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NSW Parliamentary Research Service

Regional NSW: A demographic and economic snapshot

Briefing Paper No 01/2020

by Chris Angus

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INTRODUCTION

As a proportion of its population, Australia has some of the world's highest levels of urbanisation.[1] The Australian Bureau of Statistics (ABS) has stated that more than 90% of the national population lives within 100km of the coast. NSW is no exception to this urbanisation, with over three-fifths of its population living in Greater Sydney: a region that comprises just 1.4% of total State area.[2] The remaining 98.6% of NSW—or 790,626km^2—is commonly known as the 'country' or 'bush',[3] or in this paper, 'regional NSW'.

As shown by economic, employment and demographic data, "Australia's regions are diverse, innovative and closely linked to urban and global marketplaces".[4] However, this diversity is not always recognised by policymakers or city-based communities, and has contributed to the feeling of marginalisation amongst regional residents.[5] If not addressed, Australia risks a widening of the existing divide between "small-town and big-city economic Australia", posting dangers for national cohesion in the future.[6]

Within this context, this paper presents a snapshot of regional NSW that offers insight not only into differences between the regions and Greater Sydney, but also *between* different parts of regional NSW. It aims to show readers that regional NSW is not monolithic, and that policies that may work in cities—or even in certain regions—may not be suitable for other parts of the State.

The paper is split into two parts. Part One presents a statistical overview of the NSW regions, covering indicators such as population change, economic performance, and labour force characteristics. Part Two considers the future economic and social trends expected to impact regional NSW. It provides an overview of the changes forecast to affect regional NSW, as well as proposed responses to these challenges.

[1] World Bank, *Urban population (% of total population)*, 2018.

[2] Angus C, *Trends in NSW population growth*, EB 01/2019, February 2019, NSW Parliamentary Research Service, p 6.

[3] Australian Institute of Family Studies, *Families in regional, rural and remote Australia*, March 2011.

[4] Regional Australia Institute, *Our Regions Rising – Policy Hack Summary 2019*, May 2019, p 2.

[5] Select Committee on Regional Development and Decentralisation, *Inquiry into regional development and decentralisation*, Commonwealth Government, June 2018, p 127; Regional Australia Institute, *Government that works for the bush: A regional regulatory reform agenda*, December 2018, p 9-10.

[6] Chan G, *Rusted off: Why country Australia is fed up*, 2018, p 14.

REGIONAL NSW BY ELECTORAL BOUNDARIES

This paper recognises that the definition of 'regional NSW' remains imprecise varies depending on the agency or organisation using the concept. To assist Members of the NSW Parliament, this paper wherever possible relies on State Electoral Districts (SED) boundaries to determine regional boundaries and sub-regions. Use of SED-based geographies prevents the splitting of electorates across regional boundaries, and allows for direct comparison with relevant Research Service publications.[7]

Regional NSW

Albury, Ballina, Barwon, Bathurst, Bega, Cessnock, Charlestown, Clarence, Coffs Harbour, Cootamundra, Dubbo, Gosford, Goulburn, Keira, Kiama, Lake Macquarie, Lismore, Maitland, Monaro, Murray, Myall Lakes, Newcastle, Northern Tablelands, Orange, Oxley, Port Macquarie, Port Stephens, Shellharbour, South Coast, Swansea, Tamworth, Terrigal, The Entrance, Tweed, Upper Hunter, Wagga Wagga, Wallsend, Wollongong, Wyong

Greater Sydney

Auburn, Balmain, Bankstown, Baulkham Hills, Blacktown, Blue Mountains, Cabramatta, Camden, Campbelltown, Canterbury, Castle Hill, Coogee, Cronulla, Davidson, Drummoyne, East Hills, Epping, Fairfield, Granville, Hawkesbury, Heathcote, Heffron, Holsworthy, Hornsby, Kogarah, Ku-ring-gai, Lakemba, Lane Cove, Liverpool, Londonderry, Macquarie Fields, Manly, Maroubra, Miranda, Mount Druitt, Mulgoa, Newtown, North Shore, Oatley, Parramatta, Penrith, Pittwater, Prospect, Riverstone, Rockdale, Ryde, Seven Hills, Strathfield, Summer Hill, Sydney, Vaucluse, Wakehurst, Willoughby, Wollondilly

Regional NSW by SED boundaries

[7] For example, *Indigenous NSW: Findings from the 2016 Census* and *NSW State Electoral Districts Ranked by 2016 Census Characteristics*.

Regional NSW is further divided into two sub-regions—Regional Metro and Country NSW, which separates out major regional cities to the north and south of Sydney from the rest of the State.

Regional Metro	Cessnock, Charlestown, Gosford, Keira, Kiama, Lake Macquarie, Maitland, Newcastle, Port Stephens, Shellharbour, Swansea, Terrigal, The Entrance, Wallsend, Wollongong, Wyong

Country NSW	Albury, Ballina, Barwon, Bathurst, Bega, Clarence, Coffs Harbour, Cootamundra, Dubbo, Goulburn, Lismore, Monaro, Murray, Myall Lakes, Northern Tablelands, Orange, Oxley, Port Macquarie, South Coast, Tamworth, Tweed, Upper Hunter, Wagga Wagga

PART ONE: AN OVERVIEW OF REGIONAL NSW

1) Demographics

Population and age distribution

According to the Australian Bureau of Statistics (ABS), in June 2018 3.1 million people live in Regional NSW (38.3% of NSW's almost 8.0 million population) and 4.9 million live in Greater Sydney (61.7%). Within Regional NSW, 1.3 million live in the 'Regional Metro' area, and 1.8 million reside in 'Country NSW'.

Between June 2008 and June 2018, the State's population increased by just over one million, from 6.94 million to 7.99 million (Figure 1). Greater Sydney recorded over three quarters of this population growth. The Regional Metro saw its population increase by 127,052 over the decade (12.2% of the overall total), while Country NSW grew by 112,599 persons (11.7%). On a cumulative basis, Greater Sydney grew significantly faster than Regional NSW and its sub-regions (Figure 2).

Figure 1: NSW population growth by region, June 2008 to June 2018[8]

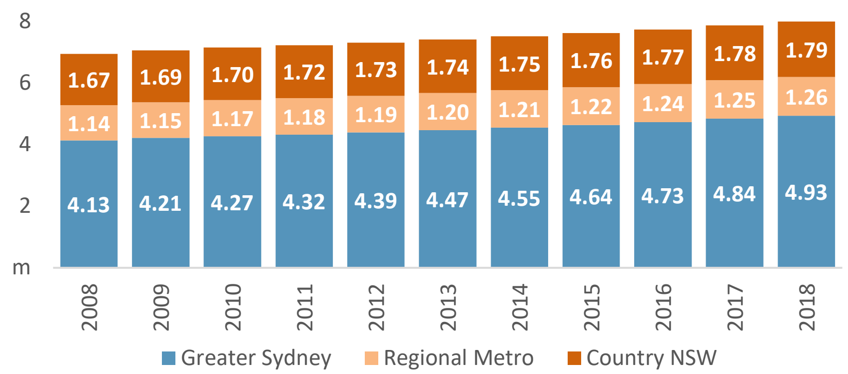
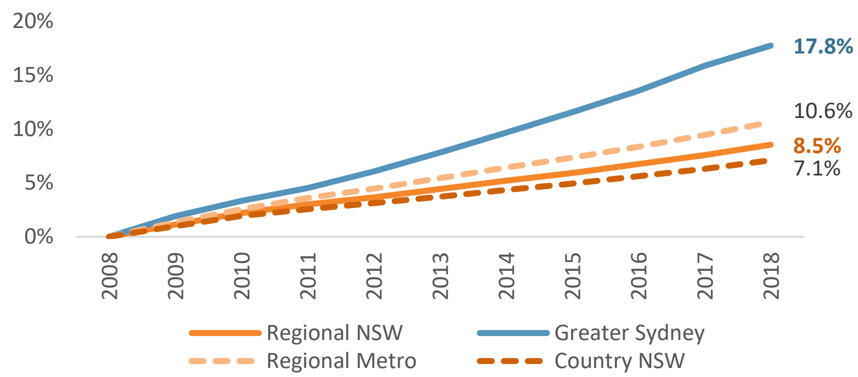


Figure 2: Cumulative NSW population growth, June 2008 to June 2018[9]

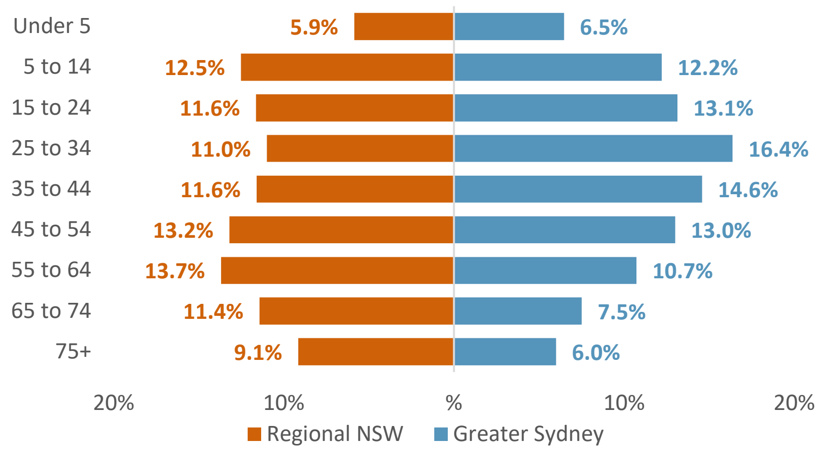


[8] Australian Bureau of Statistics, *3218.0 - Regional Population Growth, Australia, 2017-18*, 27 March 2019.

[9] Ibid.

Compared to Greater Sydney, Regional NSW's age distribution is skewed towards older age brackets (Figure 3). While both regions have similar proportions of children aged 14 years or under,[10] 20.6% of Regional NSW's population is aged 65 or over, compared to 13.5% in Greater Sydney. The regional variation is most evident within the working age population (15-64 years), with the greatest difference seen in the 25-34 year age bracket.

