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Building the Lucky Country
Business imperatives for a prosperous Australia

#5

The purpose
of place
Reconsidered

Contents

Technology has trumped the tyranny of distance and place no longer matters.

At least, that's what most people seem to think.

In fact, the opposite is occurring: place is becoming more important as the world's economies are transformed by knowledge-intensive activities.

Place matters for prosperity.

For Australia – one of the world's most urbanised nations – that means we need to reconsider the purpose of place.

This report sets the ball rolling. What do we mean by place in Australia's context? How is place relevant to Australia's living standards?

And what can business do to unlock the potential of place as a driver of our future prosperity?

Place matters

Place matters

Futurists have long argued that soon it will no longer matter where you live or work; you'll be as connected to the rest of the world on a tropical island as in the heart of New York City.

Yet things haven't worked out that way. As telecommunications and travel have grown steadily cheaper, people have chosen to live closer together rather than further apart. Around the world, urbanisation continues unabated, and that trend looks set to persist.

> "It seems that every time a new technology comes along that slashes communications costs, pundits emerge declaring the death of distance, that the earth is flat, or some other catchphrase suggesting that geography no longer matters. The truth is exactly the opposite. Falling transport and communication costs are powerful drivers of concentration."
>
> Professor Mario Polèse, 2013[2]

Why do people choose to congregate in particular places?

Place matters for prosperity

Place has always mattered for human prosperity. The direct influence of place on our material wellbeing is obvious, with physical attributes like climate, geology, topography and accessibility clearly affecting the material living standards of people who live there.

Place affects our prosperity indirectly as well. The activities, attitudes and character of the people who live in a place – rather than its physical attributes – make it attractive (or unattractive) for others to live there too.

We also value the experience of living in a place, independently of our material needs. Relationships we form with our neighbours and with the surrounding landscape nourish our sense of belonging. When conflict and discord mar these relationships, we feel displaced.

We also value the experience of living in a place, independently of our material needs. Relationships we form with our neighbours and with the surrounding landscape nourish our sense of belonging.

> "In close proximity is, of course, a description of our natural habitat – just take a look at how most of us choose to live: in cities, suburbs, towns and villages. We are, by nature, social creatures who congregate; it's our cultural DNA. We are not good at surviving in isolation. We rely on communities to support and sustain us, and if those communities are to survive and prosper, we must engage with them and nurture them. That's the beautiful symmetry of human society: we need communities and they need us."
>
> Hugh Mackay, 2014[3]

People congregate in particular places because place matters for their prosperity. It matters directly and indirectly, materially and non-materially, and for better or worse.

Human beings flourish or languish in place.

1   Scharnhorst, G (2010) *Twain in His Own Time: A Biographical Chronicle of His Life, Drawn from Recollections, Interviews, and Memoirs by Family, Friends, and Associates*, University of Iowa Press.

2   Polèse, M (2013) 'On the Growth Dynamics of Cities and Regions – Seven Lessons. A Canadian Perspective with Thoughts on Regional Australia'. Australasian Journal of Regional Studies. 19 (1): 5–35.

3   Mackay, H (2014) *The Art of Belonging*, Pan Macmillan Australia.

"The report of my death was an exaggeration."

Mark Twain[1]

The purpose of place evolves

Our prosperity is intimately connected to place and how we interact with it. The rise of average living standards through time reflects the evolution of place and the purpose we assign to it.

In early agricultural times, when primary industry dominated, place was valued for what could be grown, gathered or mined there, and how easily produce could be transported to market for trade and exchange. Places became more productive as the scale of land under cultivation and the size of forests, fisheries or mines increased, and technology improved.

The Industrial Revolution saw a dramatic change in the purpose of place. New sources of energy and power-driven machinery released manufacturing and processing from cottages and watermills, establishing them in new and different places and on a grander scale. Secondary industry was born. Labourers progressed from being farmers, fishermen and miners to become engineers, craftsmen, factory workers and seamstresses. And they moved from farms and rural villages to live in factory towns.

> *"The idea [of the Industrial Revolution] was radical: that one's living would be earned by leaving one's land or back-room workshop, and that instead of cottage industry or farming, one would go to the machine and be paid to work on it and with it as a factor of production."*
>
> Dave Maney, 2015[4]

As in the agricultural economy, scale and technology drove productivity in the industrial economy. Technological innovations, like the steam engine and the power loom, catalysed an era of mass production. Place was valued for its ability to support secondary industry rather than primary industry. Ease of locating and expanding factories, proximity to energy sources, ease of accessibility for workers or closeness to markets stood at a premium.

Industrial processes also revolutionised transport and communications. The railway was born, along with the overland telegraph. The scale economies of industrial production, together with improved transport and communications, reinforced a tendency to centralise in larger towns and cities, drawing people away from rural locations.

Industrialisation paved the way for specialisation of labour, higher incomes and a wider range of goods and services available for sale to a broader class of consumers. Material standards of living rose, but diseconomies also emerged in the form of social and environmental problems like overcrowding, poverty, pollution, crime and disease.

Industrial towns offered low-skilled workers higher wages on average than they could earn in rural areas. They came in their droves, but life in such places could be 'nasty, brutish and short'.

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4   Maney, D (2015) 'The Biggest Story Of Our Lives: Economic Revolution', www.forbes.com/sites/economaney/2013/03/01/the-biggest-story-of-our-lives-economic-revolution

Place in the knowledge economy

In the post-industrial era, the production of services (tertiary industry) creates more economic value than either agriculture or manufacturing (Chart 1.1). The most highly valued services are those intensive in ideas, knowledge and creative skill.

Knowledge workers are highly educated, and typically work in teams to create outcomes beyond the capacity of individuals working alone. They also work with sophisticated technologies to manipulate symbols and ideas to solve complex problems and develop innovative products and services.

Chart 1.1: Proportion of workers employed in primary, secondary and tertiary industries (actual and forecast, Australia)
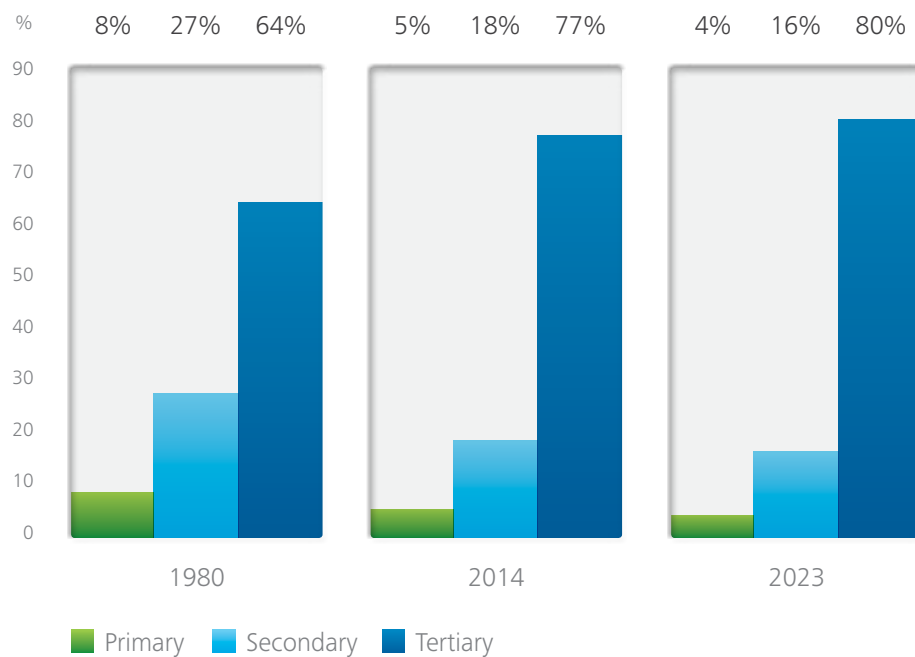
Note: Primary industry is defined as agriculture and mining; secondary industry is defined as manufacturing, construction, electricity, gas, water and waste systems. Tertiary industry is defined as all other sources of employment, including information media and telecommunications, education and training, retail and wholesale trade, professional services, and transport, postal and warehousing services.

Source: Deloitte Access Economics 2015

The purpose of place in a knowledge economy is to facilitate the productive interaction of knowledge workers. Even in a world of instant global connectivity, this typically involves them working in close proximity.

Knowledge workers spark off one another as they interact; ideas are their stock-in-trade. These ideas are honed and developed as they are exchanged in common meeting areas within offices – often serendipitously around the proverbial water-cooler – or in cafés, parks, restaurants and other venues nearby.

Although modern telecommunications allow such interactions to occur virtually and over long distances, knowledge workers continue to travel to meetings and conferences all over the world, or they congregate in office towers and technology parks in their home cities. Human beings remain very social, indeed tribal, creatures.

Knowledge-intensive services exhibit clustering effects, known as economies of agglomeration. This simply means that the productivity of knowledge workers rises exponentially when they are in close proximity. Their interaction stimulates creativity and innovation – new and different ideas – which in turn drives productivity in the knowledge economy.

Additional value and stimulus are created by the diversity of experience, cultures and attitudes one encounters in larger gatherings of people. Those who live in large cities or attend global conferences, for example, typically enjoy the stimulus of new and different people as much for its own sake as for what it enables them to produce.

> "The core idea at the center of information-based agglomeration economies is that all of our knowledge builds on things that we learn from people around us. The central premise is that the presence of knowledgeable neighbors enables an apprentice steelworker to learn his craft, but it also makes a biotechnology researcher more innovative. The interaction of smart people in urban areas both enhances the development of person-specific human capital and increases the rate at which new ideas are formed."
>
> Ed Glaeser, 2010[5]

For economies like Australia's, which are dominated by tertiary industry (especially knowledge-intensive services), the purpose of place changes yet again. Whereas arable land is central to an agricultural economy and physical capital (such as machines and factories) to an industrial economy, people – their skill, intelligence, creativity and imagination – are central to a knowledge economy.

The purpose of place in a knowledge economy is to facilitate the productive interaction of knowledge workers. Even in a world of instant global connectivity, this typically involves them working in close proximity.

