10,500 new jobs by 2028 and report progress against this target annually	- Economic Development				
1.2	Incorporate job impacts as part of supporting documents and projects that have employment implications	- All				
1.3	Focus on changing perceptions and attracting new business investment to Wollongong through Advantage Wollongong	- Economic Development				
1.4	Advocate for key transport projects that improve connectivity between Wollongong and Greater Sydney and support jobs growth and investment	- Economic Development - Infrastructure Strategic Planning				
1.5	Advocate for the retention and development of currently unused or underused industrial and urban services employment lands to support appropriate employment	- Economic Development - Infrastructure Strategic Planning - Land Use Planning				
1.6	Advocate for the port of Port Kembla as the second NSW container port as soon as possible	- Economic Development - Infrastructure Strategic Planning				
1.7	Advocate for the South West Illawarra Rail Line (SWIRL) to improve passenger and freight connections between Wollongong and SW Sydney	- Economic Development - Infrastructure Strategic Planning				
1.8	Advocate for new and existing NSW and Australian Government department or offices to be located in Wollongong	- Economic Development				
1.9	Investigate holding quarterly roundtable discussion between WCC General Manager and key business leaders and groups	- Economic Development				
1.10	Advocate for the establishment of a Wollongong city centre university campus	- Economic Development				
1.11	Work with ISJO and State government on initiatives that benefit employment outcomes	- Economic Development				
1.12	Advocate for the master planning process around Wollongong's Convention Centre/ Entertainment Centre complex	- Economic Development - Infrastructure Strategic Planning				
1.13	Work with Western Sydney counterparts and other levels of government to ensure Wollongong benefits from the Western Aerotropolis	- Economic Development				
1.14	Pursue a City Deal for Wollongong	- Economic Development				

2. Business Attraction

Number	Draft Action Item	Delivery Stream	Short Term (1-3)	Medium Term (4-6)	Long Term (7-10)	BAU
2.1	Support an ongoing strategic business attraction program via Advantage Wollongong	- Economic Development				
2.2	Develop a Wollongong place brand to increase exposure, consistency and brand reach across key economic development areas – Invest/Live/Visit/ Study	- Communications, Engagement, Events and Signage				
2.3	Develop and implement an Advantage Wollongong integrated marketing strategy targeting high value/ high income jobs in key sectors	- Economic Development				
2.4	Promote co-working facilities as a way for Wollongong resident staff to work for Sydney-based companies	- Economic Development - City Centre & Crown St Mall				
2.5	Develop and launch the Advantage Wollongong stakeholder program to leverage the existing networks of local businesses	- Economic Development				
2.6	Investigate famils, tours and delegations around Advantage Wollongong’s target sectors	- Economic Development				
2.7	Investigate future governance and management models for Advantage Wollongong	- Economic Development				
2.8	Facilitate business investment enquiries	- Economic Development				
2.9	Explore the re-introduction of a NSW government supported fund to assist new businesses seeking to establish in Wollongong	- Economic Development				

3. Knowledge Hub

Number	Draft Action Item	Delivery Stream	Short Term (1-3)	Medium Term (4-6)	Long Term (7-10)	BAU
3.1	Provide a 6-monthly update to local Councillors on the state of the local economy	- Economic Development				
3.2	Provide accurate and timely investment information such as economic, demographic and development information, and making this available to the community as a means of supporting business expansion/ investment decisions	- Economic Development				
3.3	Provide support for government submissions, modelling and policy advice for other business unit's funding applications	- Economic Development				
3.4	Promote libraries as learning centres and work spaces for business owners and their staff	- Library Services - Economic Development				
3.5	Undertake research into the negative individual and community impacts of commuting	- Economic Development				
3.6	Maintain current data on a range of types of commercial floorspace in the LGA including: significant enquiries; Development Applications; constructed projects; vacancy rates	- Economic Development - Development Assessment - Building Certification - Customer Service				