Figure 3: Age distribution, Regional NSW vs Greater Sydney, 2016 Census



Regional migration

There are three main components to population change:[11]

- **Natural increase**: the count of births minus deaths;
- **Net overseas migration (NOM)**: the net gain (or loss) of population from overseas movement; and
- **Net interstate migration (NIM)**: the net gain (or loss) of population from interstate movement.

Figure 4 overleaf shows the ABS's estimated regional population (ERP) figures between June 2017 and June 2018. According to this data, Greater Sydney's population growth came predominantly from net overseas migration (NOM), followed by natural increase. Indeed, despite a net internal migration *loss* of 27,500 people, the region's net population increased by a net 91,300 people. In comparison, Regional NSW experienced modest growth. While NOM remained the largest source of population growth, there was a net gain from net internal migration.

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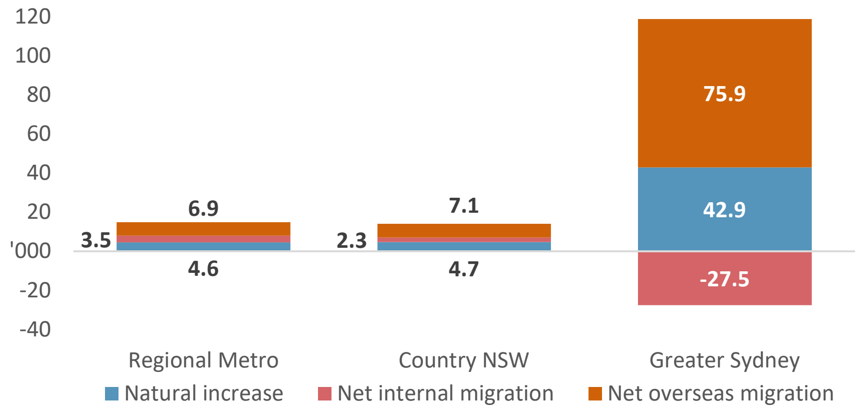
[10] 18.4% in Regional NSW, 18.7% in Greater Sydney.

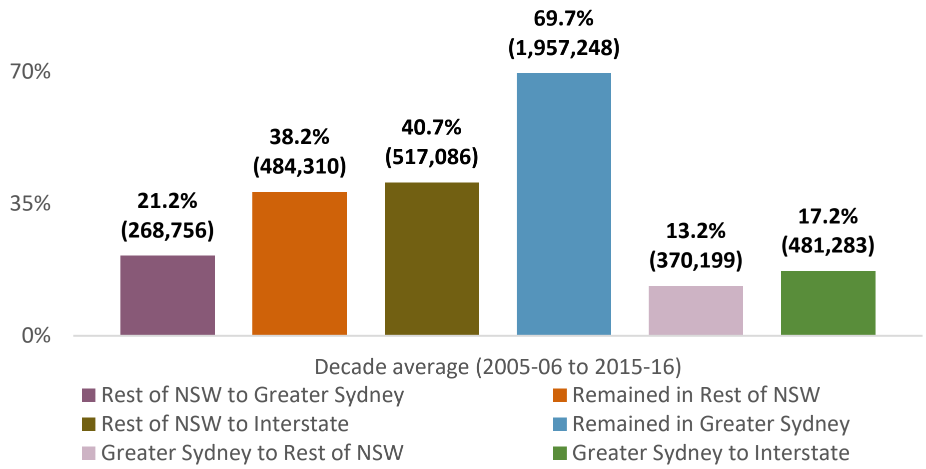
[11] Angus, note 2, p 7.

Figure 4: Change in ERP by NSW region, June 2017 to June 2018[12]



Although the NSW Government is encouraging people to move to the regions, it appears that few Sydneysiders have relocated in recent years. Internal migration data provided by the ABS indicates that, over the decade to 2015-16, only 13.2% of moving residents relocated from Greater Sydney to the Rest of NSW. Conversely, a greater proportion of Rest of NSW residents (21.2%) moved to Greater Sydney over this period.[13] In fact, while 17.2% of Greater Sydney residents moved interstate during the decade, 40.7% of Rest of NSW residents moved out of the State over this period (Figure 5).

Figure 5: Net internal migration by destination, Rest of NSW vs Greater Sydney, 2005-06 to 2015-16



Evidence also suggests that a 'brain drain' is occurring in which regional students move to capital cities for tertiary education, but do not subsequently return to the country.[14] Grattan Institute analysis of Census longitudinal data found that the

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[12] ABS, note 8, Table 1.

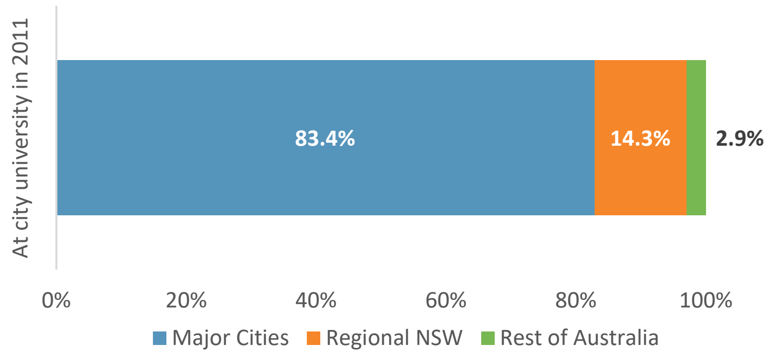
[13] Although a greater *total number* of people moved from Greater Sydney to Rest of NSW.

[14] Australian Clearinghouse for Youth Studies, *Engaging young people in regional, rural and remote Australia*, April 2015, p 30.

majority of regional high school students who undertook city-based study remained in cities following graduation.[15] This paper has replicated the Grattan Institute's analysis for NSW by using the 2006-2016 Australian Census Longitudinal Dataset (ACLD) to identify young regional school students in 2006,[16] determine which ones were studying at university in 2011, and then where they were living in 2016.

Based on this analysis, 83.4% of this cohort were still living in an Australian city as at the 2016 Census: just 14.3% had returned to regional NSW. In contrast, of the NSW regional school students in 2006 who attended a *regional NSW* university in 2011, nearly two-thirds (62.8%) were living in regional NSW in 2016.

Figure 6: Persons living in cities in 2016, who were regional students in 2006 and attended city universities in 2011



2) Regional Economies

Regional economic diversity

Regional NSW has a large and diverse economy. Major regional industries include agribusiness and food, tourism, energy, mining, and advanced manufacturing.[17] Regional NSW is not a single, homogenous, economic region. It is comprised of many smaller local economies known as functional economic regions (FERs, see Figure 7 overleaf).[18]

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[15] Grattan Blog, *More regional Australians are moving to the city to study. Few return when they've finished*, 30 April 2019.

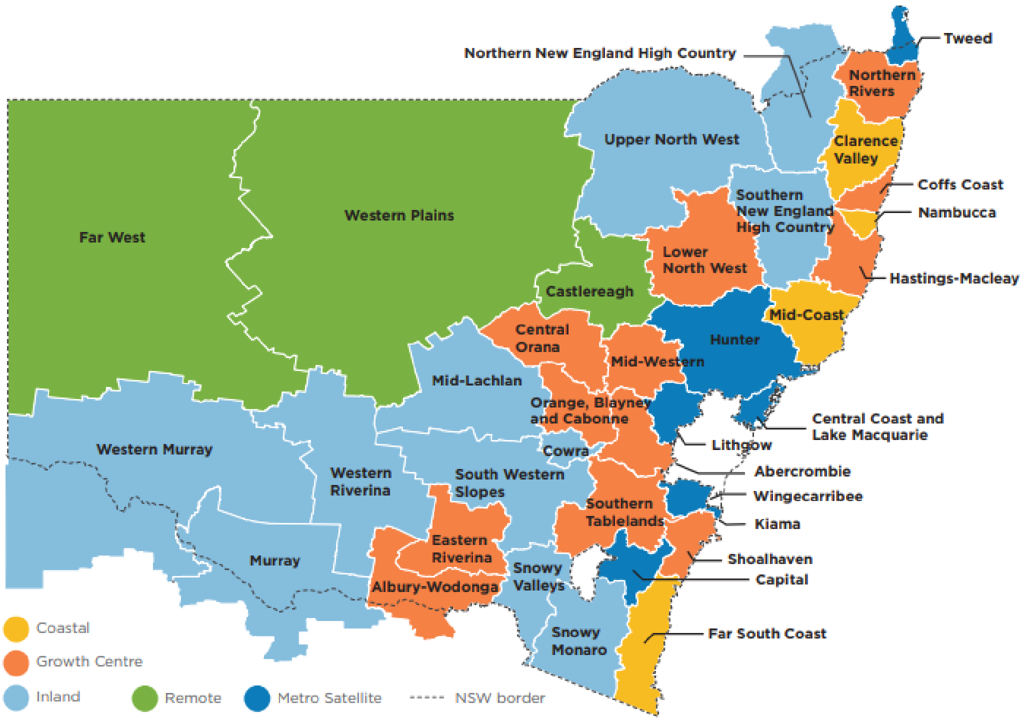
[16] Aged 12-20 years as at the 2006 Census, and living in any of the following four ABS remoteness regions in NSW: Inner Regional Australia, Outer Regional Australia, Remote Australia, or Very Remote Australia.

[17] NSW Legislative Council Standing Committee on State Development, *Regional development and a global Sydney*, 7 June 2018, p 4. See also: Infrastructure NSW, *Building Momentum: State Infrastructure Strategy 2018-2038*, February 2018, p 99-100.

[18] NSW Government, *A 20-Year Economic Vision for Regional NSW*, July 2018, p 6.