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5   Glaeser, E L (2010) *Agglomeration Economics*, The University of Chicago Press.

> *"Urban agglomerations are a great idea. Concentrating a lot of activity in a small area saves on transportation; allows all sorts of convenience, sharing, and economies of scale; encourages the spread of new ideas; and simply satisfies the human desire to be social."*
>
> Brendan O'Flaherty, 2009[6]

But there's a tension here. Although proximity fosters economies of agglomeration, it also unleashes the diseconomies of congestion and disamenity, that is, the ugliness of crowds and crowded places (Chart 1.2). It was true of the Industrial Revolution, when the crush of workers in factory towns fuelled overcrowding, squalor and disease.

Living and working in close proximity might stimulate knowledge workers to greater heights of creativity and innovation, but it can also drive them to distraction on overcrowded roads and public transport, or to despair as the cost of desirable housing rises faster than average incomes.

Chart 1.2: Congestion cost and city population (2012–20)

Congestion cost ($b)
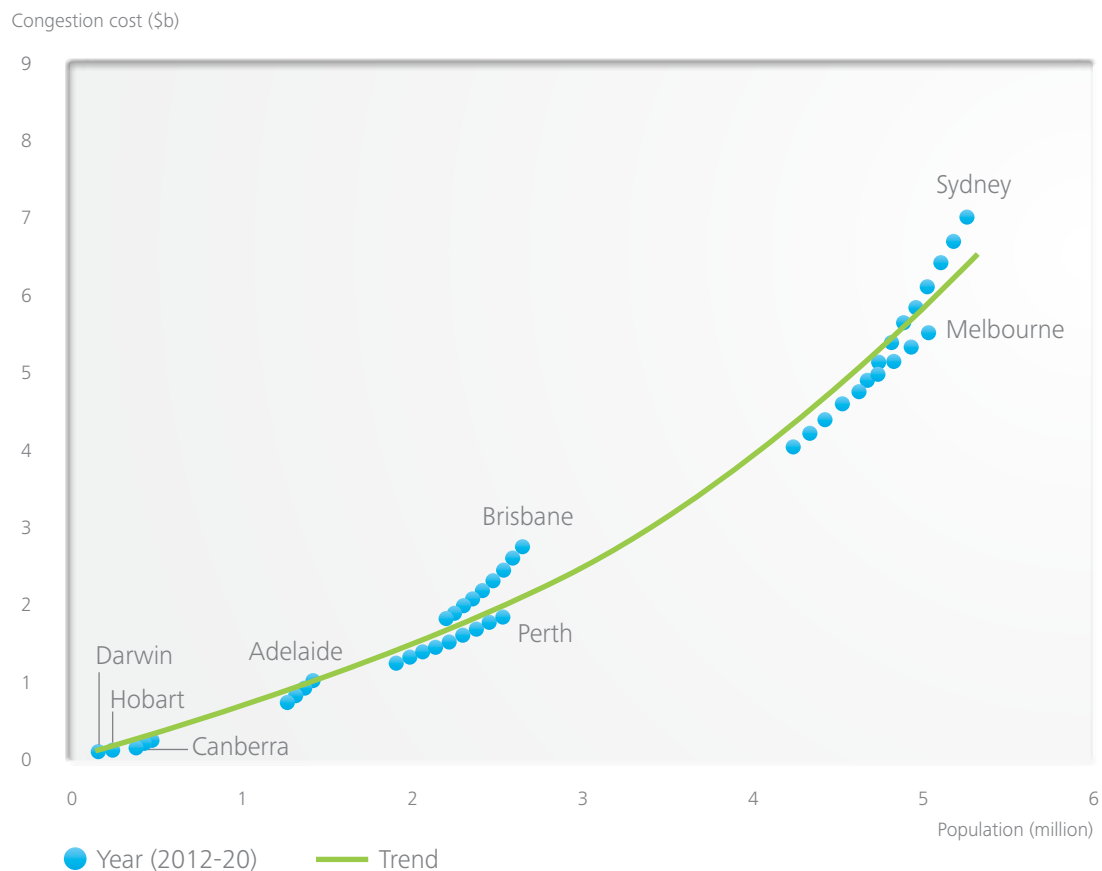
Source: Bureau of Infrastructure, Transport and Regional Economics (2007)[7]

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6   O'Flaherty, B (2009) *City Economics*, Harvard University Press.

7   Deloitte Access Economics 2015, Bureau of Infastructure, Transport and Regional Economics (2007).

They want somewhere to belong, where their human need for community can be nourished, and where they feel a measure of control over the things that matter to them.

If the desirable potential for crowded places to drive future living standards is to be harnessed, the undesirable side effects of those same crowded places must be mitigated.

In addition, people want places to do more than just meet their material needs. They want somewhere to belong, where their human need for community can be nourished, and where they feel a measure of control over the things that matter to them.

People want places where they can flourish.

Place in an
Australian context

Place in an Australian context

It is understandable, when people think about Australia, that they think of just two categories: city and bush. Reality, however, is more nuanced.

The romance of the bush resonates strongly with Australians – yet we live in one of the world's most urbanised nations. Life for most of us is about as far away from the poet's 'wide, brown land' as it's possible to get.

But just adding cities to the set of images is simplistic. Too often, analysis of place-related issues in Australia has been distorted by a dichotomous characterisation: the city versus the bush.

It is time to reconsider what we mean by place in Australia.

> "Dairy, wheat, and wool, along with mines and cattle stations… laid the basis for a popular image of Australia as a rural country – an image reinforced in a range of literature and film, from 'Clancy of the Overflow' in the 1890s to 'Crocodile Dundee' in the 1980s. Yet metropolitan development was the central feature of the settlement of Australia."
>
> O'Connor, Stimson and Daly, 2001 [9]

A land of extremes

Perhaps the most striking feature of Australia as a place is its diversity. It is truly a land of extremes.[10]

Only 6% of the Australian landmass is arable and almost 20% is desert. Australia has the least amount of water in rivers, the lowest run-off and the smallest area of permanent wetlands of all continents.

With a surface area of 7.7 million square kilometres and a population of 24 million, Australia is, unsurprisingly, the least densely populated of all inhabited continents. Yet we are one of the most coastal-dwelling countries in the world. More than 80% of Australians live within 100 kilometres of the coastline, with most in the south and east of the continent.

Australians who live away from the coast, in rural and remote settings, inhabit some of the most sparsely populated places on Earth. Our capital cities, especially Sydney, Melbourne and Brisbane, are among the geographically largest cities in the world, yet they have some of the world's lowest urban densities.

It is understandable, when people think about Australia, that they think of just two categories: city and bush. Reality, however, is more nuanced.

The diversity of Australia is manifest in its many and varied regions.

> "A greater proportion of Australians live in cities than nearly any other country. Sydney, Melbourne, Brisbane, Perth and Adelaide all have populations of more than a million. Together they house more than three in five Australians. Three-quarters of Australians live in cities with a population above 100,000, compared to 68% of Americans, 71% of Canadians and 62% of people in the United Kingdom."
>
> Grattan Institute, 2015 [11]

8   Mackellar, D, 'My Country', in Moore, TI (1964) *Poetry in Australia. Volume 1: From Ballads to Brennan*, University of California Press.

9   O'Connor, K Stimson, R and Daly, M (2001) *Australia's Changing Economic Geography: A Society Dividing*, Oxford University Press.

10 Australian Government, 'Our country', www.australia.gov.au/about-australia/our-country

11 Kelly, J-F and Donegan, P (2015) *City Limits: Why Australia's cities are broken and how we can fix them*, Grattan Institute, Melbourne University Publishing.

Five types of place

In this report, we use a five-way classification of Australia's regions, each of which is a different type of place.

- **Inner city** – the CBD and adjoining inner metropolitan areas, as far out as 7.5 kilometres in Melbourne and Sydney, and 5 kilometres in the other capital cities

- **Suburban** – the metropolitan areas that lie between the inner city and outer urban areas, typically areas of post-World War II urban expansion

- **Outer urban** – the interface between metropolitan areas and non-metropolitan areas, sometimes known as the 'urban fringe'

- **Regional cities** – non-metropolitan agglomerations of at least 10,000 people

- **Rural and remote** – the rest of Australia, comprising agglomerations of less than 10,000 people and uninhabited areas or areas not built up.

We used the Australian Bureau of Statistics (ABS) Level 2 Statistical Areas (SA2s) as the spatial building blocks for our five regions. SA2s generally cover individual suburbs in metropolitan areas and the larger regional cities, and entire small cities and towns in surrounding rural areas.

Unlike Local Government Areas (LGAs) or other ABS spatial units, people typically associate with their SA2s, even if they don't realise it.

Plotting our five regions on a map of Australia (Charts 2.1-2.6) confirms just how concentrated Australian settlement is, and how many of us live on the coastal fringe. Most of Australia's landmass falls into the rural and remote category.

