The decentralisation of work and the Illawarra
Practical insights for business

Business Illawarra
April 2021
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Foreword

This report has been prepared for Illawarra First by Deloitte Access Economics.

Illawarra First is the peak business leadership group for the region, comprising the heads of its leading organisations as part of a dialogue that incorporates senior decision-makers from across government and the private sector.

As part of Business Illawarra (formerly the Illawarra Business Chamber) and backed by a research fund, Illawarra First advances the region’s economic development through advocacy that is supported by a rigorous evidence base.

With the onset of COVID-19, employment and working practices have been significantly disrupted. The Illawarra, with its large commuter workforce and proximity to Sydney, was always going to be impacted by the adoption of flexible and remote working practices.

Business Illawarra has long advocated for the decentralisation of private and public sector jobs to regional areas, and recent events could serve to redefine work in the Illawarra region beyond the period of the pandemic. The benefit to business, employees, and both the state and regional economies could be significant.

The purpose of this research is to produce a public report that describes the impact and, in particular, the risks and opportunities, that may arise from the shift to decentralised work in the Illawarra.

The report adds to the existing knowledge base by setting out a number of recommendations for employers to effectively adapt to and maximise the benefits of hybrid work practices.

The findings in this report relate directly to the Illawarra region but could also be applied to other satellite regions with good access to metropolitan CBDs such as Central Coast (NSW) or Geelong (Victoria) among others.

Deloitte Access Economics and Business Illawarra would like to thank all the organisations and respondents that participated in this study, and specifically acknowledge the contribution of Evan Marginson, Policy Manager, Business Illawarra.

Adam Zarth
Executive Director
Business Illawarra
Executive summary

COVID-19 has accelerated the shift towards decentralised working. With many businesses forced to temporarily close their physical workplaces, both employees and employers were forced to overcome the barriers to working from home, effectively embedding a remote working mindset in the process. Reflecting the notion that work is no longer bound by the physical office, decentralised working, capturing work that is undertaken outside the primary office of an employee, is fast becoming a more permanent feature of many Australian businesses.

A hybrid working model, where only part of the work week is spent in the central office, will likely be the future of work for many businesses. The model that an individual employer adopts will depend on the nature of the work undertaken. Hybrid work will likely be the reality for many knowledge workers as they have the potential to do certain tasks from home, and other tasks from the office or on the job site. Global research indicates that employees in finance and insurance, management, and professional services can effectively complete between 62% and 76% of all tasks remotely. On the other hand, only 7% to 15% of tasks in construction, the retail and health services industries, and agriculture can be completed remotely.\(^1\)

Given its high commuter workforce, relative affordability of housing, and natural amenity, the Illawarra region is well positioned to benefit from the accelerated shift towards remote working.\(^2\) A theoretical scenario purely based on a workforce analysis of the Illawarra labour market indicates that 38% of the current local workforce could work entirely remotely.

But people do not want to work from home all the time. As part of this study we have completed a detailed survey of people in the Illawarra that live and work in the region, and those that commute to Greater Sydney. 75% of survey respondents indicated they would like to work from home in some capacity in the future. This is a significant increase from the pre-COVID-19 experience where only 44% of survey respondents worked from home in some capacity.\(^3\)

More specifically, the survey shows that most workers that commute into Greater Sydney would prefer to work remotely for three to five days per week – much higher than the non-commuters who would prefer to work remotely two to three days per week.

Combining our analysis of the Illawarra workforce with the survey results, it is estimated that approximately 11,900 commuters from the Illawarra region could work from home an additional 1.3 days per week in the future if they were enabled to do so.

Such a scenario would see the Illawarra region benefit more broadly from the decentralisation of work as people spend more time and money within the region. Commuters indicated that they spent approximately $5.63 per day more at local businesses when working from home during COVID-19. Extrapolating that result across the additional time worked from home by commuters in the future would induce an additional $4.1 million in local spending per annum.

Remote working has benefits for businesses and employees. Employees benefit from improved work-life balance, especially those workers that commute into Greater Sydney who can save three hours (or more) a day in commute time. At the same time, employers with workforces that can work remotely could benefit from reduced absenteeism, increased employee engagement, and an uplift in productivity for those workers. According to NSW Government research, approximately 53% of NSW workers reported higher productivity when working remotely compared to in the office.\(^3\)

68% of surveyed Illawarra residents reported being more productive while working remotely, with an average 17% uplift in productivity compared to in the office. Importantly, the commuter population (22% uplift) indicated a greater productivity uplift from remote work than non-commuters (16% uplift) in the region. This finding suggests that commute time savings are, at least in part, translating into more productive workdays.

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2. The Illawarra region, for the purposes of this report, is comprised of Wollongong, Shellharbour, and Kiama LGAs, as well as adjacent Wingecaribee and Wollondilly LGAs.
However, there are also challenges to overcome. Collaboration and culture remain important for both employers and employees to realise the benefits of decentralisation. The office still holds value as a place for collaboration and socialisation that contributes to the culture of a company and wellbeing of the workforce. In addition, some workers do not have the appropriate technology, space, or equipment available to effectively work from home.

To enable this, employers will need to provide necessary mental health support to mitigate potential effects of social isolation and put in place open and transparent lines of communication. Employers may experience some challenges in ensuring productivity remains elevated. Improved lines of communication, providing technology and equipment, along with processes to maintain employee engagement can assist. It is important for employers to also create a working environment that fosters flexibility and accountability, perhaps by focusing performance measurement on outputs rather than actual time spent on a task.

A number of employers based both in the Illawarra region and Greater Sydney – public and private, small, and large, local and national – were consulted as part of this study to better understand emerging business responses and attitudes to remote work. This included large professional services firms, finance, telecommunications, and data analytics sector employers, as well as public sector agencies. While it was challenging and disruptive to shift to remote working models as rapidly as required during the COVID-19 pandemic, the overall sentiment expressed by the organisations consulted was one of satisfaction with the outcomes of the transition. Consistent with global trends, employers and employees consulted in this study indicated a preference, where applicable, for hybrid work, where employees work remotely part of the week and spend the rest in the primary office.

Given these trends, businesses need to review their work practices and implement any changes necessary to maximise the benefits of remote work. This includes considering how to adjust recruitment and onboarding processes, adapt physical office space, and implement new policies for staff. Similarly, employees need to proactively engage with their employers about their remote working needs, identify how to best set up their workspace, and ensure they maintain social connection to their workplace and industry more broadly.

There is also an increasing need for employers to actively engage with all levels of government to encourage investment in hard and soft infrastructure to support the shift to remote working. For instance, workplace health and safety regulations and industrial relations laws will need to be realigned to recognise remote working and its implications for business and staff wellbeing. Infrastructure investment to support remote work, such as upgrades to digital networks and services, will likely be required in many regional areas. Land use and transport investment policies should also be reviewed to ensure they remain fit for the purpose of enabling remote work.
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Recommendations to support employers in the shift to remote working

Ultimately, each individual business will need to undertake its own cost-benefit assessment, considering which roles and tasks are better suited to a hybrid model and the enabling conditions required. To this end, it is important that employers review their business needs and, put in place policies, practices, and employment arrangements that enable a hybrid model of work, where appropriate and mutually beneficial to both employers and employees.

- **Adjusting recruitment and on boarding processes to adapt to remote work**
  Remote working flexibility can increase the pool of talent usually available to businesses. Adjusting locational requirements and on boarding processes can greatly improve the success of remote work when growing the organisation’s workforce.

- **Adapting physical office space**
  The utilisation and provision of office space will need to adapt to an increasingly hybrid work model, with a potentially different office footprint where worksites are better optimised for collaboration.

- **Considering costs of supply of equipment to enable hybrid work**
  Leveraging the recent acceleration in new enabling technology, employers will need to invest in virtual communication platforms and enabling network infrastructure, workstation equipment, and in upskilling employees to use new technology. This will be important to harness remote working benefits to date and into the future.

- **Reviewing and tailoring work arrangements to better suit individuals and roles**
  Proactively engaging with employees, employers will need to review current employment arrangements recognising individual needs and roles, and how they can be tailored to successful remote work.

- **Re-thinking remote working policies**
  Businesses need to be proactive in developing a remote working policy that captures the benefits, such as enhanced productivity, while addressing the risks and challenges. Technology, processes, and leadership support is required within the organisation. Monitoring the success of new working arrangements over time, including their impact on productivity, will be important.

- **Implementing processes to ensure regular communication**
  Employers should proactively assist employees with maintaining social connection to their work and industry and encourage regular communication between managers and employees.

- **Reviewing compliance with and the application of OH&S, IR and privacy laws to hybrid work**
  Employers should review their compliance with current rules and regulations, such as OH&S, and IR among others, and their applicability to hybrid work to actively manage any liability risks that may arise. Over time, employers will need to engage with government to ensure that legislation and regulation are adapted accordingly.

- **Engaging with government to encourage the provision of enabling infrastructure**
  Working with all levels of government, employers can play an important role to assist government with optimising the use of infrastructure (digital connectivity, among others) and commercial office space in a manner designed to maximise the benefit of remote work.
Key findings

What is the ideal future model of work?

A hybrid working model, where only part of the work week is spent in the central office, will likely be the future of work for many businesses, particularly those in the knowledge sector.

How frequently would employees like to work from home in the future?

- 85% commuters want to WFH
- 3-5 days per week on average
- 62% non-commuters want to WFH
- 2-3 days per week

How did remote working impact the productivity of Illawarra residents?

- Average reported productivity uplift when working remotely during COVID-19, compared to in the office (based on employee surveys)
- Commuters: 17%
- Non-commuters: 16%

What are the top 3 benefits of and barriers to remote working for employers?