FERs vary substantially from one another, ranging from high-density communities on the outskirts of major centres to remote areas with substantial agricultural and mining activity.[19] FERs also differ in their 'adaptive capacity', or resilience to national and global change. Factors affecting this resilience include "the skills and education of regional workforces, access to infrastructure and services, availability of natural resources, financial resources available to businesses and individuals, and industry diversity."[20]

Figure 7: Regional NSW functional economic regions, NSW Government[21]



The Productivity Commission's 2017 analysis of adaptive capacity found that, of the 21 FERs identified for NSW, ten had below average levels of resilience. As shown overleaf, these are clustered in the State's north and west.

[19] Ibid p 8-10.

[20] Productivity Commission, *Transitioning Regional Economies*, December 2017, p 8.

[21] NSW Government, note 18, p 6.

Table 1: NSW FERs by level of adaptive capacity[22]			
Least	**Below average**	**Above average**	**Most**
• Far West NSW - Lower Murray	• Taree • Dubbo • Port Macquarie • Coffs Harbour - Grafton • Tamworth • Parkes - Cobar • Armidale - Moree • Griffith • Mudgee	• Bathurst - Orange • South Coast NSW • Richmond - Tweed • Hunter • Wagga Wagga - Young • Illawarra - Nowra • Albury • Deniliquin	• Cooma • Goulburn - Southern Highlands • Greater Sydney

Economic performance

Gross Regional Product (GRP) is the net measure of wealth generated by a region, and includes all incomes earned by individuals,[23] firms,[24] and governments.[25] GRP differs by region. According to 2019 SGS Economics research, Sydney's 2018-19 GRP was $461.4 billion in comparison to $152.97 billion for regional NSW.

However, SGS Economics also found a significant difference in recent economic performance between these two regions. Between 2008-09 and 2018-19, Sydney's average annual growth was 2.7%: in contrast, regional NSW had average annual growth of 1.7%. More recently, regional NSW economic growth has been weak, with the region experiencing a technical recession in 2018-19:[26]

> [T]he economy of Regional New South Wales contracted in 2013-14 (-0.4 per cent), experienced very weak growth in 2014-15 and then boomed in 2015-16. Since then, the GDP growth rate has been in steady decline. In 2018-19, Regional New South Wales was in recession with GDP falling by 0.3 per cent.[27]

This economic slowdown been driven by contractions in the agriculture and transport industries as a result of drought: since 2016-17 agricultural production has fallen by almost 20%.[28]

Other economic indicators, such as business growth, also indicate a disparity between Greater Sydney and Regional NSW. ABS business count data indicates that over the five years to June 2019, the number of businesses grew by 16.2%

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[22] Productivity Commission, note 20, Supporting material A.

[23] Wages and salaries.

[24] Gross operating surpluses.

[25] Taxes on products and services. See REMPLAN, *Economy Profile – New South Wales: Gross Regional Product*, 2019.

[26] SGS Economics, *GDP report: Economic Performance of Australia's Cities and Regions*, December 2019, p 10.

[27] Ibid p 56.

[28] Ibid p 57.

in Greater Sydney, compared to 8.4% across Regional NSW. As shown in Figure 8, this reflects slower business growth in Country NSW (5.9% cumulative growth), with the Regional Metro area recording growth closer to the Greater Sydney level (13.5%).

With regard to the agriculture and transport industries, although these sectors have experienced economic decline, business growth data paints a different picture. Between 2015 and 2019, agriculture, forestry and fishing business counts remained stable in Country NSW, but declined in the Regional Metro area (Figure 9). In comparison, transport, postal and warehousing business counts increased by 26.0% in the Regional Metro, while in Country NSW this growth was a lower 2.6% (Figure 10).

Figure 8: Cumulative growth in number of businesses by NSW region, June 2015 to June 2019[29]

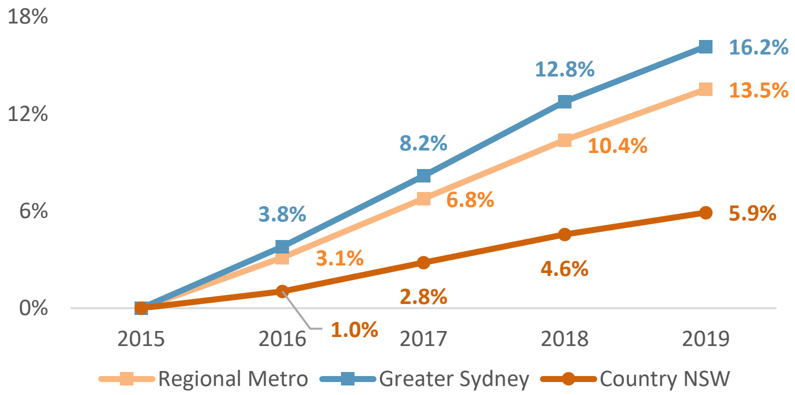
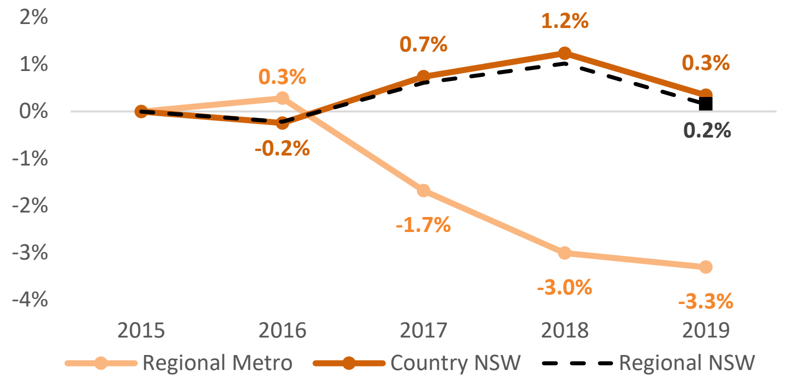


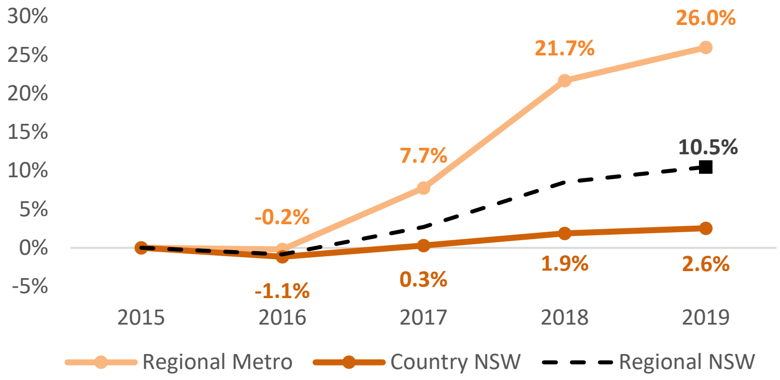
Figure 9: Cumulative growth in agriculture, forestry and fishing businesses, Regional Metro vs Country NSW, June 2015 to June 2019[30]



[29] ABS, *8165.0 - Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017*, February 2020.

[30] Ibid.

Figure 10: Cumulative growth in transport, postal and warehousing businesses, Regional Metro vs Country NSW, June 2015 to June 2019[31]



3) Employment and income

Industries

According to 2016 Census data,[32] the largest employment sector in Regional NSW is the health care and social assistance industry, comprising 14.5% of the regional workforce. Health care and social assistance was also the largest workforce in Greater Sydney, but constituted a smaller percentage (11.4%) of its workforce.

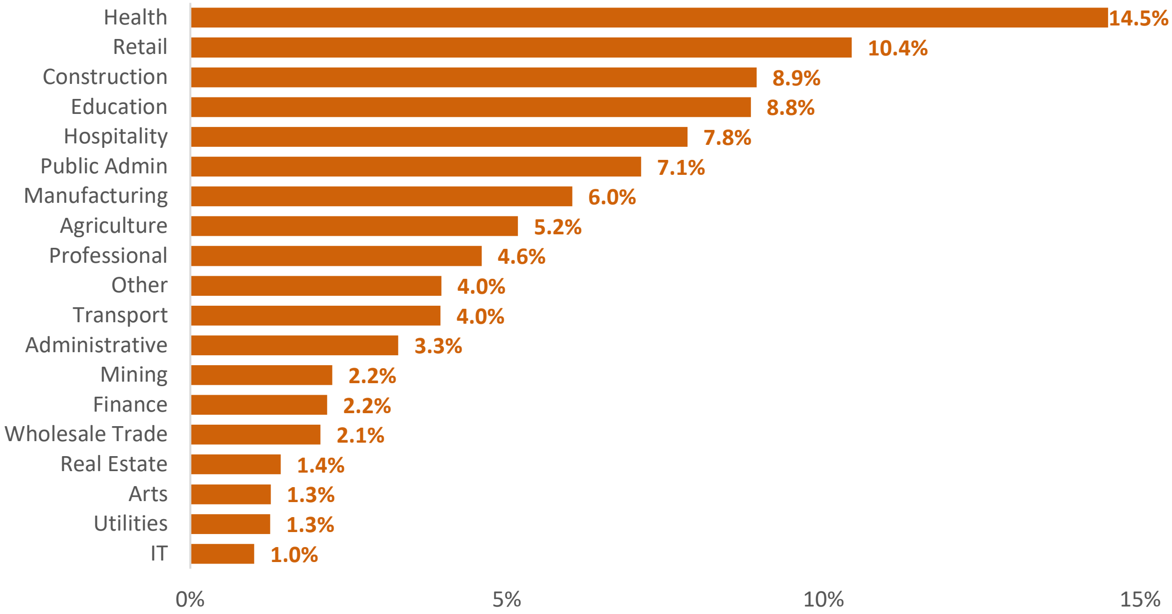
Figure 11 shows the proportion of employees in Regional NSW industries as at the 2016 Census, while the top five industries for both regions are shown below.

Table 2: Top five NSW industries of employment, 2016 Census	
Regional NSW	**Greater Sydney**
Health Care and Social Assistance (14.5%)	Health Care and Social Assistance (11.4%)
Retail Trade (10.4%)	Professional, Scientific and Technical Services (10.1%)
Construction (8.9%)	Retail Trade (9.2%)
Education and Training (8.8%)	Education and Training (8.1%)
Accommodation and Food Services (7.8%)	Construction (8.0%)

[31] Ibid.