Chart 2.1: Australia's five regions

- Inner city
- Suburban
- Outer urban
- Regional cities
- Rural and remote
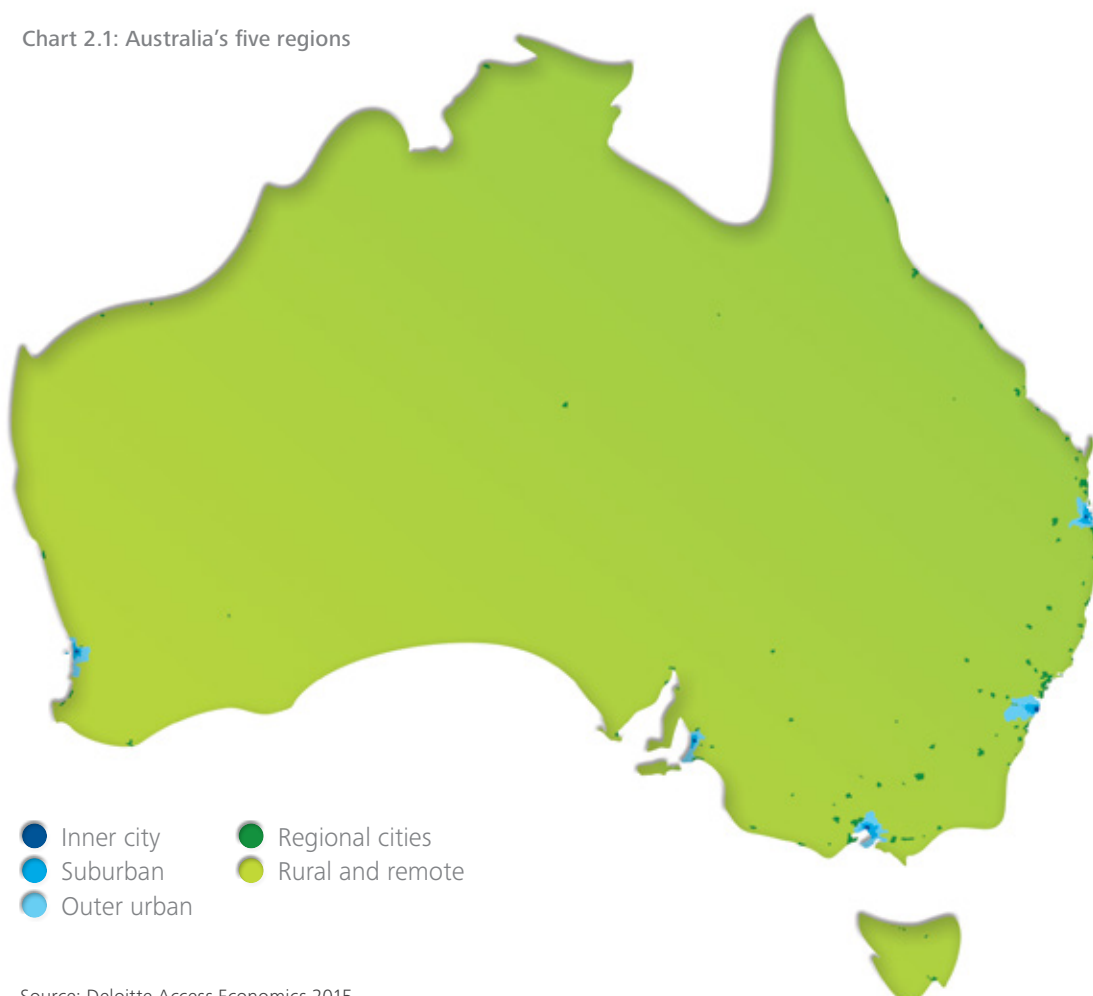
Source: Deloitte Access Economics 2015

Chart 2.2: Melbourne and surrounding regions

- Inner city
- Suburban
- Outer urban
- Regional cities
- Rural and remote

Table 2.1: Examples of SA2s by region – Victoria

Region	Example SA2s
Inner city	Brunswick, Northcote, Moonee Ponds, Melbourne, Southbank, St Kilda, Abbotsford, Prahran - Windsor, Hawthorn, Footscray, Docklands, Kensington, Flemington, Kew
Suburban	Noble Park, Ashwood - Chadstone, Cairnlea, Sunshine, Sydenham, Newport, Laverton, Maribyrnong, Carrum Downs, Frankston, Mount Waverley - North, Mooroolbark, Box Hill
Outer urban	Eltham, Lalor, Ferntree Gully, Mount Evelyn, Koo Wee Rup, Endeavour Hills, Taylors Hill, Wyndham Vale, Mount Eliza, Somerville, Greenvale - Bulla, Donvale - Park Orchards
Regional cities	Ballarat, Maryborough (Vic.), Bendigo, Bairnsdale, Torquay, Wangaratta, Wodonga, Sale, Warragul, Traralgon, Sunbury, Bacchus Marsh, Horsham, Mildura, Shepparton - North
Rural and remote	Smythes Creek, Daylesford, Beaufort, Heathcote, Loddon, Leopold, Queenscliff, Euroa, Benalla, Bright - Mount Beauty, Drouin, Lakes Entrance, Phillip Island, Yarriambiack

Source: Deloitte Access Economics 2015, Australian Bureau of Statistics

Chart 2.3: Sydney and surrounding regions

- Inner city
- Suburban
- Outer urban
- Regional cities
- Rural and remote

Table 2.2: Examples of SA2s by region – New South Wales

Region	Example SA2s
Inner city	North Sydney - Lavender Bay, Sydney - Haymarket - The Rocks, Surry Hills, Darlinghurst, Bondi Beach - North Bondi, Marrickville, Haberfield - Summer Hill, Mascot - Eastlakes
Suburban	Caringbah - Lilli Pilli, Cabramatta - Lansvale, Macquarie Park - Marsfield, Carlingford, Parramatta - Rosehill, Penrith, Manly - Fairlight, Pymble, Ashfield, Kogarah, Bankstown
Outer urban	Cronulla - Kurnell - Bundeena, Badgerys Creek - Greendale, Springwood - Winmalee, Casula, Campbelltown - Woodbine, Warriewood - Mona Vale, Hornsby - Waitara
Regional cities	Katoomba - Leura, Wagga Wagga - East, Newcastle - Cooks Hill, Swansea - Caves Beach, Forster, Wollongong, Bathurst, Gosford - Springfield, Queanbeyan, Ballina, Taree, Nowra
Rural and remote	Blackheath - Megalong Valley, Hill Top - Colo Vale, Berry - Kangaroo Valley, Pottsville, Evans Head, Gunnedah, Glen Innes, Corowa, Wauchope, Scone, Mudgee, Bega - Tathra

Source: Deloitte Access Economics 2015, Australian Bureau of Statistics

Chart 2.4: Perth and surrounding regions

- Inner city
- Suburban
- Outer urban
- Regional cities
- Rural and remote

Table 2.3: Examples of SA2s by region – Western Australia

Region	Example SA2s
Inner city	Kings Park (WA), Mount Hawthorn - Leederville, North Perth, Perth City, Maylands, Subiaco - Shenton Park, Victoria Park - Lathlain - Burswood, South Perth - Kensington
Suburban	City Beach, Cottesloe, Mosman Park - Peppermint Grove, Hazelmere - South Guildford, Ocean Reef, Belmont - Ascot - Redcliffe, Cannington - Queens Park, Fremantle
Outer urban	Mandurah, Glen Forrest - Darlington, Lockridge - Kiara, Alexander Heights - Koondoola, Forrestfield - Wattle Grove, Success - Hammond Park, Cooloongup, Ballajura, Byford
Regional cities	Busselton, Bunbury, Ellenbrook, Kalgoorlie, Broome, Geraldton, Karratha, Port Hedland, Albany, Bayonet Head - Lower King, College Grove - Carey Park, Australind - Leschenault
Rural and remote	Augusta, Margaret River, Capel, Bridgetown - Boyup Brook, Gidgegannup, Esperance, Serpentine - Jarrahdale, Exmouth, Halls Creek, Irwin, Denmark, Toodyay, Murray

Source: Deloitte Access Economics 2015, Australian Bureau of Statistics

Chart 2.5: Adelaide and surrounding regions

Inner city
Suburban
Outer urban
Regional cities
Rural and remote

Table 2.4: Examples of SA2s by region – South Australia

Region	Example SA2s
Inner city	Adelaide, Toorak Gardens, Norwood (SA), St Peters - Marden, Nailsworth - Broadview, Prospect, Walkerville, Goodwood - Millswood, Hindmarsh - Brompton, Richmond (SA)
Suburban	Burnside - Wattle Park, Paradise - Newton, Windsor Gardens, Ingle Farm, Brighton (SA), Morphettville, Panorama, Christies Beach, Flinders Park, Dry Creek - South, Fulham
Outer urban	Adelaide Hills, Rostrevor - Magill, Gawler - South, Davoren Park, Paralowie, Greenwith, Blackwood, Hackham - Onkaparinga Hills, Morphett Vale - East, Yankalilla, Athelstone
Regional cities	Mount Barker, Gawler - North, Port Pirie, Whyalla, Port Augusta, Goolwa - Port Elliot, Victor Harbor, Mount Gambier, Murray Bridge, Port Lincoln, Whyalla - North
Rural and remote	Hahndorf - Echunga, Lewiston - Two Wells, Barossa - Angaston, Clare, Jamestown, Kadina, Eyre Peninsula, Coober Pedy, Kangaroo Island, Wattle Range, Loxton

Source: Deloitte Access Economics 2015, Australian Bureau of Statistics

Chart 2.6: Brisbane and surrounding regions

- Inner city
- Suburban
- Outer urban
- Regional cities
- Rural and remote

Table 2.5: Examples of SA2s by region – Queensland

Region	Example SA2s
Inner city	Fairfield - Dutton Park, St Lucia, Brisbane City, Fortitude Valley, Kangaroo Point, Spring Hill, Bulimba, Hawthorne, Kelvin Grove - Herston, Ashgrove, Paddington - Milton, Red Hill (Qld)
Suburban	Alexandra Hills, Cleveland, Brisbane Port - Lytton, Bald Hills, Aspley, Boondall, Deagon, Camp Hill, Coorparoo, Mount Gravatt, Moorooka, Algester, Riverhills, Enoggera, Ascot
Outer urban	Belmont - Gumdale, Redland Bay, Carindale, Eight Mile Plains, Chapel Hill, The Gap, Ormeau - Yatala, Leichhardt - One Mile, New Chum, Springfield Lakes, Logan Village
Regional cities	Cairns City, Emerald, Gladstone, Rockhampton City, Burleigh Heads, Coolangatta, Labrador, Currumbin Valley - Tallebudgera, Coomera, Robina, Surfers Paradise, Mackay
Rural and remote	Redland Islands, Lamb Range, Innisfail, Daintree, Port Douglas, Kuranda, Chinchilla, Clifton - Greenmount, Banana, Emu Park, Boonah, Jimboomba, Cape York, Gin Gin

Source: Deloitte Access Economics 2015, Australian Bureau of Statistics

Regional differences

Striking differences emerge across Australia when places are assessed using our five-way classification.