<table>
<thead>
<tr>
<th>Top benefits</th>
<th>Top barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in overhead costs</td>
<td>Harder to develop and maintain company culture</td>
</tr>
<tr>
<td>Access to a broader talent pool</td>
<td>Increased salary competition</td>
</tr>
<tr>
<td>Higher employee engagement</td>
<td>Difficulty collaborating online</td>
</tr>
</tbody>
</table>

What is the future potential of remote working in the Illawarra?

- 11,900 Potential Remote workers as at 2020
- 1.3 days Additional days WFH per week
- $4.1m Spending within the region per annum
1. Introduction

Business Illawarra through its leadership group Illawarra First (“Business Illawarra” henceforth), engaged Deloitte Access Economics to deliver a report examining decentralisation of work in the Illawarra region.4

In the wake of the COVID precipitated disruption to business practices, this report undertakes detailed modelling and survey analysis of employees, and qualitative interviews with Sydney and Illawarra based employers, on the impact and future of decentralised work practices.

The report sets out recommendations for business to recognise and prepare for the changes necessary to adapt to the shift in working practices. To this end, it illuminates the appetite of, and mutual benefits to employers and employees under a potential future state of decentralised work in the Illawarra. It then sets out several recommendations that are designed to assist employers to successfully implement new work arrangements that employers have determined are beneficial.

For the purposes of this report, the following definitions are used:

• Decentralised work captures work undertaken outside the traditional office (e.g. in co-working spaces, working from home, or working in a regional office), as well as alternative models of working (e.g. hybrid model of work).

• Remote work includes any work that is undertaken outside the employee’s primary office. This may be at an individual’s home or in an alternative work or office space (e.g. co-working spaces).

• Hybrid model of work is defined as one where an employee works in different locations during working hours, choosing between a primary office or remote work locations.

• Flexible model of work is defined as changes to an employee’s standard work environment to support a model of work that suits an employee’s individual needs.5 Flexible working covers aspects of employment such as working hours, location of work, and pattern of work.

The methodology used in this report combines qualitative and quantitative techniques to derive business-focused insights. Detailed workforce analysis was completed to compare the current and potential ability to work remotely in the Illawarra. The analysis has been used to determine the impact that remote working models could have on the Illawarra region. A detailed description of the workforce analysis can be found in Appendix A.

A quantitative survey of employees from the Illawarra region, and interviews with 16 employers across the Illawarra and Greater Sydney Region were undertaken to gather data and perspectives from both employers and employees. Employers that participated in consultation included large professional services firms, finance, telecommunications, and data analytics sector employers, as well as public sector agencies. Of the employees that participated in the survey, approximately half lived in the Illawarra and commuted to the greater Sydney region for work, while the remainder lived and worked within the Illawarra. These groups are referred to as the commuters and non-commuters respectively throughout the report. Details of the quantitative survey responses can be found in Appendix A.

The remainder of the report is structured as follows:

• Chapter 2: The current state of decentralised working – provides an overview of remote working from recent global and Australian literature, setting the broader context for this study.

• Chapter 3: The positioning of the Illawarra workforce for remote working – provides an overview of the Illawarra region and how it is well positioned to benefit from the shift to remote working.

• Chapter 4: The benefits and challenges of remote working in the Illawarra – leveraging both our survey of Illawarra residents and interviews with employers, this chapter analyses the benefits and challenges to employees and businesses in a remote working environment.

• Chapter 5: The future of remote working in the Illawarra – outlines how employees and businesses see the future of remote work, and the implications of such a future scenario.

• Chapter 6: Enabling remote working – provides a set of recommendations for employers, describing how remote working can be supported in a way that could maximise the benefits to employers, employees, and the Illawarra region.

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4 The Illawarra region consists of Wollongong, Shellharbour, Shoalhaven, and Kiama LGAs, as well as adjacent Wingecaribee and Wollondilly LGAs.

2. The current state of decentralised working

COVID-19 removed barriers to remote working and shifted attitudes to not only where, but also when and how people work. Employees now expect organisations to offer remote and flexible working practices, and employers, encouraged by positive results to-date, are rising to this task. This chapter delves into the recent global and Australian literature on remote working and examines its implications for both employers and employees.

The idea of remote working is not new and has been an ongoing trend in the Australian labour market. Around 25% of employees in Australia were working from home at some point in 2019 according to data from the Australian Bureau of Statistics. This increased sharply during the COVID-19 outbreak, when nearly 50% of Australians worked from home to mitigate the health risks for employees and society in general.

Prior to COVID-19, almost 50% of Australian firms reported having a flexible working arrangement in place. However, it was often subject to specific conditions such as demonstration of personal need or seniority. This created barriers to employees adopting a flexible working arrangement.

For many organisations, the pandemic broke technological and cultural barriers that once inhibited the uptake of remote work. Many business leaders embraced remote working and accelerated the adoption of new technologies. During 2020, Australian businesses adopted new technology at a rate equivalent to the uptake over the last 10 years.

Looking forward, as the health threat from COVID-19 subsides, it is apparent that the remote working trend is here to stay. Almost 63% of Australian workers now support a hybrid model of working for the future, compared with 40% of Australian employers. Now, it is about taking the learnings from COVID-19 and shaping the future decentralised work environment.

2.1 The benefits and challenges of remote working

Remote working can deliver a range of benefits for individuals, businesses, and the broader economy. For employees, remote working can provide flexibility, time and money savings from less commuting and a better work-life balance. Meanwhile, a number of studies suggest that businesses can benefit from an uplift in productivity and better access to a broader pool of workers.

2.1.1 Travel time savings for employees

The benefits for employees are substantial. Across NSW, workers on average saved 123 hours and $860 in travel costs per year when working remotely. These benefits allow employees to allocate time to other activities, including spending time with family and friends or engaging in hobbies. This has the potential to improve wellbeing and improve employee engagement, as well as benefit businesses through spending locally.

2.1.2 Productivity gains

For employers, these employee benefits could translate into increased productivity, higher engagement and better retention of staff. According to NSW Government research, approximately 53% of NSW workers are more productive when working remotely compared to in the office.

2.1.3 Broader impacts for society and the economy

There are also broader benefits of remote working for society and the economy, including the opportunity to reduce commuter congestion (and potentially carbon emissions), revitalise local economies, and the potential to improve access to job opportunities. In April 2020, Greater Sydney public transport patronage was down 80% compared to the previous year, while cycleways reported a 106% increase.

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7 NSW Innovation and Productivity Council 2020, NSW remote working insights: Our experience during COVID-19 and what it means for the future of work.
8 Ibid.
13 Ibid.
14 Ibid.
15 Ibid.
These benefits also come with challenges, as a shift towards remote working poses new hurdles for employees and businesses to overcome.

2.1.4 Social isolation and challenges around collaboration
Some of the biggest challenges of remote working for employees include isolation and the lack of opportunities to socialise with team members. Around 1 in 5 Australian employees rank these issues as the biggest challenges of a hybrid working model. These factors can significantly influence an employee’s mental health and productivity.

While employees valued the newfound flexibility and increased control over their work activities, employers were more cautious. However, both employees and employers acknowledge that remote working can negatively impact teamwork and collaboration.

2.1.5 Changes to workplace policies
In addition, the adoption of a remote working model may require significant changes to company policy, including performance management, general business processes and other workplace policies. Some of the biggest challenges in remote working are an inability to effectively monitor staff, difficulty maintaining company culture, and concerns over digital and cyber safety. Approximately 28% of employers view inability to oversee staff and managing productivity as the biggest challenge of a hybrid working model.

2.2 A temporary change or a permanent shift?
Many employees and employers believe that remote working is here to stay and support the adoption of a hybrid model of work. According to a recent study, Australian workers would ideally like to work remotely for two to three days a week. While there has been a significant shift in remote working practices, the extent to which this will be a permanent feature will depend predominately on the type of work undertaken, as well as employee preferences and support from employers.

2.2.1 The ideal hybrid working environment
For employers, approximately 57% report that it is likely that they will implement a hybrid work plan in the future. That is, employees will work some days in the office and some days remotely. Larger firms, and financial and professional services firms are more likely to support a hybrid model of work. That said, there are industries, such as retail, mining, and manufacturing, where a hybrid working model does not support the type of work undertaken given the requirement for specialist equipment.

It is anticipated that the adoption of the hybrid work model will be driven by tasks and activities rather than occupations. Knowledge-intensive activities in industries such as professional services support the adoption of remote working. It is estimated that employees in finance and insurance, management and professional services can effectively complete between 62% and 76% of all tasks remotely. For jobs in construction, the service industry and agriculture, only 7% to 15% of tasks can be completed remotely. This is due to the physical presence and specialised equipment that cannot be delivered in a virtual setting.

Responding to COVID-19, Germany proposed drafting a law to allow employees the legal right to work from home. In Australia, many employers are now looking to support flexible working but would encourage staff to return to the office in some capacity. Some firms may look to implement a hybrid model that requires staff to come into the office for a set number of days, or some may allow employees to choose their preferred frequency.

18 Dahik, J et al. 2020, ‘What 12,000 employees have to say about the future of remote work’, Boston Consulting Group.
19 Ibid.
20 Ibid.
26 Ibid.
27 Whiting, K 2020, ‘Is flexible working here to stay? We asked 6 companies how to make it work’, World Economic Forum.
According to analysis by the World Economic Forum, communication is key, as leaders are forced to trust their employees to deliver the necessary work. Rather than counting the number of meetings attended and hours worked, employers will need to measure employee engagement and monitor outputs to measure productivity.

2.2.2 The future of the office

Despite strong demand for continued remote working, offices in major metropolitan CBDs still have a role to play in the future. However, the office experience will not look or feel the same in the future.