4. Infrastructure

Number	Draft Action Item	Delivery Stream	Short Term (1-3)	Medium Term (4-6)	Long Term (7-10)	BAU
4.1	Develop the business case for the installation of ultra-high-speed digital infrastructure in the Wollongong city centre to enable new digital economy businesses	- Economic Development - Technology Infrastructure Services - Infrastructure Strategic Planning - City Centre and Crown Street Mall				
4.2	Explore future opportunities in the Smart City space to improve Council's operating efficiency and delivery of services to the community	- Technology Infrastructure Services - Infrastructure Strategic Planning				
4.3	Develop local transport policies that ensure all residents can access employment opportunities in job centres such as Metro Wollongong	- Infrastructure Strategic Planning - Road Safety, Traffic and Transport Planning				
4.4	Investigate options for reducing car parking rates to assist commercial building feasibility in the city	- Infrastructure Strategic Planning - Road Safety, Traffic and Transport Planning				
4.5	Include recognition of the economic impact and job creation capacity of major infrastructure projects undertaken by Council	- Infrastructure Strategic Planning - Urban Renewal and Civic Improvement - City Centre and Crown Street Mall				
4.6	Provide infrastructure to support activities and improve amenity and activation within the Wollongong city centre	- Infrastructure Strategic Planning - City Centre and Crown Street Mall				
4.7	Establish digital way-finding, using information systems and data collection, to improve traffic flows and car parking utilisation in the city centre	- Road Safety, Traffic and Transport Planning - Infrastructure Strategic Planning - City Centre and Crown Street Mall - Economic Development				

5. Planning

Number	Draft Action Item	Delivery Stream	Short Term (1-3)	Medium Term (4-6)	Long Term (7-10)	BAU
5.1	Establish a mechanism to expedite significant employment generating projects, which involves input from multiple specialist teams across Council.	- Infrastructure Strategic Planning - Development Assessment - Economic Development				
5.2	Implement policies that support a mix of office development in the Wollongong city centre including new A-grade commercial buildings	- Infrastructure Strategic Planning - Land Use Planning				
5.3	Implement policies (via town and village plans) that support appropriate jobs generation in other (non-city centre) employment areas across the LGA	- Infrastructure Strategic Planning - Land Use Planning				
5.4	Develop a planning and policy framework to support the ongoing evolution of Wollongong's evening economy	- City Centre and Crown Street Mall - Cultural Development - Land Use Planning - Economic Development				
5.5	Undertake a Tourism Lands Review in order to investigate the use of tourism-specific zoning on key coastal sites to ensure the provision of sufficient beds in Wollongong to support a growing visitor economy	- Infrastructure Strategic Planning - Land Use Planning				
5.6	Conduct a survey of local investors every two years to obtain feedback on their business investment experience in the LGA	- Economic Development				
5.7	Establish an investment Industry Forum every 6 months where WCC can communicate strategic directions and gain market insights	- Development Assessment - Infrastructure Strategic Planning - Land Use Planning - Economic Development				

6. Business Support

Number	Draft Action Item	Delivery Stream	Short Term (1-3)	Medium Term (4-6)	Long Term (7-10)	BAU
6.1	Undertake regular dialogue/events/workshops with small business focussed on building capacity and entrepreneurship in partnership with business groups, local chambers, iAccelerate and Advantage SME	- Economic Development				
6.2	Implement the Small Business Friendly Council Program, including the 'Easy to do Business' program	- Economic Development - Development Assessment - Inspections, Education and Registrations - Customer Service Delivery				
6.3	Work with local chambers to establish a 'Buy Local' campaign to support businesses	- Economic Development				
6.4	Promote links between the University's research capabilities and local industry	- Economic Development				
6.5	Support local industry clusters and destination marketing activities	- Economic Development - Destination Wollongong				
6.6	Investigate partnerships and promotional opportunities to further develop and expand the Made in Wollongong brand and support its delivery	- Cultural Development - Economic Development				
6.7	Support the Renew Wollongong Program in the Wollongong City Centre	- City Centre and Crown St Mall				
6.8	Establish a 6-monthly economic development electronic newsletter to update local businesses on Council activities and projects	- Economic Development				
6.9	Investigate a review of city centre levies	- City Centre and Crown St Mall				

7. Procurement

Number	Draft Action Item	Delivery Stream	Short Term (1-3)	Medium Term (4-6)	Long Term (7-10)	BAU
7.1	Review Council's procurement of local goods and services to increase its role as a major lever for local job creation	- Economic Development - Supply Management				
7.2	Launch an annual procurement showcase event associated with the capital works program to assist local businesses with tendering opportunities	- Supply Management				
7.3	Support the inclusion of targeted groups in procurement programs	- Economic Development - Community Development - Supply Management				
7.4	Use Council's procurement policy to support new businesses which are developing innovative and sustainable building materials and techniques	- Supply Management				