Population density

About 0.6% of Australia's total land area is home to 84% of the population. We are a highly urbanised people (Table 2.6).

Yet most of us (just over one-third) live in the suburbs rather than the city itself. In fact, more of us live in rural and remote areas than in the centre of Australia's major cities. The fewest Australians by far live in the inner cities, despite their appeal, especially to young adults.

More people live in regional cities than in the outer urban areas of major cities. Regional cities vary greatly in size and include places like Newcastle, Darwin and the Gold Coast. The three smallest regional cities in 2014 were Parkes in New South Wales (just under 11,500 people), Colac in Victoria (just under 12,000 people) and Drysdale–Clifton Springs in Victoria (around 12,400 people).

**Table 2.6: Proportion of Australia's land area and people by region**

Region	Proportion of total land area	Proportion of total resident population	Population density (persons/km sq)
Inner city	0.01%	8%	3,877
Suburban	0.05%	34%	1,875
Outer urban	0.25%	18%	216
Regional cities	0.26%	24%	277
Rural and remote	99.42%	16%	0.5

Proportion of total resident population

34%
Suburban

24%
Regional cities

18%
Outer urban

16%
Rural and remote

8%
Inner city
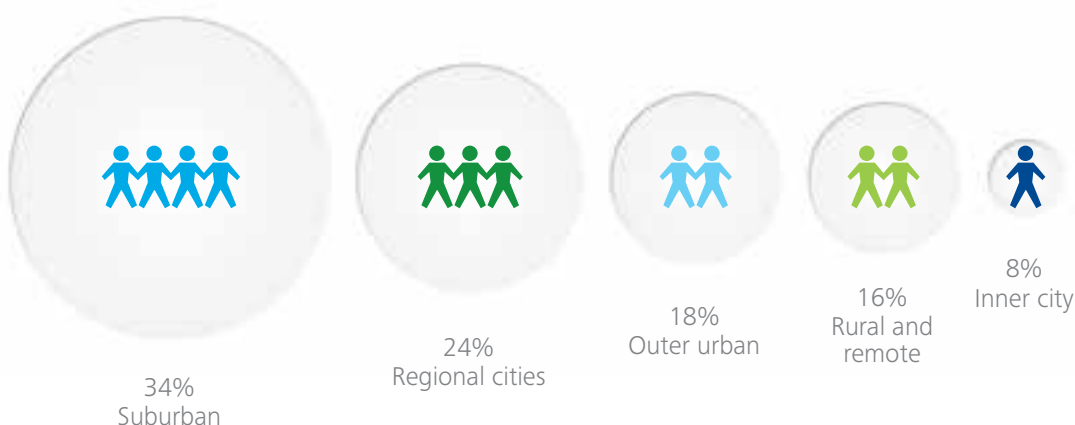
Source: Deloitte Access Economics 2015, Australian Bureau of Statistics

Chart 2.7: Proportion of total resident population by region

%

Suburban

Regional cities

Outer urban

Rural and remote

Inner city
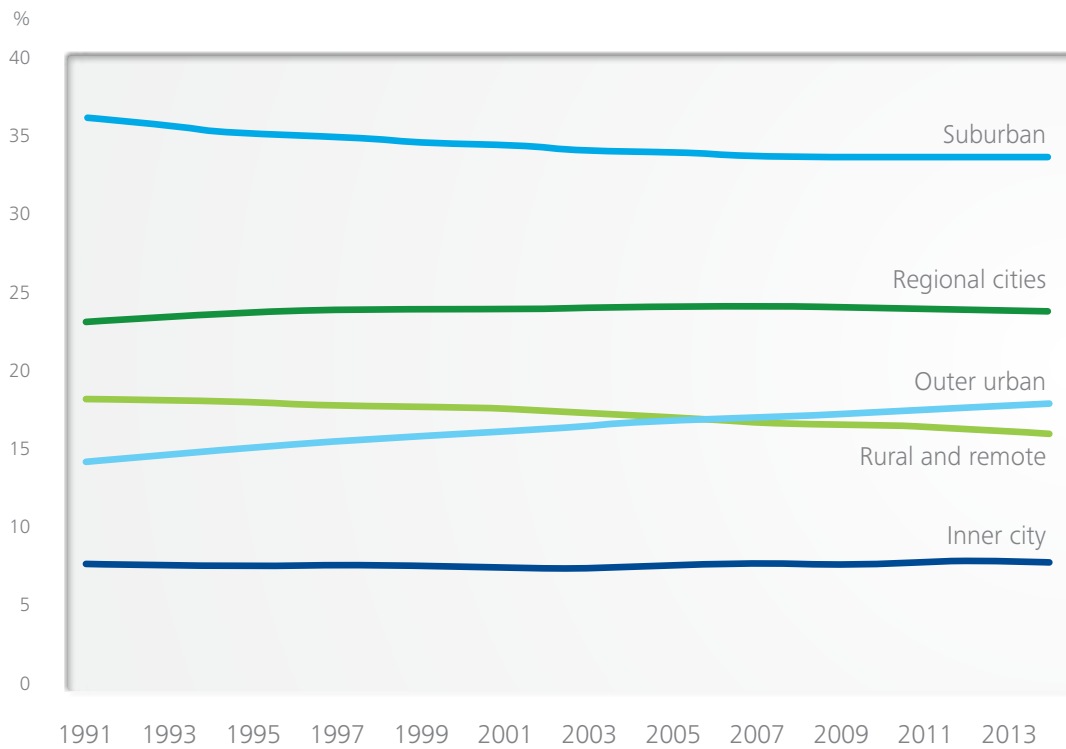
Source: Deloitte Access Economics 2015, ABS Statistical Dataset 2013

Chart 2.8: Proportion of the resident population of working age (16-64)

| 76% | 67% | 67% | 65% | 63% |

Inner city | Suburban | Outer urban | Regional cities | Rural and remote
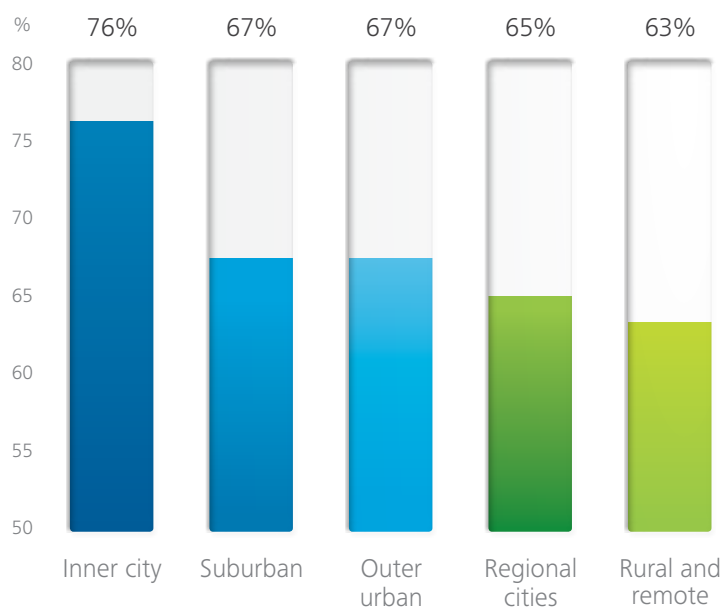
Source: Deloitte Access Economics 2015, ABS Census 2011

The relative sizes of Australia's regions are remarkably stable over time (Chart 2.7), although the steady expansion of our major cities has seen some SA2s that were originally classified as rural and remote now reclassified as outer urban.

While fewer people live in the inner cities than in any other region, population density is twice as high as the suburbs, and 14 times higher than the regional cities.

Access to employment

People who live in the inner cities are mostly of working age. Pre-school and school-age children generally live in the suburbs, while more people who live in regional cities and rural and remote areas are aged 65 or over (Chart 2.8).

As the data show, the further you go from the city centres, the more likely you are to encounter people who are considered too young or too old to be part of the workforce.

Most people who work in the inner cities live elsewhere (Chart 2.9). They commute from suburban and outer urban areas, or even travel in from regional cities.

Data from the Household Income and Labour Dynamics Australia (HILDA) survey indicate that average commuting times rose from 3.9 hours per week in 2002 to 4.4 hours per week in 2009. People in Sydney spent almost six hours per week commuting, while people in Brisbane spent five hours and people in Melbourne around 4.8 hours.[12]

These averages conceal wide variations in individual commuting times. A worker who lives in Melbourne's inner city can access 90% of jobs in the metropolitan area by car within 45 minutes, and 46% of jobs within a one-hour journey by public transport. However, from some of Melbourne's outer suburbs, only 10% of all jobs in the city can be reached in less than 45 minutes by car.[13]

The further away from the inner city you work, the more likely you are to live in that region as well. This is most likely for those working in regional cities and in rural and remote areas of Australia.

Chart 2.9: Proportion of people working in a region who also live there
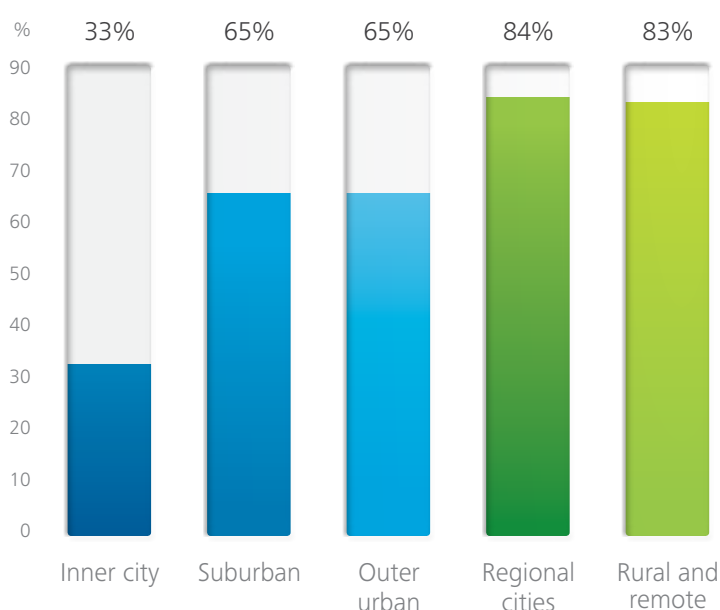
Source: Deloitte Access Economics 2015, ABS Census 2011

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12   AMP and NATSEM (2011) 'Race Against Time: How Australians Spend their Time', AMP.NATSEM Income and Wealth Report, Issue 30.