It is unlikely that there will be an ongoing expectation across all firms that employees will work 9-to-5 in the office every day – this has implications for office space needs. Before the pandemic, offices were viewed as pivotal to productivity and company culture. People had to move to where the work was, to enable collaboration and teamwork. The future flexible working model can instead offer employees choice and flexibility.

One of the key future considerations for businesses is what to do with their existing office space. Approximately half of the Australian workforce was working remotely during the early months of COVID-19. Average vacancy rates for commercial office spaces in Australian cities rose to 8% as businesses were forced to temporarily close offices during the peak of the crisis in July 2020.

This does not mean that companies are racing to transition to entirely virtual operations, with many businesses returning to office space as restrictions ease nationally in 2021. There is still underlying demand for office space in central business districts. However, the way a company uses (and employees experience) the space will be different.

Some Illawarra firms revealed during consultations that they are now considering a three-pronged approach to work locations – the home office, a remote location (such as a flexible workspace provider), and the central office. While shared workspace providers have been around for over a decade, they have typically been marketed towards start-ups and smaller firms. Compared to traditional, restrictive leases, co-working spaces have the potential to provide remote working spaces for firms in a more flexible manner.

Revisiting the use of the office is a global phenomenon. In the middle of the pandemic, global tech giant Amazon expanded its physical offices across the United States. Despite supporting remote working, Amazon views the office as providing spaces pivotal to supporting collaboration and connectivity that virtual working cannot provide. This is a sentiment also reflected by employees, who miss the social interactions of the workplace.

In the future, it is expected that offices will be used to support interactions that are hard to recreate virtually. Research has found that these interactions encourage creativity and collaboration, and there is a need for spaces that foster informal interactions.

For employers, this may mean regional co-working or satellite offices enabling closer-to-home working and supporting a shift to flexible work practices that safeguard employee safety and wellbeing, and improve the employee experience.

2.2.3 The future model of work

A shift towards remote working and a reinvention of the office provides new models of work for organisations. Previously, flexible working was based on choices around ‘when and where’ employees would work. Future models of work must now also take into consideration ‘how and what’ work is completed.

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28 Ibid.
33 Deloitte 2020, Workplace (re-invented): Understanding the next normal & embracing hybrid work models.
34 Deloitte Consulting 2020, Future work models: A roadmap to a re-architecting work, unleashing the workforce and adapting the workplace.
These two critical degrees of choice must be considered in collaboration with employees to understand how to align physical spaces and roles with employee needs, and to deliver business outcomes. Deloitte research and analysis of market trends has resulted in the generation of four potential ‘worlds’ of work in the future. The decisions employers make against ‘when and where’ work takes place, and ‘how and what’ work is completed will govern the degree of choice, flexibility, and autonomy available for their work models. The four models are described below.

**Co-location collaboration**
Work is executed through fluid networks of teams that are focused on achieving customer missions. These teams thrive when they are co-located, working together physically, utilising digital tools and platforms to connect with remote peers when needed. Employees do their best work when they’re on-site, have tools at their fingertips and work across the same time zones together.

**Stable, secure and social**
Employees are most comfortable when working together, thriving with social and physical connection. These organisations will choose to maintain stability in when, how and where work is completed – a lot like the ‘old normal’. The workforce is focused on task execution relevant to their functional units, reflecting a traditional hierarchical model. There is a preference for working on-site with access to shared equipment, tools and face to face connection.

**Autonomy and personalisation**
These organisations will provide complete choice, autonomy and flexibility to their employees across all dimensions, creating highly empowered teams. Employees work across fluid networks of teams to achieve customer missions in virtual-hybrid environments. Teams are in tune with each other and have clear norms around ways of working.

**A time and a place for choice**
Work is executed through traditional, functionally aligned structures, with high choice around the location and time when work is complete. These organisations will focus on employee outputs and outcomes, over time on the clock. These workforces are comfortable working in hybrid ways.

Overall, the model of work adopted by a firm will be driven by the required roles and the extent to which flexibility in time and place of work can be supported. For example, roles that cannot feasibly engage in remote working may still be able to support flexible working. This can be implemented through flexibility around hours worked, rather than location. Some roles may require service delivery at set times, but the location of the work is less important. A firm’s adoption of a particular working model does not restrict it from adapting it again in the future. As technology changes, workplace policies change and tasks evolve, so too will the model of work best suited for a firm.
3. The positioning of the Illawarra workforce for remote working

The Illawarra region, comprising of Wollongong, Shellharbour, and Kiama LGAs, has experienced considerable economic growth over the past four years. Wollongong City – the Illawarra region’s main area of economic activity – experienced annual economic growth of 1.7%, on average, over this period. The largest contributor to this growth has been in the region’s construction industry, growing by over 30% between FY14-15 and FY19-20.35

Driving this strong growth is the expansion that has been occurring in the region in both residential and non-residential construction. Since 2012, Wollongong CBD has seen over $1.2 billion in investment, which includes projects such as the building of new private hospitals, shopping centres and aged care facilities. Furthermore, there has been over 8,200 dwelling completions in the Illawarra region between the first quarter of 2016 and the fourth quarter of 2019.36

The strong growth in dwelling completions reflects growing demand for housing in the region. In addition to the high number of completions, there has also been a further 1,125 approvals for new houses in the 2019-20 financial year and 1,367 in the first half of the 2020-21 financial year.37

House prices have grown considerably in each of the LGAs within the Illawarra region and in the surrounding LGAs, especially post COVID-19 as interest in the region has grown. In the five years to December 2020, house prices rose 31% in Wollongong, 27% in Shellharbour, 41% in Kiama and 53% in the Shoalhaven. Additionally, prices have grown, on average, almost 15% over the past year in these regions, which more than doubles the 7% growth seen in Sydney.38

Chart 3.1: Median house price growth – as at December 2020

<table>
<thead>
<tr>
<th>LGA</th>
<th>5-YR</th>
<th>YOY</th>
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<tbody>
<tr>
<td>Kiama</td>
<td>20%</td>
<td>11%</td>
</tr>
<tr>
<td>Shellharbour</td>
<td>9%</td>
<td>27%</td>
</tr>
<tr>
<td>Shoalhaven</td>
<td>19%</td>
<td>53%</td>
</tr>
<tr>
<td>Wollongong</td>
<td>20%</td>
<td>31%</td>
</tr>
</tbody>
</table>

Source: Domain Property Market Report, December 2020
3.1 The Illawarra region is uniquely positioned for remote work

There are several underlying factors that naturally position the Illawarra region for remote work. In 2020, the Illawarra region was home to 315,000 people, with over 147,000 of those people employed. In the 12 months prior to February 2020, the major industries of employment within the region were health care and social assistance, education and training, and retail trade. These three industries employed almost 34% of the total workforce. Knowledge sector workers, such as those employed in professional services, finance, education, and telecommunication, also make up a significant share of employed residents— in terms of occupations, professionals accounted for 26% of the total workforce.

Chart 3.2: Share of employment by industry, February 2020 – Greater Sydney and Illawarra

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<thead>
<tr>
<th>Industry</th>
<th>The Illawarra</th>
<th>Greater Sydney</th>
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<tbody>
<tr>
<td>Health Care and Social Assistance</td>
<td>15.6%</td>
<td></td>
</tr>
<tr>
<td>Retail Trade</td>
<td>9.3%</td>
<td></td>
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<tr>
<td>Education and Training</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>8.9%</td>
<td></td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>8.4%</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>8.3%</td>
<td></td>
</tr>
<tr>
<td>Public Administration and Safety</td>
<td>7.9%</td>
<td></td>
</tr>
<tr>
<td>Professional, Scientific and Technical Services</td>
<td>7.6%</td>
<td></td>
</tr>
<tr>
<td>Transport, Postal and Warehousing</td>
<td>5.6%</td>
<td></td>
</tr>
<tr>
<td>Other Services</td>
<td>4.2%</td>
<td></td>
</tr>
<tr>
<td>Administrative and Support Services</td>
<td>2.9%</td>
<td></td>
</tr>
<tr>
<td>Financial and Insurance Services</td>
<td>2.5%</td>
<td></td>
</tr>
<tr>
<td>Arts and Recreation Services</td>
<td>2.5%</td>
<td></td>
</tr>
<tr>
<td>Rental, Hiring and Real Estate Services</td>
<td>2.1%</td>
<td></td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>1.7%</td>
<td></td>
</tr>
<tr>
<td>Mining</td>
<td>1.6%</td>
<td></td>
</tr>
<tr>
<td>Information Media and Telecommunications</td>
<td>1.3%</td>
<td></td>
</tr>
<tr>
<td>Electricity, Gas, Water and Waste Services</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Agriculture, Forestry and Fishing</td>
<td>0.1%</td>
<td></td>
</tr>
</tbody>
</table>

Source: ABS Labour Force; note that the Illawarra region Statistical Area 4 (SA4) is comprised of Wollongong, Shellharbour, and Kiama LGAs

39 ABS, Estimated residential population by SA2 and above (ASGS 2016), 2001 onwards.
The Illawarra has long been a commuting workforce, with an estimated 25,000 living in the region commuting from Wollongong, Shellharbour, and Kiama LGAs to the Greater Sydney region for work during 2020. Overall, in 2016 nearly 25% of residents in the Illawarra region commute to locations outside the region (including Greater Sydney) for work purposes – the third highest proportion in the state (See Chart 3.3).

One of the main attractions of the Illawarra for those that commute to Sydney is the relative affordability of the region. Although the region has seen strong house price growth over the past five years, the median house price remains almost $250,000 lower than that of Sydney. However, what these commuters gain in affordability they lose out on in terms of commute time. Of those surveyed for this research, the daily time spent for those commuting into and out of Greater Sydney was approximately three hours.