[32] More recent labour force data by SA4 geography is provided on the Research Service's Regional labour force trends and NSW electorates webpage.

Figure 11: Regional NSW workforce by industry sector, 2016 Census



A larger proportion of the Regional NSW labour force works in agriculture, health and mining, while Greater Sydney's professional, finance and IT industries are proportionally larger than these industries within Regional NSW (Table 3).

Table 3: Difference in industry sizes, Regional NSW vs Greater Sydney

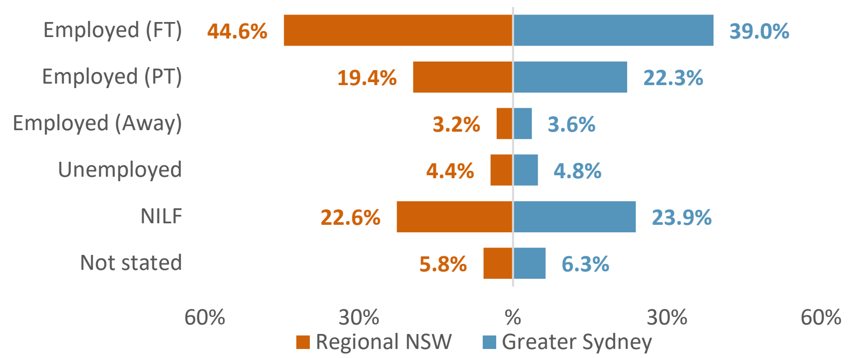
A larger proportion of Regional NSW works in…	A larger proportion of Greater Sydney works in…
Agriculture, Forestry and Fishing (**5.2%** vs 0.4%)	Professional, Scientific and Technical Services (**10.1%** vs 4.6%)
Health Care and Social Assistance (**14.5%** vs 11.4%)	Financial and Insurance Services (**6.5%** vs 2.2%)
Mining (**2.2%** vs 0.2%)	Information Media and Telecommunications (**2.8%** vs 1.0%)

Labour force

2016 Census data reported that 44.6% of Regional NSW residents aged 15-64 years worked full time, compared to 39.0% of Greater Sydney. However, other labour force categories, such as not in the labour force (NILF)[33] or proportion of unemployed, are similar for both regions.

[33] Persons who, during the week prior to Census night, were neither employed nor unemployed (e.g. retired, permanently unable to work, in jail).

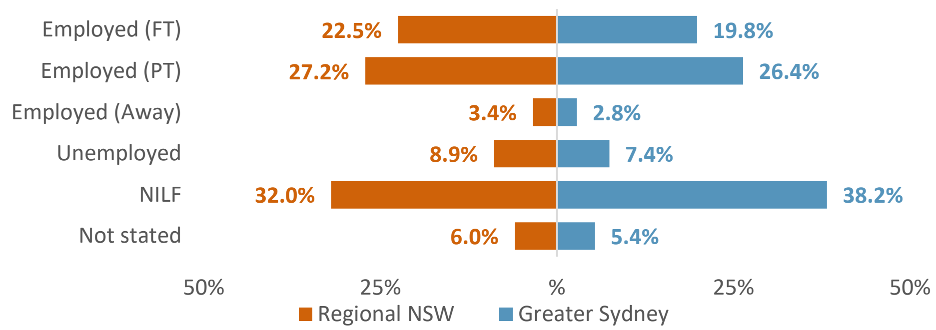
Figure 12: Labour force status, 15-64 years Regional NSW vs Greater Sydney, 2016 Census



There are concerns about levels of youth unemployment (15-24 year olds) in regional Australia, particularly as young people's transition from school to study or full-time work has long-term implications for their lives.[34]

2016 Census data indicates that, compared with Greater Sydney, a larger proportion of Regional NSW youth are employed[35] (53.1% vs 49.0%). However, the proportion of unemployed youth was higher in regional areas (8.9%) than in Greater Sydney (7.4%).

Figure 13: Youth labour force status, Regional NSW vs Greater Sydney, 2016 Census



The proportion of NILF youth in Regional NSW is also lower than in Greater Sydney (32.0% vs 38.2%). This may suggest that fewer Greater Sydney youths work while studying.

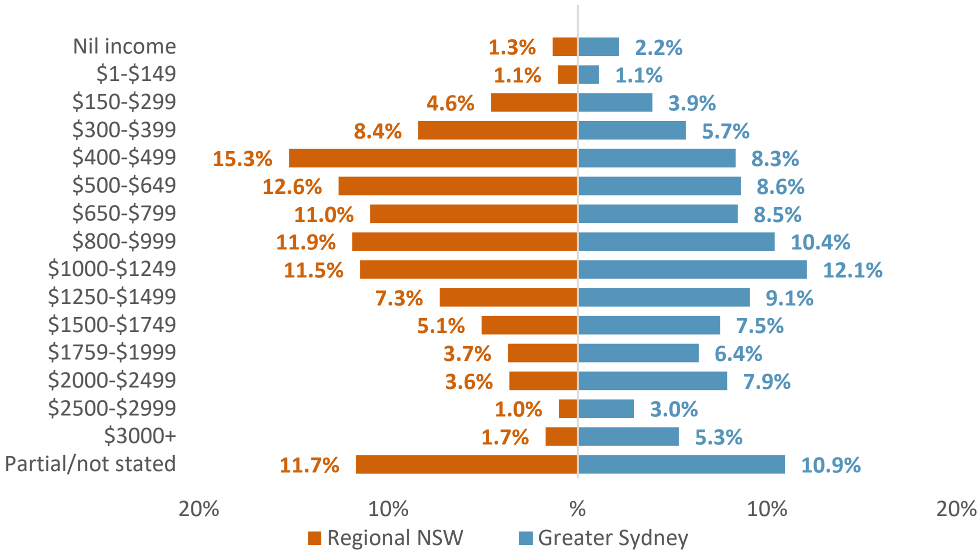
[34] Australian Bureau of Statistics, *2071.0 - Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016*, October 2017.

[35] Including all full-time and part-time employees, and employees away from work at the time.

Income

In general, regional households earn less income than households in Greater Sydney. This is evident when comparing the equivalised weekly household income rates of Regional NSW and Greater Sydney (Figure 14). Equivalised weekly household income involves the adjustment of weekly household income to enable analysis of the relative wellbeing of households of different sizes and composition, and provides more insight into the total weekly income that individuals can access.[36]

Figure 14: Equivalised weekly household income, Regional NSW vs Greater Sydney, 2016 Census



This income disparity is also reflected in the estimated median income for the regions compared to Greater Sydney and the NSW average (Table 4).

Table 4: Estimated median household income, Regional NSW v Greater Sydney, 2016 Census	
Region	**Median weekly household income bracket (annual in brackets)**
Regional NSW	$500-$649 ($26,000-$33,799)
- Regional Metro	*$500-$649 ($26,000-$33,799)*
- Country NSW	*$500-$649 ($26,000-$33,799)*
Greater Sydney	$800-$999 ($41,600-$51,999)
NSW average	**$650-$799 ($33,800-$41,599)**

[36] Productivity Commission, *Deep and Persistent Disadvantage in Australia*, July 2013, p 17-18, 33-34. For further information, see: Montoya D, *NSW Electorate Profiles: 2016 Census*, BP 02/2018, May 2018, NSW Parliamentary Research Service.

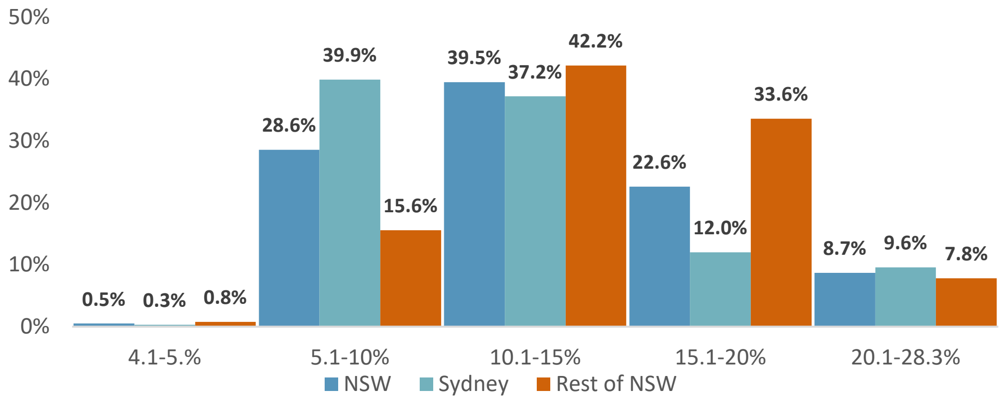
Poverty

Regional NSW is affected more than Sydney by poverty, which is measured as being below 50% of median household income.[37] According to October 2019 research commissioned by the NSW Council of Social Service, factors contributing to higher rates of poverty in regional areas include:

- generally lower incomes and net household worth for those living in regions outside of Sydney
- increased cost of essentials such as food, petrol, energy and health care
- distance and isolation
- Aboriginal and Torres Strait Islander people being more likely to live outside our capital cities and being disproportionately impacted by poverty.[38]

The study found that, while Sydney has a slightly greater number of SA2 'pockets'[39] with the highest rates of poverty, the percentage of SA2 regions with between 10% and 20% is higher in regions outside the capital.

Figure 15: Percentage of SA2s in each poverty rate category for NSW, Sydney and Rest of NSW[40]



[37] Vidyattama Y, Tanton R, *Mapping Economic Disadvantage in New South Wales*, NCOSS, October 2019, p 11.

[38] Ibid p 17.