13   Kelly, J-F and Mares, P (2013) 'Productive Cities: Opportunity in a Changing Economy', Grattan Institute.

Australia's inner cities are populated by knowledge workers because this is where the jobs are.

Unlike Australia's capital cities, which are ringed by suburban and outer urban areas, regional cities interface directly with the rural countryside. Even so, commuting from rural areas to work in regional cities, or even from the bigger cities to work in remote locations on a 'fly in-fly out' (FIFO) basis, is not uncommon.

For example, the Education and Health Standing Committee of Western Australia (2015) estimates there were about 60,000 FIFO workers in Western Australia in early 2015, down from around 67,000 in 2014 – reflecting the passing of the peak of the mining boom.[14]

Employment and training

More inner-city residents of working age are either employed or in training or education than in any other region (Chart 2.10).

At the other end of the spectrum, more working-age residents of rural and remote Australia are unemployed or not in training or education than in any other region.

Inner-city residents tend to have more years of academic education behind them than people living in other regions (Chart 2.11). The further you are from the cities, the greater the number of people who have neither a higher education nor a vocational education and training (VET) qualification.

Australia's inner cities are populated by knowledge workers because this is where the jobs are. They are joined by educated workers from the surrounding suburban and even outer urban regions, who work in inner cities each day.

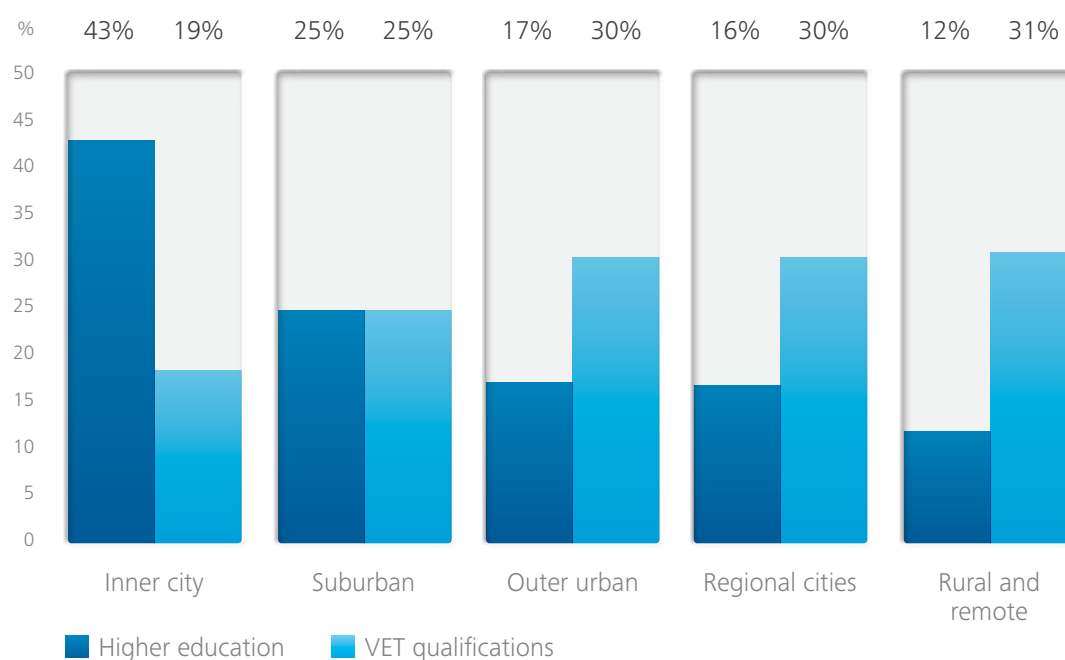Australia's inner cities, like those elsewhere in the developed world, are economic powerhouses.

Chart 2.10: Proportion of the resident working-age population currently in training or employment
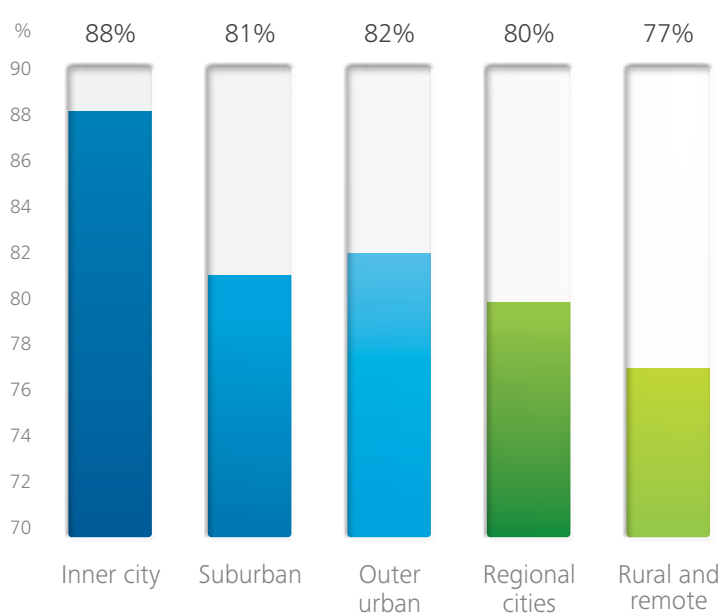
Source: Deloitte Access Economics 2015, ABS Census 2011

14 Education and Health Standing Committee (2015) 'The impact of FIFO work practices on mental health – final report', Legislative Assembly, Parliament of Western Australia, Report No. 5.

Chart 2.11: Proportion of the resident working-age population with higher education qualifications and VET qualifications

43% 19%   25% 25%   17% 30%   16% 30%   12% 31%

Inner city   Suburban   Outer urban   Regional cities   Rural and remote

■ Higher education   ■ VET qualifications

Source: Deloitte Access Economics 2015, ABS Census 2011

Our five-way regional classification highlights the diversity of places in our country – Australia is far more than just the city and the bush.

According to a Grattan Institute report (2014), the CBDs of Sydney, Melbourne, Brisbane and Perth generated almost 15% of all economic activity in Australia in 2011-12.[15] Similarly, PwC (2015) finds that just 10 SA2s generate almost $1 in every $5 of national income in Australia.[16]

Diverse places

Our five-way regional classification highlights the diversity of places in our country – Australia is far more than just the city and the bush. The classification also reveals aspects of the changing purpose of place that we discussed in Chapter 1.

Our inner cities attract more highly educated people keen to live there, or willing to commute from other regions, because that is where knowledge-intensive activities are clustered, and where demand for knowledge workers is highest.

Where you live largely determines how many neighbours you have, and how geographically close you are to them. It also affects whether or not you have a job, and how far you must travel to work. And it signals how likely you are to be a knowledge worker.

Place matters for prosperity.

15 Kelly, J-F and Donegan, P (2014) 'Mapping Australia's Economy: Cities as Engines of Prosperity', Grattan Institute.

16 PwC (2015) 'Understanding the Economy from the Ground Up', PwC report.

Prosperity
and place

Prosperity and place

For place to drive prosperity, it must do more than fulfil our material needs. Indeed, as we grow and change, the role of place as a driver of prosperity changes too.

Most people know what it means to be prosperous.

As Abraham Maslow proposed in his famous 'hierarchy of needs', being prosperous starts with satisfying our basic need for food and shelter, but then we look beyond the material aspects of life for fulfilment, including love, a sense of belonging and the esteem of others.[18]

For place to drive prosperity, it must do more than fulfil our material needs. Indeed, as we grow and change, the role of place as a driver of prosperity changes too.

"Prosperity is the state of flourishing, thriving, good fortune and/or successful social status. Prosperity often encompasses wealth but also includes other factors which can be independent of wealth to varying degrees, such as happiness and health."

Wikipedia, 'Prosperity'[19]

Measuring prosperity in 10 dimensions

Measuring prosperity involves more than counting the goods and services people consume. In the words of Amartya Sen, the Nobel-Prize-winning philosopher and economist, our measure must try to capture the "richness of human life, rather than the richness of the economy in which human beings live".[20]

This is especially important when attempting to link place and prosperity. Place contributes more to human welfare than just material goods and services, as important as these are. Place is where people live their lives – where they grow up, make friends, raise families, play sports and join clubs.

We need a richer set of measures to capture prosperity – and the potential for place to generate prosperity – than those economists traditionally consider.

Various researchers have attempted to compile broader measures of human wellbeing. We list some examples in Table 3.1.

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17   Berlin, I (1946) 'I Got the Sun in the Morning', in Berlin, I, Fields, H and Fields, D, *Annie Get Your Gun*, Broadway musical.

18   Maslow, A (1943) 'A Theory of Human Motivation', Psychological Review 50(4): 370-96.

19   Wikipedia, 'Prosperity', https://en.wikipedia.org/wiki/Prosperity

20   Sen, A (2007) in Shaikh, N, *The Present As History: Critical Perspectives on Global Power*, Columbia University Press.