The number of commuters has been growing over time, which may be a result of the jobs deficit in the region – historically, there have not been enough jobs in the Illawarra region to support all its residents, especially for highly skilled individuals. Wollongong City Council has proposed a jobs target of 10,500 in the Wollongong LGA. Additionally, the allure of higher wages has also drawn residents away from the region. For those that live and work in the Illawarra, 10% had an annual salary greater than $104,000, whereas this is 22% for those that live in the region and work in Sydney. There is also a loss of skills to the region, as 32% of those making the commute hold a bachelor’s degree or higher.

Chart 3.3: Share of residents commuting out of each region for work

<table>
<thead>
<tr>
<th>Region</th>
<th>Share of Residents Commuting Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Coast</td>
<td>31%</td>
</tr>
<tr>
<td>Hunter Valley exc Newcastle</td>
<td>27%</td>
</tr>
<tr>
<td>Illawarra</td>
<td>25%</td>
</tr>
<tr>
<td>Newcastle and Lake Macquarie</td>
<td>21%</td>
</tr>
<tr>
<td>Southern Highlands and Shoalhaven</td>
<td>20%</td>
</tr>
<tr>
<td>Capital Region</td>
<td>11%</td>
</tr>
<tr>
<td>Mid North Coast</td>
<td>10%</td>
</tr>
<tr>
<td>Coffs Harbour – Grafton</td>
<td>9%</td>
</tr>
<tr>
<td>Richmond – Tweed</td>
<td>8%</td>
</tr>
<tr>
<td>Central West</td>
<td>8%</td>
</tr>
<tr>
<td>Murray</td>
<td>7%</td>
</tr>
<tr>
<td>Far West and Orana</td>
<td>6%</td>
</tr>
<tr>
<td>Riverina</td>
<td>6%</td>
</tr>
<tr>
<td>New England and North West</td>
<td>6%</td>
</tr>
<tr>
<td>Sydney</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: ABS Census (2016); note 1) Illawarra region (SA4) is comprised of Wollongong, Shellharbour, and Kiama LGAs, Sydney is comprised of all the SA4s within the greater Sydney Region

41 Based on historical commuter trends for Wollongong, Shellharbour, and Kiama LGAs and ABS Labour Force data from 2019 (February 2020 release). Note that, according to ABS Census 2016, including Wollondilly LGA, increases the commuter figure from approximately 22,000 to 26,000.

42 CoreLogic 2020, Regional Market Update

43 Wollongong City Council 2019, Economic Development Strategy 2019-2029
### 3.2 COVID impact on commute patterns in the Illawarra

Remote working has steadily increased in the Illawarra. In 2011, 1.6% of people living in the region reported that they worked from home, which grew to 3.7% by 2016.\(^\text{44}\) By comparison, the NSW average remained at roughly 2.6% over the same period. Although COVID-19 case numbers remained very low through 2020 and into 2021 in the Illawarra, the region still experienced large shifts in how and where people worked.

Real-time data highlights the changes in how and where people are commuting throughout 2020 and into 2021. Road usage, Opal patronage and Google mobility (activity in and around key employment centres) data suggest that those in the Illawarra region have been working from home more through the year; at levels that are much closer to (or even exceeding) the potential identified in our analysis.

#### Chart 3.4: Commuter modes of transport during Covid-19, compared with pre-COVID-19 baseline

![Chart 3.4: Commuter modes of transport during Covid-19, compared with pre-COVID-19 baseline](image)

**Source:** Transport for NSW

Road usage data shows the immediate impact that COVID-19 had on mobility. The average number of people making the commute from Illawarra to Sydney fell by over 20% against the previous year in March, with similar falls experienced through to June.\(^\text{45}\) Although recovering through the year, the number of people making the daily commute remained below where it was in the previous year. However, due to many switching modes of transport (with many not using public transport due to the increased risk of COVID-19 transmission), these numbers cannot be used in isolation to determine how many people were working remotely during the COVID-19 period.

There were more abrupt falls in Opal Card usage. The average adult daily trips on the South Coast line (the main rail line connecting the Illawarra region; including links to Sydney) were 46% lower in March 2020 compared with the same point in the previous year.\(^\text{46}\) The peak of disruption on train patronage figures occurred in April, where usage was down 87% compared against the previous year. Following this, train patronage has seen a gradual recovery through 2020, however, usage was still down over 50% in December of 2020 – a sign of the Northern Beaches lockdown taking effect across the network.\(^\text{47}\)

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45. Those trips heading northbound on the M1 Princess Motorway between the hours of 5AM and 9AM on a weekday. Public holidays have been excluded.
47. Ibid.
Google mobility data shows that workplace mobility, in terms of foot traffic in and around key centres such as CBDs, in both the Wollongong and Sydney LGAs remained below what it was pre-COVID. However, the fall in workplace mobility is much more profound in the Sydney LGA region, with mobility below pre-COVID levels by 20% in the first week of February 2021. The greater fall in Sydney also aligns with the composition of the workforce in that region, which has a greater potential to work remotely.

These broader COVID commute trends are also reflected in the findings of our survey specific to Illawarra residents. The share of survey respondents working at least 1 day a week from home jumped from 44% pre-COVID to 63% during the COVID-19 period. This is higher than corresponding observations for NSW as a whole where 25% of employees were estimated to be working remotely at least one day a week from home pre-COVID, rising to 46% during the COVID-19 period. Furthermore, the proportion of people working four or more days, more than doubled during the COVID-19 period.

Chart 3.6: Share of survey respondents working remotely one day a week vs four or more days a week

<table>
<thead>
<tr>
<th>At least 1 day a week</th>
<th>At least 4 days a week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-covid</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>37%</td>
</tr>
<tr>
<td><strong>Commuter</strong></td>
<td>48%</td>
</tr>
<tr>
<td><strong>Non-commuter</strong></td>
<td>23%</td>
</tr>
</tbody>
</table>

Source: Deloitte Access Economics survey of Illawarra residents (n=220)

Note: The survey included respondents from Wollongong, Shoalhaven, Kiama, and Shellharbour LGAs. The “total” result weights the commuter and non-commuter responses by the number of workers in the respective categories in the whole of the Illawarra region. Survey question: Prior to COVID-19/During COVID-19, on average how frequently, if at all, did you work from home?

These results were more profound for commuters. Nearly half of all commuters were working four or more days from home during COVID-19, compared to just a quarter for non-commuters. This is reflective of two aspects; the commuting workforce was made of occupations that were better suited to working remotely, and the additional benefit associated with a greater reduction in commute time to and from work. While recognising the unique aspects of the Illawarra, these findings are consistent with research conducted by the University of Sydney, which found that during the COVID-19 period roughly 39% of respondents from NSW worked from home on a usual basis, which was almost double what was occurring pre-COVID. This provides greater confidence that the findings from the Illawarra survey in this report are robust and not simply an outlier.

The decentralisation of work and the Illawarra: Practical insights for business

3.3 The Illawarra’s remote working potential

When considering a region’s ability to accommodate decentralised work, there are three main factors that need to be examined; an employee’s capacity to conduct their work remotely, the breakdown of the region’s workforce, and the region’s ability to service a decentralised workforce.

The capacity of an employee to undertake their work remotely is largely determined by the occupation, as this dictates the tasks and duties that employees must undertake and the equipment they must use in their roles. For example, those employed in knowledge intensive industries are much more likely to be able to perform their tasks remotely than those in population serving roles requiring physical interaction with customers. As such, the workforce analysis in this report leverages a US employment survey (which has been used to create an occupation-indicator revealing whether an occupation can be entirely remotely worked), which is analysed and applied to ABS Census data to estimate the regional work potential for the Illawarra workforce.

As per Chart 3.7, the workforce analysis has identified that the greatest potential for those to perform their roles remotely is those working as clerical and administrative workers and professionals, with 76% and 70% of these roles being able to be performed remotely respectively. Both roles are knowledge intensive and require little in the way of specialised equipment or face-to-face interaction to complete their roles. On the other end of the spectrum, those working as machinery operators had the lowest potential ability to work remotely (0%). For those within this occupation there are close to zero roles that can perform their roles remotely. This is driven by the fact they must use specialised equipment that cannot be removed from their primary workplace.

![Chart 3.7: Workforce analysis – Estimated remote work potential vs the Illawarra’s workforce](image)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Remote Work Potential</th>
<th>Workforce Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical and Administrative Workers</td>
<td>76%</td>
<td>13%</td>
</tr>
<tr>
<td>Professionals</td>
<td>70%</td>
<td>25%</td>
</tr>
<tr>
<td>Managers</td>
<td>60%</td>
<td>9%</td>
</tr>
<tr>
<td>Sales Workers</td>
<td>37%</td>
<td>7%</td>
</tr>
<tr>
<td>Community and Personal Service Workers</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>Technicians and Trades Workers</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Labourers</td>
<td>3%</td>
<td>11%</td>
</tr>
<tr>
<td>Machinery Operators and Drivers</td>
<td>0%</td>
<td>6%</td>
</tr>
</tbody>
</table>


From a regional perspective, the occupational breakdown will determine the extent to which its workforce can be decentralised. Those regions that house a greater proportion of workers within occupations that have been identified as having the greatest potential to work remotely will have the highest capacity for decentralised working.

In looking at the breakdown of the Illawarra region’s workforce in the year prior to February 2020, as per Chart 3.7, the greatest concentration of employees is those employed as professionals (25%), with clerical and administrative workers coming in third (13%). From a decentralisation perspective, this bodes well for the region. However, 32% of the region’s workforce is employed within the three occupations that have been identified as having the lowest potential to work remotely, reflecting the historically significant mining and manufacturing sectors in the region.