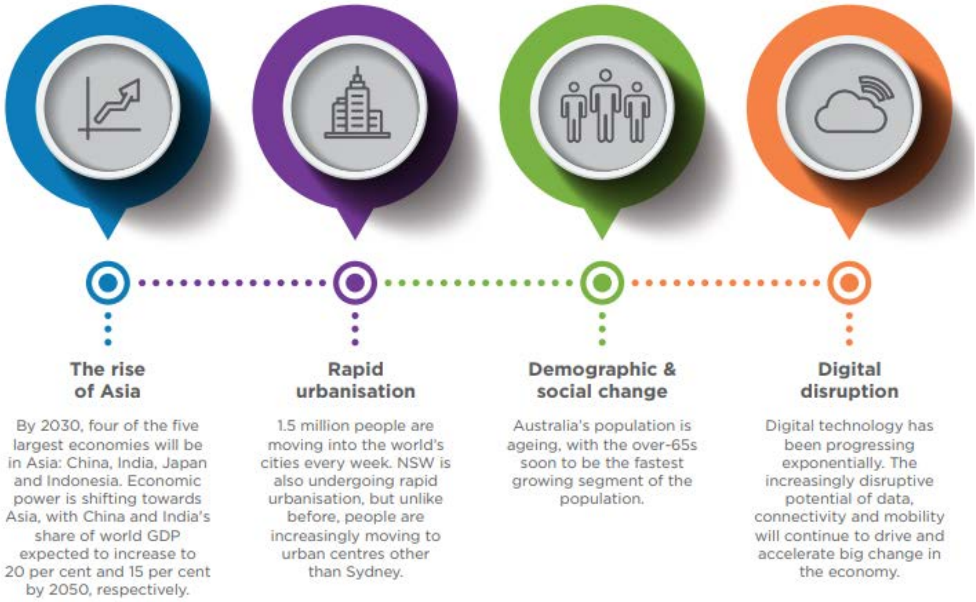
[39] An ABS geography designed to reflect functional areas that represent a community that interacts together socially and economically. SA2s generally have a population range of 3,000 to 25,000 persons, and have an average population of about 10,000 persons.

[40] Ibid p 17-18.

PART TWO: THE FUTURE OF REGIONAL NSW

As discussed in Part One, there are a range of demographic and economic differences between Regional NSW and Greater Sydney, and significant local variation *within* Regional NSW. However, further change is anticipated: the NSW Government, in its 20-Year Economic Vision for Regional NSW, identified four 'megatrends' that will affect regional NSW.

Figure 16: Megatrends affecting regional NSW[41]



Part Two of this paper reviews these megatrends and discusses how they may impact regional NSW. It also outlines proposals for managing the change that may occur in ways that benefit regional communities and their local economies.

1) A declining and ageing regional population

Slowing population growth

According to projections from the NSW Department of Planning, Industry and Environment (DPIE), the NSW population is forecast to grow from 7.7 million[42] in 2016 to 10.6 million in 2041. As Table 5 shows, Greater Sydney is forecast to record a 25 year growth rate of 51.5% and receive 85% of total NSW population growth over the period. In comparison, Regional NSW will grow by 14% from 2016 to 2041, receiving just 15% of total NSW population growth.

[41] NSW Government, note 18, p 14.

[42] Note that the DPIE uses LGA-based geographies to calculate Greater Sydney and Regional NSW, rather than electorate-based geographies as used in this paper. See Department of Planning, Industry and Environment, *Population projections*, December 2019.

Table 5: Projected population growth by NSW region, 2016 to 2041[43]					
Region	**2016**	**2041**	**Change**	**Growth**	**Proportion of increase**
Greater Sydney	4,688,255	7,103,091	+2,414,836	51.5%	85.0%
Regional NSW	3,044,603	3,469,605	+425,002	14.0%	15.0%
NSW	7,732,858	10,572,696	+2,839,838	36.7%	-

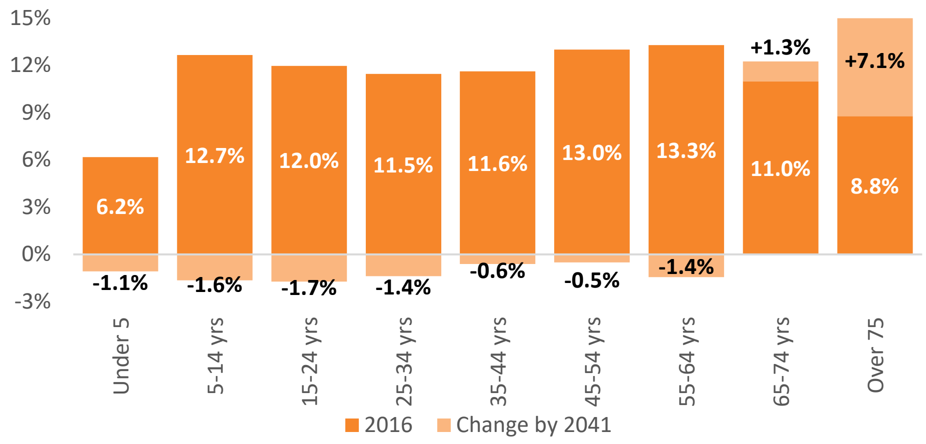
DPIE's figures show that Regional NSW comprised 39.4% of the NSW population in 2016: by 2041, this will decline to 32.8%. This appears to be a continuation of a long-running national and global trend towards urbanisation.[44]

An older community

As forecast by the regional NSW megatrends, the proportionally shrinking regional population will become older over the coming decades. While almost all analysts expect Australia to become, on average, a much older nation in the coming decades,[45] regional Australia is expected to be more affected than metropolitan areas.[46]

DPIE projections show that Regional NSW will age significantly between 2016 and 2041 (Figure 17). Residents aged over 75 will constitute the largest age group by 2036, increasing from 8.8% of the regional population to 15.9%. This represents a 7.1% increase in the total population share. The 65-74 year age group is also expected to increase, while all other age groups are forecast to shrink by 2041.

Figure 17: Forecast age distribution, Regional NSW, 2016 to 2041[47]



43 Ibid.

44 United Nations, *2018 Revision of World Urbanization Prospects*, May 2018; International Organisation for Migration, *World Migration Report 2015*, 2015.

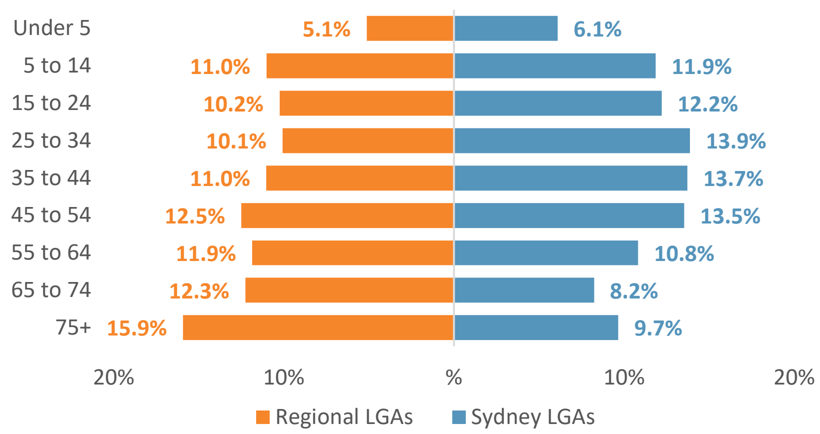
45 For example, see: ABS, *3222.0 - Population Projections, Australia, 2017 (base) - 2066*, November 2018; Commonwealth Government, *2015 Intergenerational Report*, March 2015.

46 NSW Government, *Intergenerational Report*, 2016, p 6.

47 NSW DPIE, note 42.

While the age distribution will skew older in both Greater Sydney and Regional NSW, the impact is much more pronounced in the latter region (Figure 18).

Figure 18: Forecast age distribution by 2041, Greater Sydney vs Regional NSW[48]



2) Responding to demographic and urbanisation trends

Since early Federation there have been attempts to address the population imbalance between city and country, albeit with little success.[49] Nevertheless, two key ideas currently being implemented in the regions are:

1) Decentralisation policies to encourage domestic migration from the cities to the regions; and
2) Encouraging—and more recently *mandating*—new migrants to settle in regional Australia.

Decentralisation of existing services and businesses

Decentralisation is a popular policy amongst regional stakeholders. The NSW Legislative Council's Standing Committee on State Development 2017 discussion paper, *Regional development and a global Sydney*, reported that many inquiry participants advocated for greater decentralisation, arguing that it significantly contributes to employment growth, diversity and the growth of the local skills base.[50]

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[48] Ibid.

[49] Hugo G, 'Is decentralisation the answer?' in Productivity Commission, *A 'Sustainable' Population? - Key Policy Issues*, March 2011, p 133, 137.

[50] NSW Legislative Council Standing Committee on State Development, note 17, p 57.

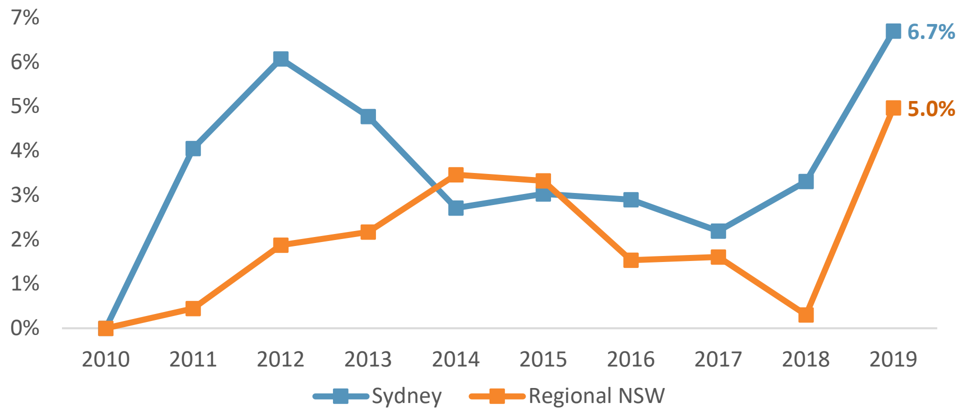
In a 2016 report, the Regional Australia Institute (RAI) claimed that:

> The economic potential for small cities, if they can deliver, is huge. In 2026 Australia's small cities are projected to grow to 5.6 million people. For every 100,000 Australians who choose to live in growing small cities rather than our big five, the RAI estimates that an additional $50 billion will be released into the economy over 30 years in reduced congestion costs and increased consumption.[51]

However, with proportionally few Sydney residents relocating to regional NSW voluntarily, the NSW Government has introduced a number of policies to increase regional migration. In August 2013, the Government offered financial incentives for skilled workers and businesses to relocate to the regions, and set a target of relocating 1,500 metropolitan public sector jobs to regional NSW by 2021.[52] However, it is unclear whether the Government has achieved this goal, or what impact it has had on regional economies.