*"Got no mansion, got no yacht
Still I'm happy with what I've got
I got the sun in the morning
and the moon at night."*

Irving Berlin[17]

Table 3.1: Broader measures of prosperity

Source	Description
Socio-Economic Indexes for Area (SEIFA)	SEIFA consists of four indexes the ABS uses to assess levels of socio-economic advantage and disadvantage in various parts of Australia. SEIFA captures variables such as educational attainment, employment, household income and housing circumstances.[21]
The University of Canberra Regional Wellbeing Survey	The 2013 Regional Wellbeing Survey conducted by the University of Canberra examined both the wellbeing of individual people and of communities in rural and regional Australia.[22]
The Social Progress Index (SPI)	SPI is a weighted average of three broad conceptual dimensions: basic human needs, foundations of wellbeing and opportunity.[23]
The Regional Australia Institute (RAI) Competitiveness Index	An index of 59 statistical indicators across 10 themes, it measures the competitiveness of Australia's regional areas.[24]
The Legatum Prosperity Index	Drawing upon international academic literature, the Legatum Prosperity Index uses 89 variables for each country (categorised in eight sub-indices) to capture what nations need to prosper.[25]
The OECD Better Life Index	The OECD identifies 11 dimensions as essential to wellbeing. They range from health and education to local environment and personal security, as well as more traditional measures such as income.[26]

In this report, we use 10 dimensions of prosperity in place informed by the work of these researchers and our own views.

1. **Human Resources** – people power

2. **Natural Resources** – endowed wealth

3. **Physical Capital** – buildings and equipment

4. **Social Capital** – social connections

5. **Innovation and Entrepreneurship** – desire for the new and willingness to take risks

6. **Leadership and Contribution** – capacity and willingness to lead and collaborate

7. **Material Standards** – economic wellbeing

8. **Health and Safety** – physical, mental and emotional wellbeing

9. **Natural Amenity** – beauty of the surroundings

10. **Local Amenities** – convenience and accessibility in meeting everyday needs.

21 ABS (2011) 'Socio-Economic Indexes for Areas (SEIFA)', technical paper.

22 Schirmer, J and Berry, H (2014) 'People and Place in Australia: The 2013 Regional Wellbeing Survey', Faculty of Health, Centre for Research and Action in Public Health and Collaborative Research Networks for Murray-Darling Basin Futures, University of Canberra.

23 Social Progress Imperative (2015) 'Social Progress Index', http://www.socialprogressimperative.org/data/spi

24 The Regional Australia Institute (2014) '[In]Sight 2014 User Guide'.

25 Legatum Institute (2014) 'The 2014 Legatum Prosperity Index'.

26 OECD (2015) 'OECD Better Life Index', http://www.oecdbetterlifeindex.org/

Our first three dimensions – Human Resources, Natural Resources and Physical Capital – are 'inputs'. They are the building blocks of prosperity in place.

The next three – Social Capital, Innovation and Entrepreneurship, and Leadership and Contribution – influence the effectiveness with which these inputs are applied to creating prosperity in place. We call these dimensions 'boosters'.

The final four – Material Standards, Health and Safety, Natural Amenity and Local Amenities – are 'outputs'. At the end of the day, these are the things people care about; the things that make for flourishing places and prosperous lives.
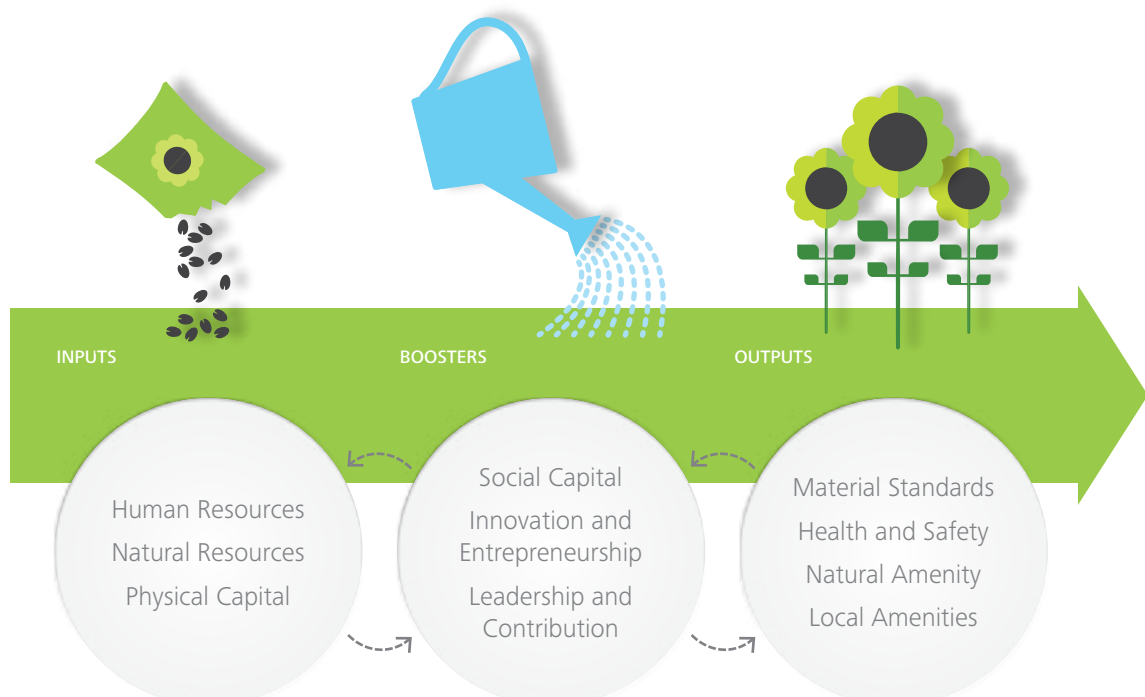
Figure 3.1 shows how we think the 10 dimensions relate to one another. They represent the elements of what economists might call a 'Prosperity Production Function'. Inputs of varying quantities and qualities are combined with varying degrees of effectiveness to produce outputs in varying quantities and of varying qualities.

The process depicted in Figure 3.1 is not unidirectional. Various elements are interdependent and can influence one another so that, for example:

- more effective leadership (a booster) drives the creation of more physical capital (an input)

- better and/or differently educated people (an input) makes for better innovators and entrepreneurs (a booster)

- a community that feels healthy and safe (an output) builds greater social connectedness (a booster)

- a community that is materially wealthier (an output) invests more in education and training (an input).

Each of the 10 dimensions is more easily recognised in principle than measured with available data. Therefore, we have drawn on a variety of datasets to compile a list of proxies for each of our dimensions. These are listed in the Appendix.

Figure 3.1: The Prosperity Production Function

INPUTS

BOOSTERS

OUTPUTS

Human Resources

Natural Resources

Physical Capital

Social Capital

Innovation and Entrepreneurship

Leadership and Contribution

Material Standards

Health and Safety

Natural Amenity

Local Amenities

Source: Deloitte Access Economics 2015

How prosperous are Australian places?

Using data on the statistical proxies for each of the 10 dimensions, we rank each of our five regions in each dimension of prosperity.

We use radar (or 'spiderweb') charts to display ordinal rankings of the 10 dimensions for each region. Each radar chart depicts the lowest ranking in the centre of the chart and the highest at the outer edge. The different colours reflect whether a particular dimension is an input, an output or a booster in our Prosperity Production Function.

Since these are ordinal rankings, a place ranked 4 on a particular dimension isn't twice as good as another place ranked 2. Some places simply rank ahead of others on certain dimensions.

A place that ranks highly in all dimensions will display as a radar chart with all measures close to or on the edge of the chart – this place is flourishing. A place with all measures clustered towards the centre of the chart ranks poorly in all dimensions of prosperity – this place is languishing.

As a place flourishes its prosperity increases, and its radar chart opens up like a flower; languishing places have radar charts that lose their 'petals' or remain tightly closed like a bud.

As a place flourishes its prosperity increases, and its radar chart opens up like a flower; languishing places have radar charts that lose their 'petals' or remain tightly closed like a bud.