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51 NSW Innovation and Productivity Council 2020, NSW remote working insights: Our experience during COVID-19 and what it means for the future of work.
Chart 3.8 shows the proportions of those employed with the top and bottom two occupations from Chart 3.7, on a region-by-region basis. The Illawarra region contains a greater proportion of clerical and support workers and professionals than regional NSW (38% of the total workforce in the Illawarra compared with 33% for rest of the state), while also having a smaller proportion of machinery operators and drivers, and labourers (17% of the total workforce in the Illawarra compared with 19% for rest of the state). However, when compared to the Greater Sydney region the occupational breakdown is not as favourable in terms of the decentralisation of workers.

Chart 3.8: Proportion of employees in highest and lowest occupations with estimated remote work potential (workforce analysis)


Considering the type of work performed by employees living in the Illawarra region, it is estimated that 38% of all working residents can work entirely remotely, well above the pre-COVID level of just 3%, as reported in the 2016 Census. This is lower than the Greater Sydney average, but substantially higher than the result for the rest of NSW, where it was estimated that 49% and 33% of roles could be performed remotely respectively.

Chart 3.9: Share of workforce working from home – actual (2016 census) and estimated remote working potential (workforce analysis)

The potential ability to engage in remote work is also much greater with the Illawarra’s commuting workforce. Given the nature of their current occupations, it is estimated that almost half (49%) of the Illawarra residents making the daily commute into Greater Sydney could work entirely remotely. To put this into perspective, if each of these workers that could work remotely did so, it would see the number of people working remotely (and engaging in the Illawarra’s daytime economy) increase by an estimated 11,900 people (as at 2020).

The second key aspect from a region’s perspective is its ability to support a decentralised workforce. This support comes in two forms; the availability of skills and appropriate facilities to support those businesses setting up these working arrangements. The Illawarra region has access to both skilled workers and high-quality facilities, making it an ideal location for businesses.

The Illawarra is the home of the University of Wollongong (UOW). UOW is ranked amongst the top 200 universities globally, and has been identified as one of the top 50 under 50 universities. With more than seven thousand local graduates per year, this facility provides local talent for local businesses and an opportunity for the region to retain these graduates if their prospective roles encourage remote working.

Commercial real-estate is also cheaper than that of Sydney CBD, and there is a strong pipeline of new office space coming online over the coming years. Office rental space is 33% cheaper than that of the same rating in Sydney and there is also an abundance of office space available, with another 28,000 sqm of A-grade office space under construction or newly completed.

There are also other options for businesses with employees residing in the Illawarra region. For those employers not looking to establish a permanent office in the region, there are several established co-working spaces in the region, and for employees working from home, Wollongong ranked the highest nationally for fixed internet speeds.
4. The benefits and challenges of remote working in the Illawarra

4.1 The employee experience of remote working in the Illawarra

COVID-19 provided employees with a greater degree of workplace flexibility, resulting in several personal benefits for workers. The Illawarra-focused survey, capturing responses from Wollongong, Shoalhaven, Kiama, and Shellharbour LGA residents, undertaken in this study provided in-depth insights into the attitudes, benefits, and challenges faced by the regions employed residents – both commuter and non-commuters.

Most respondents report working from home during COVID-19 as a positive experience, driven largely by an improvement in work-life balance. When ranking the top five aspects of remote working, almost half of all survey respondents selected work-life balance as a top response, followed by an improvement in the management of family responsibilities and a reduction in daily expenses. Workers across NSW also echo this sentiment, identifying improvements in their work-life balance as the top benefit of remote work.55

Figure 4.1: Percentage of respondents who ranked these as the best aspects of remote working

![Diagram showing percentages]

Source: Deloitte Access Economics survey of the Illawarra employed residents (n=220)
Survey question: Please rank the following aspects of remote work from best to worst. (Does not sum to 100% as respondents can choose multiple options.)

The implementation of remote working goes beyond an employee choosing the location they wish to work. COVID-19 has resulted in a cultural shift towards flexible work practices, meaning 9 to 5 is no longer the norm. Many employees now have the flexibility to choose their work hours to accommodate family and personal responsibilities.

Illawarra residents no longer commuting to Sydney during COVID-19 saved an average of three hours per day, the majority of which they allocate to work, household chores or family time.

Of this travel time savings, 53 minutes is allocated towards work – significantly more than the equivalent observation for NSW workers, who only spend an additional 13 minutes working.56 Given that the Illawarra region commuters save more than twice the commuting time compared to the average worker in NSW, it is clear that travel time savings assist the Illawarra workers with being more productive during the work day.

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56 Ibid.
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Figure 4.2: Top three ways workers allocated their travel time savings

![Circle chart showing travel time savings allocated to working, household chores, and spending time with family.]

- Working: 53 mins
- Household chores: 34 mins
- Spending time with family: 33 mins

Source: Deloitte Access Economics survey of the Illawarra employed residents (n=120)
Survey questions: 1) Including preparatory time, such as getting ready for work, how long was your daily total effective commute time to your primary place of work? 2) When working from home during COVID-19, how did you spend any additional free time saved from not commuting to work?

In addition to time, remote working reduces commuting expenses for respondents by an average of $35 per week. Transport costs are the third largest household expense after housing and food.\(^57\) Cash savings from reduced travel may ease a household’s financial burden or free up funds to be spent in the local economy.

Despite the positive changes brought on by remote working, there are some barriers that reduce the possibility of working from home for many workers in the Illawarra. Over half of the Illawarra respondents indicate that the biggest barrier to remote work is that some tasks cannot be completed remotely. This echoes the sentiment of workers across NSW who indicate that this is also a top barrier.\(^58\) The inability to do some tasks remotely is particularly prevalent for workers in the health care, social assistance and retail trade industries, where customer facing elements of the role are not easily transferred to a remote working situation.

Figure 4.3: The top barriers for the Illawarra residents to working remotely

![Triangular chart showing the top three barriers to remote work: 1) Tasks that cannot be done remotely, 2) Difficulty collaborating remotely, 3) Lack of motivation.]

Source: Deloitte Access Economics survey of the Illawarra residents (n=220)
Survey question: Please rank the following barriers to remote work from most significant barrier to least significant barrier.

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Prior to COVID-19, the two most common reasons that people did not work from home were job requirements (76.8% of respondents) and restrictive company policy (12.2%). These limitations were in part driven by existing cultural and technological barriers. In many businesses, COVID-19 expedited digital transformation in businesses by up to 10 years.59

During 2020, there was a significant shift to establish the technical infrastructure to support remote working. Over 67% of those who worked from home in the Illawarra agree their employer provided them with the necessary technology to work from home effectively.

While employees highlight that working remotely can improve work-life balance, low motivation, and lack of opportunity for social engagements can counteract these benefits. This highlights the importance of employers providing support for mental health and wellbeing. A survey of 12,000 professionals across the United States, Germany, and India showed that those with better mental health during COVID-19 were twice as likely to be more productive.60

Workers in the Illawarra highlight that while remote working provides enhanced workplace flexibility, it limits the opportunity to meet people in-person, engage in unplanned and informal workplace conversations and enjoy the overall atmosphere of the office. The culture and values of the office consistently ranks as one of the largest drivers of employee satisfaction globally.61

Employees enjoy the time and cost savings of working remotely, but the office still holds value as a place for collaboration and socialisation that contributes to the company culture.

### 4.2 The adoption of remote working by employers

The transition from the office to remote working required employers to implement significant changes to workplace practices and to accelerate technological adoption. While the adoption of remote working has provided some unexpected benefits for firms, there is still value in having an office.

As part of this study, consultations with large professional services firms, finance, telecommunications, and data analytics sector employers, as well public sector agencies provided useful insights into the employer experience, and importantly helped inform future recommendations for business outlined in Chapter 6. All consultation responses reported have been anonymised in this report.

Outlined in Figure 4.4 are the top benefits of and barriers to remote working identified by employers in both Greater Sydney and the Illawarra.

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**Figure 4.4: The top benefits and barriers of remote working for employers**

<table>
<thead>
<tr>
<th>Top benefits</th>
<th>Top barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in overhead costs</td>
<td>Harder to develop and maintain company culture</td>
</tr>
<tr>
<td>Access to a broader talent pool</td>
<td>Increased salary competition</td>
</tr>
<tr>
<td>Higher employee engagement</td>
<td>Difficulty collaborating online</td>
</tr>
</tbody>
</table>

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**Source:** Deloitte Access Economics consultations

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59 McKinsey 2020, How COVID-19 has pushed companies over the technology tipping point – and transformed business forever.
60 Dahik, A et al. 2020, ‘What 12,000 employees have to say about the future of remote work’, Boston Consulting Group.
61 Stansell, A 2019, ‘Which workplace factors drive employee satisfaction around the world?’, Glassdoor.
The benefits of remote working for individuals can have flow on effects for the company. Recent research indicates that a flexible working policy can reduce absenteeism and increase employee engagement. Addressing the barriers to remote working can, therefore, have tangible business benefits.

**Limited flexible working policies**
COVID-19 challenged existing cultural norms around flexible working and the role of the office. During consultations, many employer representatives acknowledged their firm had a flexible work policy prior to COVID-19. However, there was often strict requirements around eligibility, and online and remote collaboration was not supported to the extent it is now. These restrictions were in place across large, national businesses, as well as smaller businesses in both Sydney and the Illawarra.

**Reduction in overhead costs**
One of the biggest direct benefits of remote working for businesses is the potential to reduce overhead costs. During COVID-19, many businesses reported saving on business travel, electricity, internet, and general amenity services. However, businesses were also incurring rental expenses on office spaces that were primarily unoccupied as people worked from home. This was raised as a particular concern during consultations by smaller businesses in the Illawarra. As businesses seek to embed the capabilities that support flexible working, firms will need to determine what their ideal office space looks like.