Data from the Public Service Commission's Workforce Profile Reports shows that, over the decade to June 2019, the Regional NSW public sector workforce grew at a slower rate than Sydney's: 5.0% versus 6.7% (Figure 19).

Figure 19: Cumulative NSW public sector employee headcount, by region, June 2008 to June 2018[53]



Although the number of regional public sector employees has increased during this period,[54] the proportion of the NSW public sector workforce in Regional NSW *declined*: in 2010 it comprised 38.1% of the NSW public sector, but as of 2019 the proportion has reduced by 0.4% to total 37.7% of the workforce.

[51] Regional Australia Institute, *Deal or No Deal? Bringing Small Cities into the National Cities Agenda*, April 2016, p 31.

[52] NSW Government, *Response to the NSW Decentralisation Taskforce Report*, August 2013, p 8.

[53] Public Service Commission, *Workforce Profile Reports*, 2009 to 2019.

[54] 7,189 additional employees in Regional NSW, compared to 15,883 in Greater Sydney.

Encouraging migrants to the regions

The Commonwealth Government is currently trying to increase the number of migrants moving to regional Australia:[55] both to ease city congestion and to facilitate regional growth. In October 2019, the Prime Minister announced that regional migration visas would be increased from 18,000 to 23,000. These visas will require migrants to remain in regional Australia for at least three years before being eligible for permanent residency.

However, some experts argue that the regions must first be set up to take new residents, rather than encouraging people to move in the first instance. The Productivity Commission's 2011 roundtable report discussed the challenges associated with decentralisation policies, and noted a number of areas for policymakers to address in order to make such policies work:

- **Employment and regional growth:** Jobs are an absolutely necessary part of regional development, with past policy failures—including government agency relocations[56]—demonstrating that jobs cannot be created artificially. Any effort at regional development should be focused on regional communities whose local economies can provide a sustained demand for workers.[57]
- **Infrastructure:** Although industries such as mining and tourism can provide a basis for sustainable economic development, investment in infrastructure is vital for ongoing success. This infrastructure may incur considerable financial cost though, as well as disruption for existing communities and the natural environment.[58]
- **Housing:** While an ongoing issue for metropolitan areas in NSW, housing shortages and affordability problems are a major constraint on regional development. Housing demand is closely linked to population growth, but for much of the recent era growth in demand has outpaced population growth. Should the regions experience high levels of population growth, there will be increased pressure on housing markets, inflating prices and impacting housing affordability.[59]
- **Stemming the outflow of young adults:** Many young adults from regional NSW move to the cities for higher education, work, or simply to experience city life. While there are a number of university campuses in regional NSW, the Productivity Commission noted that all "great university

[55] Sherrell H, *Population Policy and the Budget*, Commonwealth Parliamentary Library, April 2019.

[56] *NSW Decentralisation Taskforce Report*, April 2013, p 6.

[57] Hugo, note 49, p 143-144.

[58] Sustainable Population Australia, *Population growth and infrastructure in Australia: The catch-up illusion*, November 2019, p 4; Hugo, note 49, p 147.

[59] Hugo, note 49, p 162. See also: Australian Housing and Urban Research Institute, *Why housing matters in the decentralisation debate*, November 2017.

> countries in the world have a mix of high-quality large universities in their gateway cities and regional areas".[60]

Additionally, with migration being overwhelmingly city-centric, there are doubts that visa changes will result in greater numbers of migrants moving to—and importantly, staying in—the regions.

2019 ANU research analysed migrant settlement patterns between 1981 and 2011, and estimated that over 60% of newly settled migrants from specific countries have moved away from regions within five years,[61] with the authors noting that "migrants in a regional or remote area have a 'very low chance' of staying in that area, and this pattern has been 'very consistent over time'."[62]

3) Future changes to regional economies

'Narrowing' and 'deepening' regional economies

In 2017, the NSW Government's Centre for Economic and Regional Development (CERD) conducted research to identify ways of increasing economic growth in regional areas. It found that, along with the rest of the world, "the economic base of NSW's regions is 'narrowing and deepening', with fewer key sectors employing a larger proportion of the workforce":

> 2. These key sectors are invariably directly linked to their region's local endowments. While growth in most of these industries and the emergence of some new endowment-based industries can be expected, numerous sources of market failure may be hindering growth – policies and investments to address these problems are the 'growth enablers'.
>
> 3. The future of individual regional economies is inexorably linked to their endowments, and attempts to retain or establish industries without an underpinning endowment are unlikely to succeed.
>
> 4. A narrower industrial base in an individual regional economy implies a greater exposure to boom and bust cycles and associated social costs. Hence, public interventions aimed at increasing regional development should encourage a degree of industrial diversity, as long as each sector is endowment-based, to foster community resilience while building local leadership capacity in order to enable a region to capitalise on opportunities.[63]

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[60] Ibid p 149.

[61] Baffour B, Raymer J, 'Estimating multiregional survivorship probabilities for sparse data: An application to immigrant populations in Australia, 1981-2011', *Demographic Research*, 2019, 40(18); Australian National University, *Migrants fleeing regional Australia for capital cities*, 16 May 2019.

[62] Snape J, Mannheim M, Lure of cities too strong for regional Australia to keep migrants, despite government efforts, *ABC News*, 25 November 2019.

[63] Centre for Economic and Regional Development, *Regional Economic Growth Enablers*, April 2017, p 4.

Although CERD concluded that economic growth would continue in most areas, numerous sources of market failure were hindering growth. In particular:

> The market failures most applicable to regional development that are revealed by this study relate to skills, particularly technical and vocational training, and public infrastructure provision. The market for skills is affected by several impediments, including instances of information asymmetry (principal-agent problems and access to capital), positive externalities, and instances of natural monopoly. Investment in public infrastructure is subject to the 'first mover and free rider' problem (where businesses have an incentive to wait for another firm to invest first), natural monopoly and network externalities.
>
> These market failures are not unique to regional economies, but are exacerbated by the unavoidable smaller economies of scale, shallower labour markets of regional areas, and partial public good nature of some investment. The consequence is generally under-investment in industries that depend on technical and vocational training and public infrastructure provision.[64]

Traditional industries such as agriculture may face additional challenges. For example, a 2019 study by the Australian Bureau of Agricultural and Resource Economics and Sciences found that, since 2000, climate change has reduced average annual farm business profits for NSW farms by 25.5%. Furthermore, post-2000 climate conditions have also contributed to increased risk in terms of more variable cash income and profitability, particularly for cropping farms.[65]

Changing regional labour force

The Commonwealth Government regional employment projections—the most recent being for the five years to May 2023—are provided by ABS labour force region. In NSW, these are grouped into 'Greater Sydney' and 'Rest of NSW' regions.[66] By May 2023, Rest of NSW employment is expected to grow by 74,600 jobs: an increase of 5.9%. In comparison, Greater Sydney is forecast to see new 231,100 jobs created: a higher increase of 8.9%, which equates to three-quarters of all new jobs in the State.

Both city and country are forecast to see substantial growth in the Health Care and Social Assistance industry (the largest existing industry in both regions), while Regional NSW will also see job growth in the Education and Training and Construction sectors. Regional Agriculture, Forestry and Fishing is expected to see the largest loss of all NSW industry sectors, with 5,600 jobs lost.

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[64] Ibid p 11.

[65] Hughes N, Galeano D, Hatfield-Dodds S, *The effects of drought and climate variability on Australian farms*, Australian Bureau of Agricultural and Resource Economics, December 2019. See also: Karp P, Climate change has cut Australian farm profits by 22% a year over past 20 years, report says, *The Guardian*, 18 December 2019.

[66] Note that these labour force-based regions are different from those used in Part One of the paper.

Table 6: Projected employment growth, five years to May 2023, Greater Sydney v Rest of NSW		
Industry	**Greater Sydney**	**Rest of NSW**
Agriculture, Forestry and Fishing	0	-5,600
Mining	-300	200
Manufacturing	5,800	-400
Electricity, Gas, Water and Waste	500	600
Construction	34,000	7,000
Wholesale Trade	-1,000	-1,000
Retail Trade	17,300	6,900
Accommodation and Food	16,300	4,300
Transport, Postal and Warehousing	6,400	2,000
Information Media and Telecommunications	7,000	1,000
Financial and Insurance Services	10,000	400
Rental, Hiring and Real Estate	6,100	600
Professional, Scientific and Technical	34,300	5,200
Administrative and Support	5,000	3,000
Public Administration and Safety	4,500	3,500
Education and Training	27,500	8,200
Health Care and Social Assistance	51,200	33,900
Arts and Recreation	5,700	1,700
Other	900	2,800
Total growth (All industries)	**231,100**	**74,600**

4) Boosting future economic growth

Criticism of existing growth strategies

There have been criticisms of existing regional economic growth policies and strategies. Examples of these are outlined below to illustrate some of the shortcomings of current approaches to regional economic development and growth.

The Regional Development Australia (RDA) program is a co-operative approach between Commonwealth, state and local governments to develop and strengthen regional economic outcomes.[67] In NSW, 14 RDA Committees have been established for all areas of the State, and comprise local leaders with broad and diverse skills and experience within local communities.

[67] Smith W, *Independent Review of the Regional Development Australia Programme*, Commonwealth Government, December 2016, p 12.