Chart 3.1: Inner city
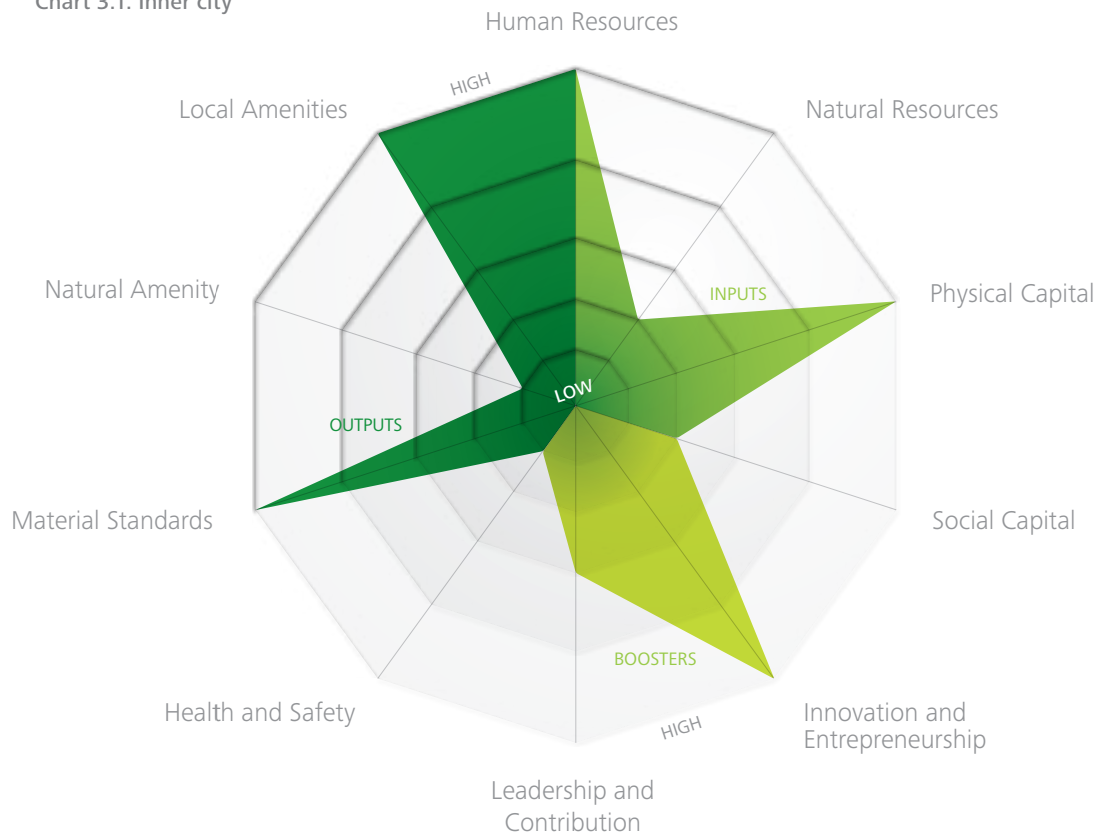
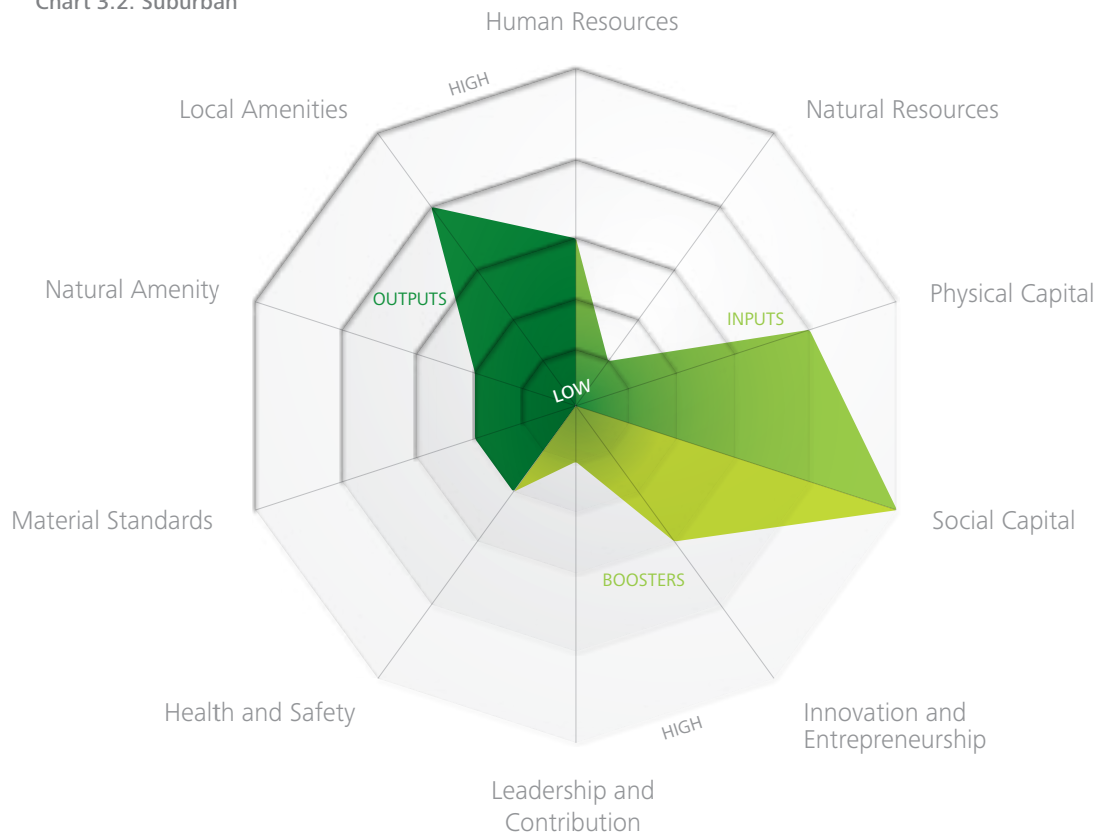Source: Deloitte Access Economics 2015

Inner city

The inner cities rank highly on Human Resources, Local Amenities, Physical Capital, Material Standards, and Innovation and Entrepreneurship. The people who live there are generally highly educated with well-paid jobs and live close to public transport and other amenities. They are often 'movers and shakers', willing to change the status quo and take people in new directions.

On the downside, our inner cities rank poorly on Natural Amenity, can expose people to the downside of close proximity, including crime, traffic jams and pollution, and are not always as socially connected as they might appear. People living close together are not necessarily neighbourly or community-minded. Loneliness and isolation can occur in the midst of crowds.

Fitzroy, an inner-city suburb in Melbourne, is known for its counter-culture and street art. This once working-class suburb has gentrified, and its residents are a mix of different ethnicities, backgrounds and incomes. It has a strong array of local amenities, including art galleries, studios, bars and pubs, vintage shops, and specialist bookstores. Fitzroy, like much of Melbourne's inner city, is well served by metropolitan infrastructure.

St Lucia is a highly affluent inner-city suburb in Brisbane. Located on the Brisbane River and close to the CBD, St Lucia is dominated by the University of Queensland's main campus, and its cafés, restaurants, shops and housing cater to affluent professionals who live in the area as well as local students.

Chart 3.2: Suburban

Source: Deloitte Access Economics 2015

Suburban

Australia's suburbs rank highly on Local Amenities, Physical Capital and Social Capital. This is where people shop nearby for their everyday needs, play sport or go to church.

The suburbs rank below the inner city on Human Resources, Innovation and Entrepreneurship, and especially on Leadership and Contribution. The typical Australian suburb houses many families with children, as well as older Australians no longer in the workforce.

Human capital is still being formed through schooling and, for many people in the suburbs, their days of innovating and taking risks (or leading and contributing) lie either ahead of them or behind them.

Ringwood is one of Melbourne's many comfortable eastern suburbs and has seen significant growth in recent years. It enjoys a number of local amenities, such as schools, gyms, libraries, health facilities, open green spaces, shops and recreation centres. Ringwood is the site of a Cadbury-Mondelez International food manufacturing facility, and is well connected to other parts of Melbourne by train, the Maroondah Highway and the EastLink toll road.

Petersham is a suburb in Sydney's inner west. It is perhaps most noteworthy as a 'Little Portugal', with its many Portuguese cafés, restaurants and small businesses. It is well connected to Sydney's inner city by public buses and trains.

Chart 3.3: Outer urban
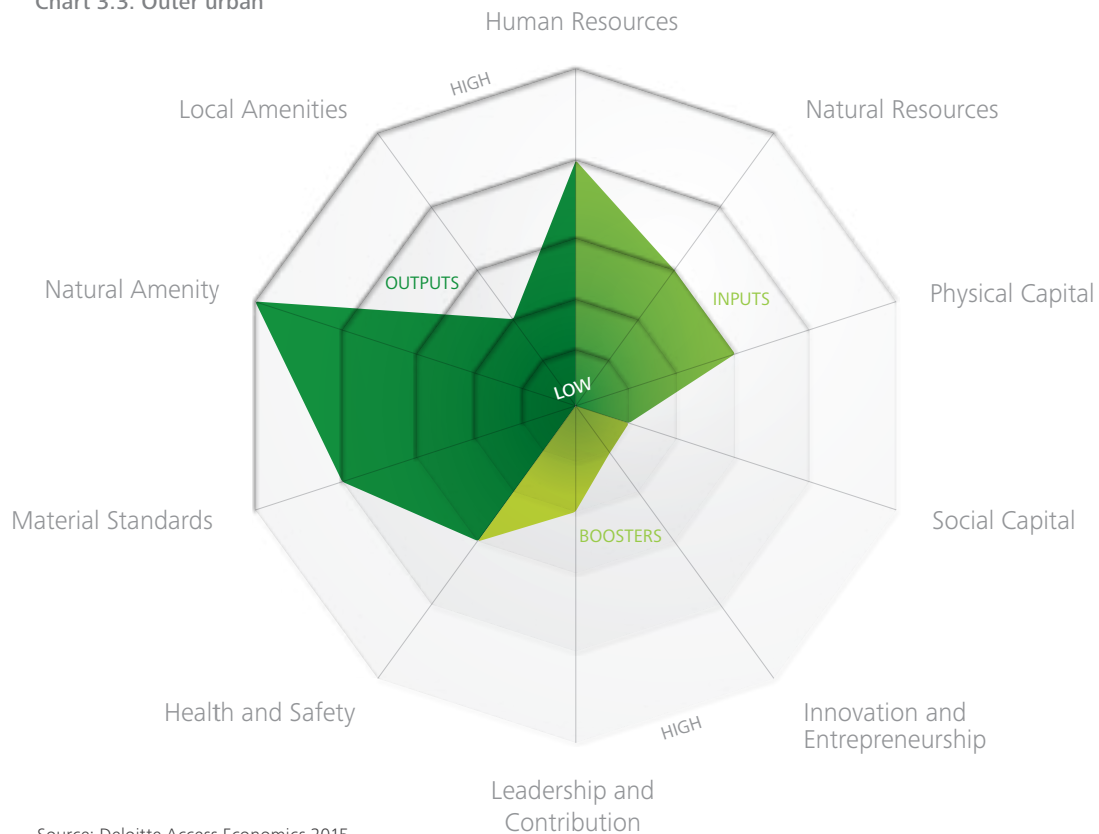
Source: Deloitte Access Economics 2015

Outer urban

Outer urban locations enjoy the benefits of being further from the inner-city bustle, and rank highly on Natural Amenity given their open spaces, natural vistas and proximity to major parks. Indeed, some urban fringe areas adjoin major parks, such as those in the Dandenong Ranges, the Blue Mountains and the Adelaide Hills.

Outer urban areas also rank higher than the suburbs on Human Resources. They attract professionals because housing is cheaper than closer to the city while commuting times needn't be that much longer, especially with express train services and toll roads.

However, everyday living can be less convenient than in the suburbs, with greater distances to local amenities and fewer choices.

Lower population density improves crime rates, but can make it harder to connect with others. Fewer people are around to support a range of sporting and social clubs. Longer commutes chew up time available for leading or contributing to community endeavours.

McLaren Vale, despite being a famed wine region in South Australia, is essentially an urban area on the periphery of Adelaide that backs directly onto medium-density housing. McLaren Vale's warm climate, beaches and coastal villages, and many vineyards make it attractive in terms of natural amenity. It is a popular tourist venue close to the capital city.