**Access to a broader talent pool**
A company that offers remote working can access a broader pool of talent. In addition, remote working is an attractive policy for potential new recruits. Residential proximity to the office is no longer a barrier. During consultations, many smaller firms reported starting to hire workers from outside the region. Many firms in the Illawarra now also remove the office location from job advertisements to encourage more geographically diverse applicants.

While the flexible work policies enable a business to access a broader talent pool, it also increases competition with other businesses. Prior to COVID-19, many people commuted from regional areas into Sydney. With the uptake of remote working, employees can live in regional areas and still work in a higher paying position for a metropolitan firm, without the hassle of a long commute. The effects of this dynamic are yet to play out. It could mean that employers located in regional areas may need to compete with the flexibility and remuneration made available by businesses outside the local regional market.

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62 Indeed 2019, ‘Report: 68% of Australian employers allow remote working, but attitudes are divided’.
Social connection challenges
Remote working also increases the difficulty of developing and maintaining company culture. Social interaction is an important driver of team morale, employee satisfaction and engagement. For larger firms, this is a particularly difficult challenge, as it is harder to coordinate online activities for lots of employees and encourage engagement. This highlights the importance of an office space suited to collaboration, and formal and informal social interaction. Illawarra-based employers cite strong leadership setting the tone and showing vulnerability through open discussions as key to successful transition to remote work.

“The outlook for property will largely be driven by supporting employees’ choice as to where and how they want to work. As we start developing a view about how people are intending to use the office, a reason for a regional hub will become clearer.”
— National Employer

4.3 How the region has responded to remote working
Prior to COVID-19, it is estimated that over 25,000 people were commuting from the Illawarra to Greater Sydney daily. For those working remotely and no longer commuting, they have more time and money to spend in the area, boosting local economic growth.

The Illawarra region offers many commuters the chance to work in the hustle and bustle of the CBD and return to the more relaxed coastal life after hours. Previously, a lack of diverse employment options and a long commute to central employment districts may have stopped more people from calling the Illawarra region home.

Despite COVID-19 causing a mass exodus of workers out of the city, Sydney and Parramatta CBDs will continue to play central roles in the future, acting as key metropolitan centres that connect strategic employment centres throughout Greater Sydney, as well in the Illawarra and Central Coast regions. There is still a need for office space in the major metropolitan CBDs to facilitate in-person contact with clients and between employees - a sentiment echoed by both employers and employees consulted. The city could now become a place where people commute for a specific need and collaboration, rather than everyday work.

“The adoption of remote working may entice people to make the shift away from metropolitan centres to regional areas. This could have potential implications for housing affordability, house prices and place pressure on existing infrastructure. Over the last decade, median house prices in the Illawarra region have increased 64%, which combined with lower than average incomes, has the potential to contribute to additional housing stress.”

64 See Section 6.4 for estimated increase in regional spending.
5. The future of remote working in the Illawarra

Working life as we know it has changed forever. Moving forward, we need to define the new normal, embrace flexible working and find the appropriate mix of space that blends connectivity, collaboration, and flexibility. The proportion of the Illawarra workforce working remotely is likely to be higher in the future compared to pre-COVID. Workforce modelling (see Chapter 3) provides a scenario where 38% of the workforce could work entirely remotely, while survey data indicates a much higher proportion of employees would like to work remotely in some capacity.

5.1 Employer future expectations

Leveraging consultations with 16 employers, which included large professional services firms, finance, telecommunications, and data analytics sector employers, as well as public sector agencies in Greater Sydney and the Illawarra, it is apparent that remote working is here to stay. Despite the different structures, sizes and activities undertaken in these businesses, there was a clear preference from employers for a hybrid model of work. Several themes regarding future employer expectations emerged:

A hybrid working model for the future

All the organisations that were consulted expect a proportion of their workforce to continue to work remotely in the future, where reasonable for certain roles and tasks. A large national employer with a workforce located in Wollongong expects that up to 70% of its employees will choose to work outside of the head office for most of the time.

“We expect that those that can work from home will continue to do so. We will support a hybrid model where people come in for in-person meetings, but day to day tasks will be done remotely.”

— Public sector employer

Maintaining productivity and engagement

Encouraging engagement and productivity will remain one of the biggest challenges for employers. Remote working has taken away an employer’s ability to have physical oversight of an employee’s work. As a result, businesses are seeking to more proactively monitor progress and measure output to encourage productivity. Some employers report using project tracking tools and implementing progress meetings to monitor productivity.

“In the beginning there was a loss in productivity due to the adaption to the new environment, but employee effort and engagement was unchanged. As the year progressed, sticking points were identified (such as improving the pre-engagement document requirements from clients so that there was less waiting around for documents during the project) and fixed.”

— Wollongong health sector employer

Some employers noted that they would support employees choosing an appropriate workspace closer to home. Some private sector employers noted that while they were downsizing their main office, they would not consider establishing satellite office locations until they had a better understanding of what employees would like, what space is needed and the cost of establishing such spaces.

As well as the size of the space, firms must consider how the office will be utilised. Employees miss the social interactions of the office and they want a space for collaboration that virtual platforms cannot provide. A professional services organisation with an office in Wollongong noted that there was a decline in creativity from a lack of ideation and brainstorming.

“Everyone was sent home in March, in September we needed to collaborate more. In March, we set up weekly meetings and in September we asked everyone to come in one day a week. Looking to see whether this needs to increase beyond one day.”

— Wollongong creative sector employer

Given the role that the physical office space plays in supporting company culture, firms need to more consciously create efforts and policies to support a
hybrid model of working. Other policy considerations include the extent to which employers will allow workers to choose their level of flexibility.

We will offer all roles flex and there will be location agnostic roles. We are pushing for flexibility and technology is a key enabler for people to work effectively from wherever they choose. We are working to shift the language to help people work in a way that best enables them to thrive."

— National employer

Adapting rules and regulations to remote work
Larger organisations with workforces governed by enterprise agreements expressed concern about restrictions imposed by current policies that may prevent employees working when and where they like. The employer-focused recommendations to enable a successful future hybrid working model are described in Chapter 7.

"A lot of our workforce is governed by enterprise agreement. We say 7 to 7 for standard hours, but if someone chooses to work outside this, how do we influence fair work laws around how people choose to work and regulatory and legal obligations. We want to allow people to work how they want to, but there is an enterprise agreement in place that restricts us."

— National employer based in Sydney and Wollongong

5.2 Employee future expectations
Consistent with employer views, in the future, Illawarra employees also desire a hybrid model of working. Almost 75% of the Illawarra survey respondents would like to work remotely in some capacity. Commuters would prefer to work remotely for three to five days per week compared to non-commuters who would prefer to work remotely two to three days per week.

The Illawarra region is unique in that it has a large commuter population. This highlights that there is a larger portion of people who are likely to want to continue working from home rather than commuting into a metropolitan office, which is reflected in the survey results. For those who can complete tasks remotely, they are more likely to continue working from the Illawarra.

The centralisation of work and the Illawarra: Practical insights for business

Figure 5.1: How frequently employees would like to work from home in the future

<table>
<thead>
<tr>
<th></th>
<th>3-5 days per week</th>
<th>2-3 days per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commuters</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>Non-commuters</td>
<td>62%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Deloitte Access Economics survey of the Illawarra region residents (n=220)

Managers across financial services, professionals, and IT workers are more likely to work from home more often in the future compared to those in other employment groups and industries. Employees within these industries cited reduced travel time as a key contributor to increased productivity, which may explain their preference to continue working remotely. Due to job requirements and inability to complete tasks remotely, almost 40% of non-commuters indicated that they would prefer not or would not be able to work remotely. For commuters, this number is approximately 15%, with a larger share (25%) of commuters hoping to work from home full time in the future.

Healthcare workers and those in retail represent the largest portion of employees who do not wish to work from home in the future. Survey responses suggest that this is primarily because there are aspects of service within their roles that cannot be completed remotely or require specific equipment that is not available at home.

Additionally, 64% of survey respondents indicated that they would consider a workspace closer to their home in the future. This could be a flexible or co-working space, or a smaller regional office of their organisation.

To successfully adopt a hybrid working model, the Illawarra survey respondents indicated that the following elements were necessary to support effective remote working in the future:
- Better and more reliable internet
- Better IT facilities to enable collaboration with colleagues; and
- Supportive management.
As well as appropriate technology, equipment and managerial support, employees still view the office as an important location for social and collaborative interactions.

**Figure 5.2: What employees value the most about working in the office**

1. The ability to meet people in-person
2. Having unplanned valuable conversations
3. The atmosphere in the office

Source: Deloitte Access Economics survey of the Illawarra region residents (n=220)

Like employee perspectives on this issue, employers also highlighted that collaborating remotely and facilitating team engagement were some of the biggest barriers to remote working. This highlights why employees feel that social interactions are best facilitated in the physical office space. For employees, while there are benefits of remote working, consistent with employer expectations, the most popular option was a hybrid working model that allows the individual to choose when and where they work, guided by task requirements. Offering remote work as an option for prospective employees will be a point of differentiation in the job market – and in some industries, may be a feature of being an employer of choice.

**5.3 Implications for productivity**

The benefits and challenges of remote working can have broader, long-term implications for all stakeholders. The location of a workspace can influence an employee’s wellbeing and productivity, which can improve business outcomes for employers and provide economic gains for the broader economy. Informed by both the Illawarra survey of employee expectations, and employer expectations expressed in business consultations, this section sets out potential productivity uplifts to business, and potential increased spending within the region, that could be realised with increased remote working.