However, 2017 research found that a number of RDA Committees were "preoccupied with providing the appearance of policy order … eschew[ing] practical complexities", and lacked the democratic legitimacy, statutory powers, special purpose policy tools and goal independence needed to address complex regional economic challenges.[68]

In 2016, an independent review of RDAs by the Commonwealth Government identified a number of shortcomings. These included Australian and State/Territory Governments not being fully committed to the RDA program, no uniform formula for determining funding levels or utilising funding, large variations in the quality of regional development plans being created by the RDAs, and a lack of performance indicators to accurately determine the success of development programs.[69] Additionally, while there was broad support for regional development efforts through RDAs, regional residents felt forgotten by governments:

> This is despite record Commonwealth investment—particularly in regional infrastructure, transport and communications. Government investments are not resonating with regional Australians; therefore, a different approach must be taken. The Government, through partnerships with state, territory and local governments, must focus initiatives on strengthening the pillars of growth to reboot the economies of our true regions, enabling the private sector to harness opportunity.
>
> Some of the foundation is there—the Building Better Regions Fund to support regional infrastructure and community building projects, the Mobile Black Spot program to improve mobile phone coverage and competition in regional Australia, the Regional Jobs and Investment Package to help regions to diversify their economies, stimulate long-term economic growth and deliver sustainable employment and Australia's Free Trade Agreements which provide opportunity to build our trading relationships— but the Australian Government must also ensure that it supports regions to engage in their futures, listens and responds to diverse circumstances and provides resources to ensure that it meets the needs of regional Australians.[70]

Other experts have criticised different policies that either directly or indirectly affect the regions. For example, The Australia Institute has contended that there has been a failure to recognise the contribution of the public sector in regional NSW, despite 41.8% of public sector employees working outside Sydney.[71] It argued that the NSW public service is important for ongoing regional economic growth, but that budget cuts and privatisation measures have disproportionately affected regional economies and labour markets:

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[68] Pugalis L, Keegan D, The regional economic development paradox: Attempting policy order in the face of societal complexity, *Australasian Journal of Regional Studies*, 2017, 23(1).

[69] Ibid p 2-3.

[70] Smith, note 67, p 1.

[71] Public Service Commission, *Workforce Profile Report 2019*, 2019, Ch 11.

> Important public sector facilities (such as hospitals, schools, higher education institutions, prisons, and others) can act as "anchor" industries in regional communities, stimulating additional indirect economic activity (both "upstream" and "downstream"). But when these facilities are privatised (as with the privatisation of prisons), those indirect benefits are reduced. For example, private facilities lack transparency regarding staffing ratios, generally have lower rates of pay than public facilities, and do not make the same commitment to local purchasing of inputs and supplies as public facilities can.[72]

Diversifying regional economies

In the context of the earlier discussion of narrowing and deepening regional economies, regional stakeholders recognise that economic diversification is vital for regional growth and prosperity.

For example, in its 2015 Transition Illawarra Initiative report, RDA Illawarra stated that its economic development required both quantitative features (e.g. increase in the number of jobs) and qualitative features (e.g. diversification of jobs created) in order to provide employment opportunities for young residents, as well as improve regional resilience to external shocks.[73] Diverse economies are also a priority of the NSW Government's 2017 Regional Growth Plans, which emphasise the goal of expanding a range of traditional and emerging industries over the coming two decades.[74]

Nevertheless, identifying opportunities for diversification is challenging. Illustrating this, a 2016 journal article by McFarlane et al examined the economic structure of the Central West region between 2001 and 2011 to determine what changes occurred over this period. Over the decade, regional industry shifted from agriculture to mining, with the Central West's Gross Regional Product doubling as a result. However, the region's economic diversity did not significantly increase, leaving it vulnerable to fluctuations in commodity prices.[75]

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[72] Henderson T, *The Economic Importance of Public Services in Regional Communities in NSW*, The Australia Institute, May 2018, p 6.

[73] RDA Illawarra, *Transition Illawarra Initiative: Report Update*, October 2015, p 2-3.

[74] For example, see: NSW Government, *Central West and Orana Regional Plan 2036*, 2017, Goal 1; NSW Government, *Hunter Regional Plan 2036*, 2017, Goal 1; NSW Government, *Far West Regional Plan 2036*, 2017, Goal 1;

[75] McFarlane et al, 'From agriculture to mining: The changing economic base of a rural economy and implications for development', *Economic Analysis and Policy*, 2016, 49.

Reliance on mining as a means of regional economic growth may also face difficulties in future, as projected increases in coal exports[76] conflicts with the NSW Government's goal of net zero emissions by 2050.[77] To address this, the NSW Government has introduced legislation excluding emissions from coal burned outside Australia: a position that has come under criticism from observers.[78]

The Productivity Commission has commented on the need to effectively manage transitioning regional economies in order to facilitate adjustment and long term development. It identified several reforms to facilitate the transition and development of regions, including:[79]

- Removing impediments to doing business (e.g. unnecessary regulations);
- Removing unnecessary impediments to pursuing new opportunities;
- Improving the effectiveness of planning and expenditure; and
- On rare occasions, specific national adjustment assistance for vulnerable communities.

The Productivity Commission's recommendations are supported by recent academic research, which contends that regional Australia could overcome global challenges through 'smart specialisation'. This is an approach that requires regions to identify and select a limited number of priority areas for knowledge-based investments, focusing on strengths and comparative advantages.[80] However, the Commonwealth Government has not responded to the Commission's report.

Transitioning regional workforces

Changing regional economies risk negative outcomes for workers across a range of industries that are forecast to decline—or outright disappear—from a region. Historically, blue collar workers have suffered the most from a combination of technological innovation and other economic forces, with many facing considerable difficulty in remaining in or returning to full time work.[81]

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[76] Transport for NSW, *NSW Freight and Ports Plan*, September 2018, Ch 2.

[77] NSW Government, *Achieving net-zero emissions by 2050*, n.d.

[78] Environmental Planning and Assessment Amendment (Territorial Limits) Bill 2019; The Australia Institute, *Enough Scope: Coal mines, scope 3 emissions and NSW climate policy*, February 2020.

[79] Productivity Commission, note 20, p 23-30.

[80] Esposto A, Abbott M, Juliano P, 'Growing Regions through Smart Specialisation: A Methodology for Modelling the Economic Impact of a Food Processing Hub in Australia', *Economic Papers*, 38(2), 2019.

[81] Angus C, *Future workforce trends in NSW: Emerging technologies and their potential impact*, BP 13/2015, December 2015, NSW Parliamentary Research Service, p 9, 23.

Globally, there are calls for the introduction of 'just transition' packages for workers in vulnerable sectors, most notably fossil-fuel industries. An overview of the concept was provided by the International Labour Organization:

> Just transition was an early trade union demand that has now become a mainstream policy tool applied by international institutions and treaties.
>
> The first mention of just transition is attributed to US trade union leader, war veteran and peace activist, Tony Mazzocchi who pleaded for a "Superfund for workers" to provide financial support and opportunities for higher education for workers displaced by environmental protection policies. … Two key features of the original claim for a just transition had a lasting effect on future interpretations. First, it should not be reduced to "welfare" (not just a "fancy funeral" as AFL-CIO President Rich Trumka put it), as there is a claim for public responsibility to facilitate and actively support a transition for the common interest. The second is that decarbonization is a planned transition (with clearly defined objectives) and as such it cannot be handled as "just another transition" that affects workplaces and livelihoods. It needs dedicated and holistic policy approaches.[82]

The Australian Council of Trade Unions (ACTU) has called for just transition policies to be adopted for coal-fired electricity sector workers and communities. It proposed a national, federally-coordinated plan for just transitions, a mechanism for the orderly retirement of power stations, and the establishment of an independent statutory Energy Transition Authority to manage job redeployment, training, early retirement access, and other forms of structural adjustment.[83]

The NSW Government does not have a just transition policy. However, a 2019 study assessed the efficacy of a $40 million Commonwealth labour market program (LMP) to help 800 Illawarra steelworkers regain employment following the 2011 closure of BlueScope Steel. According to the study authors, the program was ineffective in assisting former steelworkers to return to the workforce.

> With respect to the displaced steelworkers, we observed that only half were employed eighteen months after redundancy. As expected, older workers faired relatively poorly at first but in an optimistic sign, many subsequently obtained employment over the longer term. LMPs providing funds to JSPs [job service providers] appeared to be largely ineffective with most reemployed workers relying on their personal networks. In addition, the mining boom softened the blow of job loss from BlueScope with around a quarter of redundant steelworker obtaining re-employment in the mining sector. As such, our estimates suggested that the JSPs may have been effective in reemploying approximately fifty of the 800 redundant workers.
>
> …
>
> According to our analysis, no redundant BlueScope workers obtained jobs in IRIIF [Illawarra Region Innovation and Investment Fund] projects. It is somewhat ironic that

[82] International Labour Organization, *Just transition towards environmentally sustainable economies and societies for all*, 2018, p 1-2.

[83] ACTU, *A Just Transition for coal-fired electricity sector workers and communities*, 2016, p 4.