Bibliography

- AEC Group (2017) *360 Illawarra Shoalhaven Economic Outlook*
- ANZ (2018) *The Digital Economy: Transforming Australian Businesses*
- Australian Bureau of Statistics (2016) *Census of Population and Housing 2003.0*
- Australian Bureau of Statistics (2018) *Labour Force, Australia, Detailed - Electronic Delivery 6291.0.55.001*
- Australian Research Council (2016), *State of Australian University Research 2015–16: Volume 1 ERA National Report*
- BIS Shrapnel (2015) *Strategic Employment Review: Macquarie Park*
- Branigan, J., Harvie, C., Michalas, G., Ramezani, F. (2016) *Leading Locally, Competing Globally: Measuring the University of Wollongong's Economic & Social Contribution to the Illawarra and Beyond*, University of Wollongong
- Cardno (2014) *Destination Development Plan*
- Cardno (2014) *Illawarra Industrial Lands Study*
- Centre for Economic and Regional Development (2018) *Kiama Regional Economic Development Strategy 2018 – 2022*
- Centre for Economic and Regional Development (2018) *Shoalhaven Regional Economic Development Strategy 2018 - 2022*
- Centre for Economic and Regional Development (2018) *Wingecarribee Regional Economic Development Strategy 2018 – 2022*
- City of Ballarat (2015) *Economic Program 2015-19*
- City of Gold Coast (2013) *Economic development strategy 2013-23*
- City of Gold Coast (2016) *Procurement Policy and Contract Manual*
- City of Gold Coast (2016) *Open for business toolkit*
- City of Greater Bendigo (2014) *Economic Development Strategy 2014-2020*
- City of Parramatta Council (2017) *Economic Development Plan 2017-21*
- Committee for Perth (2014) *The rising cost of living in Perth*
- Committee for Sydney (2018) *The Sandstone Mega-Region*
- Deloitte Access Economics (2014) *Infrastructure for the Illawarra's future*
- Deloitte Access Economics (2018) *NSW Container and Port Policy*
- Department of Infrastructure, Regional Development and Cities (2019) *Princes Highway Corridor Strategy Issues Paper*
- Destination Wollongong (2019) unpublished internal data
- Domain (2019), *State of the Market Report, December quarter 2018*
- Fifth Quadrant (2019) *Knowledge Services Capability Study*
- Fitzgerald, M., Malik, A., and Rosenberger III, P. J (2017) *NSW Smart Work Hub Pilot Program: Final Report*
- G21 (2014) *G21 Region Economic Development Strategy*
- Greater Sydney Commission (2017) *A Metropolis of Three Cities*
- iAccelerate (2018) *Economic Impact Report*
- id. (2019) *Wollongong jobs and employment analysis (unpublished)*
- Illawarra Business Chamber (2017) *Upgrading rail connectivity between Illawarra and Sydney*
- Illawarra Business Chamber (2018) *Upgrading road connectivity between the Illawarra and Greater Sydney*
- Illawarra Shoalhaven Joint Organisation (2018) *Illawarra-Shoalhaven Smart Region Strategy*
- Illawarra Regional Information Service (2018), *Graduate Survey 2006-2018*
- Infrastructure Australia (2019) *Infrastructure Priority List*
- Innovation Cities Index (www.innovation-cities.com)
- Innovation and Science Australia (2017) *Australia 2030: prosperity through innovation*
- KMPG (2019) *Quay Conclusions*
- Liverpool City Council (2013) *Economic Development Strategy 2013 – 2023*
- MacroPlanDimasi (2017) *WIN Wollongong Convention Centre*

Bibliography cont.