Productivity is a measure of output per hour worked by employees. On balance, employers have indicated that there is a potential for significant productivity improvements to flow from implementing remote working. According to NSW Government research, approximately 53% of NSW workers reported higher productivity when working remotely compared to in the office. Approximately 68% of surveyed Illawarra residents reported being more productive while working remotely compared to in the office.

**Chart 5.1: Average productivity when working remotely compared to in the office, share of respondents**

<table>
<thead>
<tr>
<th>More productive</th>
<th>About the same</th>
<th>Less productive</th>
</tr>
</thead>
<tbody>
<tr>
<td>68%</td>
<td>16%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Source: Deloitte Access Economics survey of Illawarra residents (n=220); note that no productivity estimates were available from business consultations and is an area for future research.

Commuter respondents in the Illawarra survey report an average productivity uplift of 22% per hour worked during COVID-19, resulting in an effective gain of 1 hour 40 minutes per average workday. This is slightly higher than non-commuters who reported an average increase in productivity of 16% per hour worked. These results are slightly higher than those observed for NSW, possibly reflecting the added productivity benefit of avoiding particularly long commutes from the Illawarra to Greater Sydney. In a future hybrid working scenario, based on our survey analysis, employers can likely expect between 16 to 22% uplift in productivity during remote work.

---

Chart 5.2: Average productivity uplift when working remotely compared to in the office

<table>
<thead>
<tr>
<th></th>
<th>Commuters</th>
<th>Non-commuters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average productivity uplift (%)</td>
<td>22%</td>
<td>16%</td>
</tr>
<tr>
<td>Total (%)</td>
<td>17%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Source: Deloitte Access Economics survey of the Illawarra residents (n=220)

Note: the “total” result weights the commuter and non-commuter responses by the number of workers in the respective categories in the whole of the Illawarra, and productivity uplift is based on the survey question seeking respondent self-reported productivity during an average work hour.

Employees attribute productivity improvements to some of the top benefits of working remotely – a better work-life balance and avoidance of the commute leaving them more energised to perform during the workday. For the 16% of respondents who indicate a decrease in productivity, this is primarily due to an increase in distractions, poor motivation, and role restrictions.

For managers and professionals, one of the main reasons attributed to increased productivity was the reduction in travel time to the workplace.

While working from home can remove workplace distractions and lead to increased productivity, different distractions can counteract these benefits. The onset of ‘Zoom fatigue’, increased family demands and blurred lines between home and work can lead to employees being more distracted and less motivated.67,68 Alongside these factors, an inability to complete some tasks remotely can lead to reduced productivity for employees. These findings are consistent across all industries and employment levels.

Figure 5.3: Top influences on productivity during remote work

Source: Deloitte Access Economics survey of the Illawarra residents (n=220)

For managers and professionals, one of the main reasons attributed to increased productivity was the reduction in travel time to the workplace. While working from home can remove workplace distractions and lead to increased productivity, different distractions can counteract these benefits. The onset of ‘Zoom fatigue’, increased family demands and blurred lines between home and work can lead to employees being more distracted and less motivated.67,68 Alongside these factors, an inability to complete some tasks remotely can lead to reduced productivity for employees. These findings are consistent across all industries and employment levels.

“\[We focused on productivity through the employee engagement and satisfaction. So, productivity was not measured directly. However, those with better access to remote working were found to have higher work satisfaction, they were more willing to go above and beyond in their roles and had lower absenteeism.\]”

— Public sector employer

Drifting divisions between work and private life, and a loss of interaction between co-workers may also result in a loss of productivity. There may also be less benefit to flexible working arrangements if the costs of formalising remote working are very high. For instance, if employers are obliged to expand OH&S and other regulatory compliance requirements to formally incorporate remote work, these additional costs may erode potential productivity uplift benefits, and tip the balance back towards daily office-based work.

“We found 80% of the work is more efficient, cleaner, and quicker to get executed due to remote working. However, one of the groups we found to have reduced productivity is new starters. It is harder to get to know people and learn the culture when they are not meeting people in the lunchroom. It is hard to get their project work done because they do not know people apart from their email address.”

— Illawarra employer

5.4 Implications for the broader regional economy

The impact of remote working extends beyond the home and the office. Greater Sydney commuters spent, on average, $5.63 a day more at local businesses during COVID-19, compared to before COVID-19. In the future, commuters flagged that they intended to work an additional 1.3 days a week from home, suggesting strong preference for a future hybrid working model.

Assuming these expectations were met, if the almost 11,900 Illawarra commuters (as at 2020) that were identified as having the potential to work remotely were to do so, then the region could benefit from an additional $4.1 million in local spending annually. This could potentially lead to reduced peak hour commuter congestion, as well.

Figure 5.4: The potential impact of working from home for the Illawarra

| 11,900 Potential Remote workers as at 2020 | 1.3 days Additional days WFH per week | $4.1m Spending within the region per annum |

Source: Deloitte Access Economics analysis

There has clearly been an acceleration towards remote and flexible working through the COVID-19 crisis. While life is expected to return to a post-COVID normal, remote working is very likely here to stay. The impacts and ramifications of flexible working arrangements are multi-dimensional and still playing out. It is clear, however, that there is a greater acceptance of flexible arrangements, by both employers and employees, to accommodate a hybrid working arrangement in the future.

Should current hybrid working arrangements become a more permanent and long-term feature of the Illawarra workforce, it is likely that there would be a reduction in daily commuters, and a potential increase in the resident (and employed) population of the Illawarra region. Given the Illawarra’s unique characteristics, it is in prime position for employees seeking the lifestyle of the region and connectivity to Greater Sydney, as well as employers seeking to embrace regional working and gain access to the high-quality workforce in the region.
6. Enabling remote working

Consistent with global trends, employers and employees consulted in this study indicated a preference, where applicable, for hybrid work, where employees work remotely part of the week and spend the rest in the primary office. In light of this, we recommend that employers consider their business needs and implement hybrid work arrangements that benefit both the business and their employees.

The analysis in this report shows that there are potentially significant benefits to both employers and employees from a hybrid model of work. There are, however, also costs and challenges to consider.

Ultimately, each individual business will need to undertake its own cost-benefit assessment, considering which roles and tasks are better suited to a hybrid model and the enabling conditions required. The four future work model scenarios outlined in section 2.2.3 provide a useful tool to conceptualise the options available for employers. The decisions employers make regarding ‘when and where’ work takes place, and ‘how and what’ work is completed will govern the degree of choice, flexibility, and autonomy available.

Knowledge sectors, such as finance, professional services, and administration, are typically better suited for hybrid work, while sectors with greater requirements for in-person contact, such as retail, health, and manufacturing, will be less suitable for remote work.

To this end, it is important that employers review their business needs and, put in place policies, practices, and employment arrangements that enable a hybrid model of work, where appropriate and mutually beneficial. More specifically, knowledge sector employers that stand to benefit from incorporating hybrid work, should actively consider reviewing current arrangements.

Based on the research and analysis in this report, the following is a list of high-level recommendations for businesses to assist with realising the potential benefits from a hybrid model:

1. Adjusting recruitment and onboarding processes to adapt to remote work

Remote working enables businesses to access a wider pool of potential employees and talent outside the traditional head office in the city. For businesses outside the Illawarra, there is a large pool of potential remote workers residing in the region (up to an estimated 38% of the current workforce), that could be accessible with the introduction of remote working policies. For businesses operating in the Illawarra, there is a pool of expertise that can be tapped into as needed to boost business capability and capacity.

During consultations with organisations that had identified this as an opportunity for their business, future changes to the recruitment process included:

- Not listing a location on the job advertisement, and
- Actively recruiting for head-office roles in local office locations such as the Illawarra.

A key challenge for recruitment in a remote working environment is the challenge of embedding the culture and connection with new staff members. This should also be considered as part of the recruitment process, including how best to use induction days and office days to enable a smooth transition into the organisation and role.

2. Adapting physical office space

The future of work has changed the way organisations look at their office space needs. Not only should organisations reconcile what physical space they need to support employees when they are in the primary office, there is also the question about the type of space that is needed and how to best utilise it. Regional offices and co-working hubs are potential options that could be considered, if the regional workforce is sufficiently large and such a set-up meets individual business needs.

As part of an organisation’s future planning, consideration of the following dimensions to physical office space is needed:

- What proportion of staff are likely to be in the office at one time?
- Has the split between head office and regional offices changed?
- Is there a growing critical mass of current or future employees in a particular region?
- Is there a role for co-working spaces for over-flow modifying the employee experience of the office?
A key role of the office as identified by both employees and businesses in our survey and consultation is for connection and collaboration. This is likely to change the way offices are designed, with a larger focus on break-out spaces and social interaction.

3. Considering costs of supply of equipment to enable hybrid work

While evidence in this report suggests that remote working broadly improved on or maintained current levels of productivity for those roles where the work can be undertaken outside the usual worksite, the initial roll-out of new technology and processes has created short-term pain points for business. Leveraging the recent acceleration in new technology and ensuring ongoing investment and upskilling will be important to harness the benefits to date and in the future. Employers will also need to consider the costs of providing the necessary equipment and infrastructure (such as laptop, workstation, cybersecurity, and furniture) to support remote work.

Employers can also actively support employees with creating a better environment working from home. For instance, managers can encourage employees to consider the workspace more broadly. When working from home, there can often be a blurring between home-life and work-life that may create additional stress. Managers should encourage employees to consider how best to set boundaries around their workspace, including minimising distractions where possible. This was one of the major detractors to productivity found in our survey of Illawarra residents.