> the IRIIF was announced directly as a result of the redundancies, received $5 million in funding from BlueScope, was announced as intending to predominantly produce manufacturing jobs for high skilled employees, yet there was no explicit mention of BlueScope workers in IRIIF nor ultimately any formal connection observed in our data.[84]

The researchers concluded that, to be successful in creating jobs and diversifying regional economies, all key stakeholders must be involved in the changes that occur and a multifaceted approach taken that encompasses regional innovation systems.[85]

In March 2017, the Victorian Government introduced the Worker Transfer Scheme, which committed $20 million in funding to help Hazelwood power station workers remain in the power industry. The Scheme was supported by both energy company AGL and Latrobe Valley unions,[86] however reports indicate that it has had mixed success. According to a June 2019 ABC News article, only 306 workers of the 850 who took part in the Scheme are in full-time employment, while analysis of labour force data suggests that regions affected by the closure have some of Victoria's highest unemployment rates.[87]

Providing necessary public services to regional NSW

Alongside regional economic growth, an older and proportionally smaller regional population presents challenges for the provision of essential services in regional NSW, especially given the existing gaps on many measures of service provision and socio-economic outcomes. The Regional Australia Institute (RAI) identified three interrelated issues that have persisted despite decades of reform efforts:

1. A significant decline in local service delivery capacity that has undermined confidence in government and the capacity for progress to be made;
2. The incompatibility of dominant policy and service design ideology with what the evidence says is needed to support progress in rural and remote Australia; and
3. Inflexibility in program and regulatory implementation that stalls local initiatives that could deliver progress and presents a deaf ear to regional views.[88]

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[84] O'Brien M, Burrows S, 'Assessing the Effectiveness of Regional Policy Responses to Mass Redundancies: The Case of the Illawarra Region, Australia', *Economic Papers*, 38(2), 2019, p 152.

[85] Ibid p 153.

[86] Victorian Government, *Worker Transfer Scheme To Keep Skilled Jobs In The Valley*, Media Release, 1 March 2017; Latrobe Valley Authority, *Worker Transfer Scheme gives Hazelwood workers a new start*, Media Release, n.d.

[87] Whittaker J, Latrobe Valley workers face legacy of unstable work two years after Hazelwood closure, *ABC News*, 22 June 2019; Burke P, Jotzo F, Best R, Bad news. Closing coal-fired power stations costs jobs. We need to prepare, *The Conversation*, 29 March 2019.

[88] Regional Australia Institute, note 5, p 8.

According to the RAI, Australia's 'default' top-down approach to policy and program delivery has exacerbated this gap. The problem, the RAI argues, is that regional Australia does not have the economies of scale necessary for such consistency to work:

> [I]n regions, especially those with low populations, it is rare to find economies of scale that work to deliver better outcomes or a situation where the potential gains from choice and competition can be effectively realised.
>
> In low population regions, economies of scope are far more effective in delivering better and more efficient outcomes. Economies of scope can be achieved where services are bundled and tailored to meet the community's needs, for example where one local organisation combines funding for a range of part-time services into a viable operation able to spread the overheads across a portfolio of small funding sources.[89]

The RAI has identified five changes that address obstacles to service delivery, and which it argues represent significant but readily achievable improvements to current systems.

Table 7: Five changes to improve service delivery in regional Australia[90]

Suspending regulations and program rigidities for better local outcomes	Provide a mechanism within government accountability and decision-making frameworks that responds directly to local concerns and ideas
Enabling economies of scope and pooling across silos	For communities with few local service providers and a complex mix of externally located individual services, economies of scope (small providers with multiple services) will better support local service provider business models
Validating local leadership	Validate and respond to the outcomes of 'stakeholder consultation' and 'stakeholder engagement'. Currently consultation is heavily weighted to the 'inform' end, while often masquerading as being at the 'empower' end of the spectrum.
Buy-in and a place to experiment	Buy-in by governments and the creation of a safe place to experiment (and fail), examples include special policy zones and supporting local innovation efforts
Spreading the good	Help bring initiatives to scale. The contrast between how scaling happens organically in a market and how it must be engineered in government is an instructive introduction to the dilemmas that must be faced if innovation for small places is really to be embraced within government

Other experts have also argued for improved regional service delivery that addresses individual community needs. For example, 2016 research into localised crime prevention in NSW found that crime reduction targets established by central government, and a political focus on 'cutting red-tape', have impacted approaches to local crime prevention, resulting in less deliberative, consultative approaches and more data-driven, situationally oriented interventions.[91]

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[89] Ibid p 10.

[90] Regional Australia Institute, note 5, p 14-22.

[91] Clancey G, 'A Partial History of Localised Crime Prevention in New South Wales, Australia',

Similarly, a 2015 journal article recommended that local perspectives be incorporated into future policy cycles relating to rural domestic violence (DV). This was needed to respond to the unique circumstances of regional NSW, such as higher levels of personal shame, heightened family privacy and distance between DV services and where victims lived.[92]

Digital technology in regional NSW

In its 20-Year Economic Vision for Regional NSW, the NSW Government stated that digital connectivity and disruptive technology have the potential to transform regional communities, including in areas such as farming, education, healthcare, local business and standards of living.[93]

The NSW State Infrastructure Strategy 2018-2038 further elaborated on the role of digital connectivity in regional NSW, stating that investment in digital technologies "is at the heart of innovation in service delivery and better management of assets":

> The NSW Government has improved service quality and efficiency in various sectors through more connected infrastructure, and data and technology investment. This includes an open-data policy, the eHealth Strategy for NSW Health 2016-2026 [eHealth Strategy] and the Transport for NSW Future Transport Technology Roadmap. NSW can do even more to improve connectivity through Connecting Country Communities and better use of its own assets.
>
> The NSW Government will improve the performance of infrastructure investments by embedding smart technology in new and upgraded infrastructure, adopting interoperability protocols and cybersecurity standards, and providing better spatial data and mapping of assets.

Telehealth is one technology that is important to regional NSW. According to the 2016 eHealth Strategy and NSW Ministry of Health's 2015 Strategic Review of Telehealth in NSW, these services have benefited patients and clinicians through reduced travel time and improved timely access to advice and metropolitan-based specialists.[94]

Digital technology is critical for regional educational outcomes, both in terms of improved workforce participation and ways of providing appropriate educational services to regional students.[95] As part of its Schools Digital Strategy (SDS) the Department of Education's SDS handbook lists two technology-focused

Current Issues in Criminal Justice, 2016, 28(2), p 202.

[92] Owen S, Carrington K, Domestic violence (DV) service provision and the architecture of rural life: An Australian case study, *Journal of Rural Studies*, 2015, 39, p 237.

[93] NSW Government, note 18, p 16.

[94] NSW Health, *Telehealth Framework and Implementation Strategy 2016-2026*, 2016, p 1; Nous Group, NSW Health, *Strategic review of telehealth in NSW: Final report*, April 2015, Ch A.4-A.5.

[95] Vichie K, 'Higher education and digital media in rural Australia: The current situation for youth', *Australian and International Journal of Rural Education*, 2017, 27(1), p 33-34.

outcomes aimed at furthering the 20-Year Economic Vision for Regional NSW:

- Boosting digital connectivity and utilise existing and ongoing network rollouts.
- Equipping students with in-demand skills and competencies.[96]

Despite the potential for new technology to benefit regional NSW, experts warn that such changes may have a negative impact on some regions, particularly those with a low adaptive capacity to change. As noted in a 2016 Productivity Commission research paper, disruptive technologies can displace existing jobs, with the new jobs created not necessarily in the same region as those lost. The Productivity Commission commented that:

> Determining the type and amount of assistance to help workers adjust to disruptive technologies is difficult. … while the expected response is likely to differ compared to structural adjustment that is a result of market mechanisms (such as disruptive technologies), the principles are applicable where the disruption is concentrated in particular geographic locations or groups of workers. In addition, preventative strategies — such as encouragement for people in declining industries to develop skills that might increase job mobility — could be trialled and evaluated. Encouragement need not be direct government funding to particular groups, but might take other forms, such as active outreach by educational institutions, and awareness campaigns for at-risk employees.[97]

Ensuring that workers have requisite skills to use new technology is another consideration for governments. While Australian governments are currently focused on improving STEM (Science, Technology, Engineering and Mathematics) outcomes in the education system,[98] the Productivity Commission commented that simply increasing the number of STEM graduate is not enough to improve digital technology uptake:

> Given the relatively high underemployment of STEM graduates and apparent underutilisation of STEM skills, the current approaches are not delivering the problem-solving skills needed for technology rich work environments. Beyond delivering a high competency in literacy and numeracy at the school level, initiatives could include reviewing teaching methods, increasing flexibility of university degrees and improving information on employment outcomes for students to help inform student choice.[99]

In conjunction with evidence that tertiary educated regional residents are relocating to cities, ensuring there are adequate numbers of skilled workers in regional NSW—particularly those with necessary technological knowledge—presents an additional challenge to policymakers.

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[96] NSW Department of Education, *Schools Digital Strategy handbook 2019-2026*, 2019 p 6.

[97] Productivity Commission, *Digital Disruption: What do governments need to do?*, June 2016, p 90.

[98] See Gotsis T, *STEM education in NSW schools*, EB 05/2017, September 2017, NSW Parliamentary Research Service.

[99] Productivity Commission, note 97, p 86.

CONCLUSION

There are a range of existing—and growing—differences not only between Greater Sydney and Regional NSW, but within the many regional areas of the State. Compared to Greater Sydney, Regional NSW is experiencing a slowing of population growth, weak economic performance, lower incomes and higher overall levels of poverty.

These trends are expected to intensify in the coming decades. By mid-century, demographers estimate that Regional NSW will be host to an older population, while its regional economies and industries are forecast to narrow in scope and become more reliant on new technologies. These changes may exacerbate existing economic and social pressures on the regions, and risk creating a greater divide between city and country.

Nevertheless, Regional NSW’s collective strength lies in its diversity, with a wide range of regional economies that offer industries ranging from agriculture to mining, tourism and advanced manufacturing. Experts and policymakers contend that not only must regions continue to develop their economic strengths, but also consider ways in which they can expand their economies to take advantage of new opportunities and reduce the impact of external shocks.

Such a goal may be harder for some regions to achieve, particularly in areas where traditional industries clash with other government priorities: the case of coal mining and climate change mitigation is but one example. Should some regions face additional challenges adapting to changes brought about by global megatrends, the view of many stakeholders is that the government should step in and provide appropriate support to affected communities.

This paper provides examples of policy responses to the challenges facing regional NSW. Whatever policies are implemented though, policymakers must recognise that city-centric, one-size-fits-all approaches to economic and community growth do not work effectively in the regions, nor are they desired by those living there. In order to maximise success, development efforts should be tailored to each sub-region and be made in collaboration with the communities themselves.