- Marchetti, C., (1994) *Anthropological Invariants in Travel Behavior, Technological Forecasting and Social Change*, 47 :75–88, Internal Publication, International Institute for Applied Systems Analysis.
- NIEIR data compiled by .id
- NSW Government (2015) *Illawarra–Shoalhaven Regional Plan*
- NSW Government (2017) *Illawarra-Shoalhaven regional plan: annual monitoring report*
- NSW Government (2018) *Cruise Development Plan*
- NSW Government (2018) *Freight and Ports Plan 2018-23*
- NSW Government (2018) *Future Transport Strategy 2056*
- NSW Government (2018) *Greater Newcastle Metropolitan Plan 2036*
- NSW Government (2018) *Greater Sydney Regional Plan*
- NSW Government (2018) *Regional NSW services and infrastructure plan*
- NSW Government (2019) *Employment Land Supply, Illawarra-Shoalhaven*
- NSW Ports (2015) *Navigating the Future*
- Office of Local Government (2017) *Your Council 2016/17*
- Office of National Statistics (2014) *Commuting and Personal Well-being*
- Penrith City Council (2017) *Economic Development Strategy*
- Port Macquarie-Hastings Council (2017) *Economic Development Strategy 2017-2021*
- Productivity Commission (2017) *Transitioning Regional Economies, Study Report*
- Property Council of Australia (2017) *The benefits of increased employment and tertiary students in the Darwin CBD*
- Property Council of Australia (2019) *Office Market Report*
- RDA Illawarra (2017) *Workforce Participation in the Illawarra*
- RDA Illawarra (2018) *RDA Illawarra Strategy*
- RDA Illawarra (2018) *Illawarra population change*
- Regional Australia Institute (July 2018) *Business growth opportunities*
- Sandow (2013) 'Til Work Do Us Part: The Social Fallacy of Long-distance Commuting' *Urban Studies* Volume: 51 issue: 3, page(s): 526-543
- Shellharbour City Council (2014) *Economic Development Strategy 2014 – 2018*
- Small Business Digital Taskforce (2018) *Report to Government*
- Stutzer, A., Frey, B. (2008) 'Stress that doesn't pay: the commuting paradox' *Institute for the Study of Labor* Discussion Paper No. 1278
- UOW (2016) *Wollongong Campus Master Plan*
- UOW (2018) *2030 Vision: A Purposeful Future*
- Wollongong City Council (2014) *Economic Development Strategy 2013-23*
- Wollongong City Council, RDA Illawarra and Illawarra Business Chamber (2015) *Submission to Future role and contribution of regional capitals to Australia*, Senate Rural Regional Affairs and Transport Committee
- Wollongong City Council (2017) *Annual Report 2016-17*
- Wollongong City Council (2017) *Investor survey results (unpublished)*
- Wollongong City Council (2018) *Business survey results (unpublished)*
- Wollongong City Council (2018) *Our Wollongong 2028 Community Strategic Plan*
- Wollongong City Council internal DA data (unpublished)
- www.uow.edu.au/about/uow014908.html
- www.topuniversities.com
- Zahavi, Y, (May 1994) *Travel time Budgets and Mobility in Urban Areas*

Glossary

DA – Development Application

DCP – Development Control Plan

FSR – Floor Space Ratio

GRP – Gross Regional Product - Headline GRP is a measure of size or net wealth generated by the local economy. Changes in this over time can represent changes in employment, productivity or the types of industries in the area.

IBC – Illawarra Business Chamber

ISJO – Illawarra Shoalhaven Joint Organisation

IRIS – Illawarra Regional Information Service

LEP – Local Environmental Plan

LGA – Local Government Area

NABERS – National Australian Built Environment Rating System

NIEIR – National Institute of Economic and Industry Research

R&D – Research and Development

SME – Small and Medium Enterprise

SWIRL – South West Illawarra Rail Line

Tourism – An amalgam of activities across various industry sectors

Value added by industry - An indicator of business productivity in Wollongong City. It shows how productive each industry sector is at increasing the value of its inputs. It is a more accurate measure of the productivity of an industry sector than output (total gross revenue), as some industries have high levels of output but require large amounts of input expenditure to achieve that.

Undeveloped land – Currently zoned land which was not occupied by an employment related use at the time of data collection