4. Re-thinking remote working policies

The roll-out or extension of remote and flexible working policies has been reactive to the COVID-19 situation. Looking forward, employers will need to be proactive in developing a remote working policy that captures the benefits while addressing the risks and challenges. Consideration should be given to the technology, network infrastructure, processes, and leadership changes needed to embed remote working within the organisation. It is also important to ensure that business policies are adapted to avoid scope for discrimination or bias arising from locational preference.

Performance management has historically relied on in-person monitoring of activity. As remote working becomes more common place, a shift from ‘input-focused’ (i.e. time in the office doing work) to ‘output-focused’ (i.e. how much work is undertaken) activity is needed.

There is also a recognition that just as a business can implement hybrid working models where some staff work remotely and others are based in the office, so too can individuals flex their working behaviour to take advantage of the remote and office based working environment. The office plays an important role for collaboration while the home-office playing an important role for self-directed work. A change in policy to consider roles in this hybrid framework will be important to changing the culture around remote working.

5. Reviewing and tailoring work arrangements to better suit individuals and roles

Broadly there is consensus among both employees and businesses about a need for a hybrid working model, but each employee will have individual circumstances and needs. Both employees and employers have important roles to play in developing mutually beneficial remote work arrangements. Employees can play an important role in enabling remote working in the future by proactively engaging with their employer about their needs. Similarly, employers will need to review current employment arrangements with individual employees. To maximise remote working benefits, employers should proactively engage with current and future employees, with a key focus on the following discussion points:

- How often would you consider working remotely?
- What types of activities can you do remotely, and when do you need to be in an office space?
- Where would you be working remotely (i.e. at home, co-working space, or local office)?
- What support do you need to work effectively?

Early and proactive engagement on employee remote working needs is likely to result in a better outcome for both the employee and the business more broadly. Not every employee will be able to work remotely in the same way, and recognition of this diversity is necessary to truly harness the future of work potential. In addition, employers should consider how to implement and monitor these new work arrangements.
6. Implementing processes to ensure regular communication

Social connection is an important benefit of the office life. As take-up of remote working increases, there is a risk that this connection is lost. This can have significant detrimental impacts on mental health, engagement, and health outcomes of employees.

Employers should proactively assist employees with maintaining social connection to their work and industry. This can include setting up social events with the team either in the office or via online technology, creating opportunities for employees to attend in-person or virtual industry events and seminars relevant to their work, and even engaging more closely in the community work within their remote working location. Importantly, employers will need to provide the appropriate technology and culture to enable such outcomes.

7. Reviewing compliance with and the application of OH&S, IR, and privacy laws to hybrid work

Remote working has offered flexibility to employees and businesses during COVID-19, but as this transition moves to a more permanent shift in work activities, employers need to, firstly, review internal processes to ensure compliance with current laws. This includes Occupational Health and Safety (OH&S), Industrial Relations (IR), and privacy laws among others.

Secondly, there is need for legislation and regulations to keep pace with the changing nature of work. During consultations some organisations highlighted the added burden on their business of implementing remote working policies from both a health and safety, and enterprise bargaining perspectives. It is also possible that some businesses may need to review work monitoring practices and technology to build greater trust between employers and employees. Collectively, the implication of remote working on these aspects of business rules and regulations are not well understood, and businesses may need to proactively manage liability risks. Over time, business, working with government, will need to advocate for regulatory settings to better suit hybrid work arrangements.

8. Engaging with government to encourage the provision of enabling infrastructure

The uptake of remote working has been strong through COVID-19, but as it continues there will be a need for government planning to sustain an ongoing uplift in productivity. This is especially the case for regional areas such as the Illawarra, where the investment uplift is substantial.

Businesses should engage with all levels of government on the following key areas of focus:

- Investment in internet connectivity and reliability
- Consideration of policies to better utilise community space
- Enable the development of office space through both new builds and re-development of current space
- Revisiting transport infrastructure optimisation with a more regionally distributed population.
- Planning policies to ensure the vitality of local and regional centres designed for an increase in regional workers.
Appendix A: Technical

A.1 Workforce analysis
The workforce analysis combined two key datasets – Occupational Information Network (O*NET) and the 2016 Census. The former is a United States (US) based dataset that contains occupation specific descriptors. The latter is an Australian database that provides information on where people live and work, their occupations and how they travel to work.

The descriptors in the O*NET database have been used to develop an indicator of whether a role can be performed remotely, which was developed as a part of a study to determine the extent to which roles could be performed remotely in the US. This study utilised the (O*NET) surveys covering “work context” and “generalized work activities” to develop the indicator. The indicator determines those roles that could be entirely performed at home. As such, these estimates of the potential to work remotely are likely to underestimate the full extent of those being able to work remotely for some part of the working week.

To localise this approach, the work from home indicator was mapped to the Australian and New Zealand Standard Classification of Occupations (ANZSCO) at the unit group level of classification.

To determine the proportion of roles that could be performed within a given region or by a certain cohort of individuals, indicator was applied to employment counts contained in the 2016 Census. Where occupations are inadequately described in the Census or where there is no clear conversion from O*NET to ANZSCO, it has been assumed that they have the same ability to work remotely as the regional average. Therefore, these individuals have been excluded from the analysis when determining the ability of a region’s workforce to work remotely. However, when analysing the potential shift in the number of workers and the impact that this would have on the Illawarra region these individuals have been included in the analysis.

The Census was also used to estimate the extent to which individuals were working from home pre-COVID. The proportion of those working from home is based on the number of people that responded that they worked from home on the day of the Census. Therefore, we note that this may underestimate the true extent of those working remotely, as it does not capture those working from other worksites (for example Cafes or shared offices).

A.2 Consultations
As part of this study, we undertook consultations with 16 employers, which included large professional services firms, finance, telecommunications, and data analytics sector employers, as well as public sector agencies in Greater Sydney and the Illawarra. The firms consulted have a physical presence in the Illawarra and employ people from the Illawarra region. These consultations were conducted virtually, with individual or in small groups using a set list of questions.

A.3 The Illawarra Employed-Residents Survey
Deloitte Access Economics undertook a survey of 220 Illawarra employed residents using Dynata, a leading market research firm. The survey was issued online and over the phone and was in the field for three weeks.

The aim of the survey was to understand the workforce of the Illawarra’s experience of remote working, with a particular focus on obtaining data for those who regularly commuted to Greater Sydney for work. A respondent was classified as a commuter if they commuted into Greater Sydney for work.

Table A.1: Count of survey participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commuters</td>
<td>120</td>
</tr>
<tr>
<td>Non-commuters</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
</tr>
</tbody>
</table>

The survey received a total of 220 responses, with more than half of these from commuters. The responses were distributed across the Illawarra region, with a concentration of those in the Wollongong area. Commuter responses were predominantly associated with places of work in the CBD.

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69 Dingel, J, Nieman, B, How Many Jobs Can be Done at Home, University of Chicago (2020)
The following postcodes were provided as the primary residence of survey respondents:
2500, 2502, 2505, 2506, 2508, 2515, 2516, 2517, 2518, 2519, 2525, 2526, 2527, 2528, 2529, 2530, 2533, 2534, 2535, 2536, 2538, 2539, 2540, 2541, 2577, 2622.

The following postcodes were provided as the Greater Sydney office location Illawarra residents were commuting to:

The survey captured responses from a range of age groups, industries, and employment roles. The average age of respondents was 40 years old, and the top industry of employment for all respondents was health care. For commuters, the top industry of employment was information media and telecommunications followed by health care. Commuters made up the largest portion of managers and professionals, which were the top roles respondents were employed in.

Table A.2: Summary of survey participants

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Commuter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not provided</td>
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<td>1</td>
</tr>
<tr>
<td>Under 25 years old</td>
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<td>13</td>
</tr>
<tr>
<td>25-34 years old</td>
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<td>27</td>
</tr>
<tr>
<td>35-44 years old</td>
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<td>40</td>
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<tr>
<td>45-54 years old</td>
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<tr>
<td>55+ years old</td>
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<tr>
<td><strong>Total</strong></td>
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<td>120</td>
</tr>
<tr>
<td><strong>Role</strong></td>
<td></td>
<td></td>
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<tr>
<td>Managers</td>
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<td>41</td>
</tr>
<tr>
<td>Professionals</td>
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<td>21</td>
</tr>
<tr>
<td>Technicians and Trades Workers</td>
<td>21</td>
<td>17</td>
</tr>
<tr>
<td>Community and Personal Service Workers</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>Clerical and Administrative Workers</td>
<td>32</td>
<td>14</td>
</tr>
<tr>
<td>Sales Workers</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>Machinery Operators and Drivers</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Labourers</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>25</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>220</td>
<td>120</td>
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### Industry of employment

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Commuter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry and Fishing</td>
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<td>6</td>
</tr>
<tr>
<td>Mining</td>
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<td>1</td>
</tr>
<tr>
<td>Manufacturing</td>
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<td>2</td>
</tr>
<tr>
<td>Electricity, Gas, Water and Waste Services</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Construction</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Wholesale Trade</td>
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</tr>
<tr>
<td>Retail Trade</td>
<td>17</td>
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</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Transport, Postal and Warehousing</td>
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<td>8</td>
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<tr>
<td>Information Media and Telecommunications</td>
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<td>19</td>
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<tr>
<td>Financial and Insurance Services</td>
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<td>7</td>
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<tr>
<td>Rental, Hiring and Real Estate Services</td>
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<tr>
<td>Professional, Scientific and Technical Services</td>
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<tr>
<td>Administrative and Support Services</td>
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<td>Public Administration and Safety</td>
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<td>Arts and Recreation Services</td>
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<td>Other Services</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>220</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>
Reference List


Australian Bureau of Statistics, ERP by SA2 and above (ASGS 2016), 2001 onwards


QS Quacquarelli Symonds Limited 2021, *Global University Rankings*.


Limitation of our work

**General use restriction**
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