UOW – University of Wollongong

Endnotes

- ¹Australian Bureau of Statistics (2018) *Labour Force, Australia, Detailed - Electronic Delivery* 6291.0.55.001
- ²Branigan, J., Harvie, C., Michalas, G., Ramezani, F. (2016) *Leading Locally, Competing Globally: Measuring the University of Wollongong's Economic & Social Contribution to the Illawarra and Beyond*, University of Wollongong, pp 12-13
- ³BIS Shrapnel (2015) *Strategic Employment Review, Macquarie Park* p. 37
- ⁴NIEIR data compiled by .id
- ⁵NSW Government (2015) *Illawarra-Shoalhaven Regional Plan* p. 11
- ⁶NIEIR data compiled by .id
- ⁷ABS (2016) *Census of Population and Housing 2003.0*
- ⁸Property Council of Australia (2019) *Office Market Report*
- ⁹NIEIR data compiled by .id
- ¹⁰Wollongong City Council internal data
- ¹¹ABS (2016) *Census of Population and Housing 2003.0*
- ¹²Domain (2019), *State of the Market Report, December quarter 2018*
- ¹³ABS (2016) *Census of Population and Housing 2003.0*
- ¹⁴Fifth Quadrant (2019) *Knowledge Services Capability Study*
- ¹⁵www.uow.edu.au/about/uow014908.html
- ¹⁶www.topuniversities.com
- ¹⁷iAccelerate (2018) *Economic Impact Report*
- ¹⁸ABS (2016) *Census of Population and Housing 2003.0*
- ¹⁹Greater Sydney Commission (2017) *A Metropolis of Three Cities*
- ²⁰Zahavi, Y, (May 1994) *Travel time Budgets and Mobility in Urban Areas*
- ²¹Marchetti, C., (1994) *Anthropological Invariants in Travel Behavior, Technological Forecasting and Social Change*, 47 :75-88, Internal Publication, International Institute for Applied Systems Analysis.
- ²²Office of National Statistics (2014) *Commuting and personal well-being*
- ²³Regional Australia Institute (July 2018) *Business growth opportunities*
- ²⁴Wollongong City Council (2019) Business Survey results –unpublished
- ²⁵Regional Australia Institute (July 2018) *Business growth opportunities*
- ²⁶Small Business Digital Taskforce (2018), *Final Report*
- ²⁷NIEIR data compiled by .id
- ²⁸NIEIR data compiled by .id
- ²⁹NIEIR data compiled by .id
- ³⁰Branigan, J., Harvie, C., Michalas, G., Ramezani, F. (2016) *Leading Locally, Competing Globally: Measuring the University of Wollongong's Economic & Social Contribution to the Illawarra and Beyond*, University of Wollongong, pp 12-13
- ³¹Australian Research Council (2016), *State of Australian University Research 2015-16: Volume 1 ERA National Report*
- ³².id report compiled for Wollongong City Council, unpublished
- ³³ABS (2016) *Census of Population and Housing 2003.0*
- ³⁴ABS (2016) *Census of Population and Housing 2003.0*
- ³⁵AEC Group (2017) *360 Illawarra Shoalhaven Economic Outlook*
- ³⁶Illawarra Business Chamber (2017) *Upgrading rail connectivity between Illawarra and Sydney*
- ³⁷NSW Government (2018) *Future Transport Strategy 2056*
- ³⁸Illawarra Business Chamber (2018) *Upgrading road connectivity between the Illawarra and Greater Sydney*
- ³⁹Committee for Sydney (June 2018) *The Sandstone Mega-Region*
- ⁴⁰Infrastructure Australia (2019) *Infrastructure Priority List*
- ⁴¹Department of infrastructure, Regional Development and Cities (2019) *Princes Highway Corridor Strategy Issues Paper*
- ⁴²AEC Group (2017) *360 Illawarra Shoalhaven Economic Outlook*
- ⁴³Property Council of Australia (2019) *Office Market Report*
- ⁴⁴ABS (2016) *Census of Population and Housing 2003.0*
- ⁴⁵NSW Government (2015) *Illawarra Shoalhaven Regional Plan*
- ⁴⁶NSW Government (2019) *Employment Land Supply, Illawarra-Shoalhaven*
- ⁴⁷Cardno (2014) *Illawarra Industrial Lands Study*
- ⁴⁸Destination Wollongong (2018) *Crowd Seeker Q4 2018*
- ⁴⁹MacroPlanDimasi (2017) *WIN Wollongong Convention Centre*
- ⁵⁰NSW Government (2018) *Cruise Development Plan*
- ⁵¹Property Council of Australia (2017) *The benefits of increased employment and tertiary students in the Darwin CBD*
- ⁵²NSW Ports (2015) *Navigating the Future* pg 15
- ⁵³NSW Gov (2018) *Freight and Ports Plan 2018-23* pg 39
- ⁵⁴KPMG (2019) *Quay Conclusions*
- ⁵⁵NSW Ports (2015) *Navigating the Future*
- ⁵⁶Illawarra-Shoalhaven Joint Organisation (2018) *Illawarra-Shoalhaven Smart Regional Strategy*
- ⁵⁷NIEIR data compiled by .id
- ⁵⁸Destination Wollongong (2019) unpublished internal data
- ⁵⁹Wollongong City Council 2018, *Annual Report 2017/18*
- ⁶⁰Illawarra Regional Information Service (2018), *Graduate Survey 2006-2018*