Redland Bay is an outer urban township on the south-eastern fringe of Brisbane. Farming yielded to residential development in the late 20th century. Although Redland Bay has modest local amenities and is some distance from inner-city Brisbane, it is well served by rail and bus links and is a gateway to numerous islands in Moreton Bay.

Jobs are scarcer in outer urban regions, and they are often less well paid.

Chart 3.4: Regional cities

Human Resources

HIGH

Local Amenities

Natural Resources

OUTPUTS

INPUTS

Natural Amenity

Physical Capital

LOW

Material Standards

Social Capital

BOOSTERS

Health and Safety

HIGH

Innovation and Entrepreneurship

Leadership and Contribution

Source: Deloitte Access Economics 2015

Regional cities

Australia's regional cities rank highly as safe and healthy places to live. Community life is also generally strong. People are often passionate about their regional city and like to get involved in local affairs.

Regional cities are also well connected to natural areas, ranking highly on proximity to nature conservation and outdoor tourism.

But they can be difficult places to get to and from, even if there's an airport. Flights to regional cities can be few and far between, and there isn't always a passenger rail link or high-speed motorway nearby.

In addition, good jobs can be hard to find, especially for young people, and that often leads them to relocate closer to major cities.

Newcastle is the world's largest coal-exporting port. The abundance of its surrounding natural resources has been a driving force in its prosperity. Apart from industry, Newcastle enjoys rich natural amenity, with beaches, mountains and nature reserves.

Darwin, despite being the capital of the Northern Territory, is also a regional city. It is a unique cosmopolitan melting pot of ethnicities, including Asian, European and Aboriginal cultures. Its tropical surrounds rank it highly in terms of natural amenity, and it has substantial mineral resources, and oil and natural gas sectors.

Chart 3.5: Rural and remote
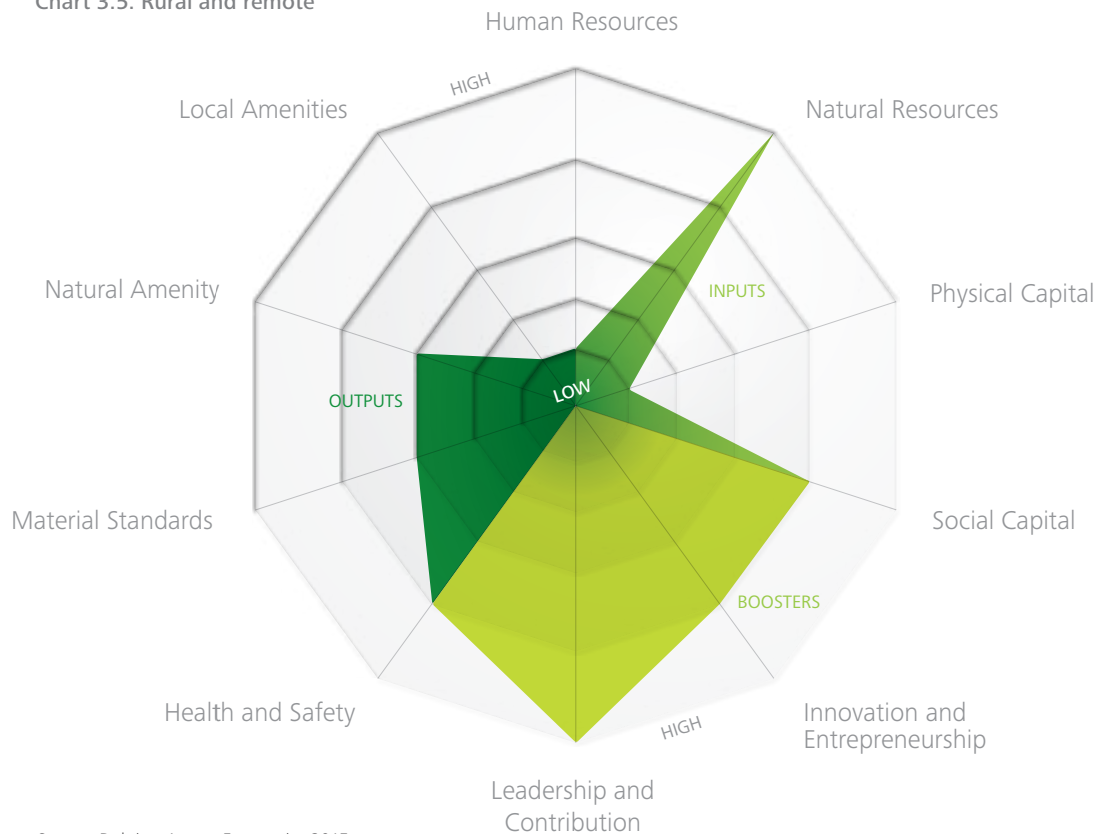
Source: Deloitte Access Economics 2015

Rural and remote

Rural and remote Australia is, unsurprisingly, rich in natural resources. Our indicators also suggest that these regions enjoy high levels of Leadership and Contribution, and Innovation and Entrepreneurship.

Living and working in remote areas reveals a tolerance to risk that is often associated with entrepreneurship. Those who live off the land have never been shy of taking risks.

People living in remote communities are generally compelled to interact with one another, building social capital. Their geographic isolation also builds self-reliance.

But remoteness and isolation have their costs. Rural and remote regions rank poorly on Local Amenities and Material Standards, and access to Human Resources and Physical Capital, including broadband and mobile telephony.

Except in specialised occupations, such as mining, jobs in rural Australia are generally lower paid, and in remote Australia tend to be scarcer.

East Pilbara in Western Australia exemplifies many of the challenges and geographic extremes that Australians face living in rural and remote regions. It has a land area slightly larger than Norway's. In contrast, the population in 2013 was a mere 8,203 people. Like much of the red and dry Pilbara region, it is rich in natural resources and its industrial mainstay is mining.

*The **Central Highlands** in Tasmania is also typical of the geographic diversity of Australia's rural and remote areas. It is sparsely populated. In 2013, it was home to 2,238 people living in roughly 718,500 hectares. It consists of a series of lakes and mountains stretching across a number of national parks and conservation areas, and its dominant industries are agriculture, forestry and fishing.*

Flourishing and languishing places

Table 3.2 summarises the rankings we have assigned to each of our five regions in each of the 10 dimensions of prosperity.

The different dimensions of prosperity are developed to varying extents in different places. Over time, places that flourish rank more highly in some or all of the 10 dimensions of prosperity, while places that languish fall behind and drift downwards.

How can flourishing be promoted and languishing avoided? What are the drivers of prosperity in place?

Table 3.2: Ranking of Australia's five regions across dimensions of prosperity

	Inner city	Suburban	Outer urban	Regional cities	Rural and remote
Human Resources	1	3	2	4	5
Natural Resources	4	5	3	2	1
Physical Capital	1	2	3	4	5
Social Capital	4	1	5	3	2
Innovation and Entrepreneurship	1	3	5	4	2
Leadership and Contribution	3	5	4	2	1
Health and Safety	5	4	3	1	2
Material Standards	1	4	2	5	3
Natural Amenity	5	4	1	2	3
Local Amenities	1	2	4	3	5

(1 = highest; 5 = lowest)

Source: Deloitte Access Economics 2015

The potential
of place

The potential of place

Different places have different opportunities to grow their prosperity. If you wanted to unlock the potential of a place so that it flourishes rather than languishes, what would you need to change?

Reconsidering the purpose of place – how place drives prosperity – can help to unlock the *potential* of place.

We identify four dynamic forces that interact to catalyse flourishing in place:

- **People** – people are the basic ingredient of prosperity in place and need to be present in appropriate numbers and with appropriate skills, experience and outlook

- **Community** – people gathered together need to feel they are more than just a crowd, that they belong to a community with a shared sense of identity, purpose and values

- **Technology** – technology can help people live more comfortably in close proximity, can aid a sense of connectedness in crowds and can partially substitute for physical proximity

- **Governance** – good governance strikes a balance between individual and collective decision making so that government occurs with the consent of the governed.

Acting in concert, these dynamic forces can unlock the potential of place and spark a virtuous circle of prosperity.

People

People in appropriate numbers and with appropriate skills, experience and outlook are the basic ingredient in catalysing economies of agglomeration.

People move to and from places. When they come, they bring their unique capabilities, attitudes and aspirations; when they go, their contribution is lost to that place and to the people, communities and businesses that remain.

Emerging trends in the preferences of different groups of people are relevant when thinking about the potential of different types of places. The ability to catalyse the prosperity of place by attracting people depends on who they are, what they bring and what they're looking for.

Three emerging trends have the potential to influence the trajectory of place: the rise of the Millennials, the retirement of the Super Boomers, and future levels of migration.

Millennials

People born after 1980 are loosely referred to as Millennials, having come of age around the turn of the millennium. They are emerging as the dominant drivers of consumer spending and wealth accumulation, and their preferences are shaped by connectivity, digital technology, higher education, shared resources and social interaction.

> *"Millennials are more connected to technology than previous generations and [many] believe that their relationship to technology is what makes their generation unique. While all generations have experienced technological advances, the sheer amount of computational power and access to information that Millennials have had at their fingertips since grade-school is unparalleled."*
>
> The Council of Economic Advisers, 2014 [28]

Millennials' expectations of the place where they live and work, the communities of interest they join, their access to technology and their travel and cultural experiences, contrast dramatically with those of older generations.

Their preferences will increasingly shape place as their purchasing power, and social and political influence grow. They are typically in the early stages of building career and family. Yet already Millennials display a disdain for suburban life, strongly preferring inner-city locales and regional cities where they can live and work in close proximity to other Millennials.

These preferences will drive, for instance, different configurations of housing supply and different financial arrangements as Millennial preferences change the profile of house prices and rents across Australia's cities.

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27   Dr Seuss (1960) *Oh, the Places You'll Go!,* Random House Children's Books.

28   The Council of Economic Advisors (2014) '15 Economic Facts about Millennials', Executive Office of the President of the United States.

Super Boomers

According to the Regional Australia Institute, Australia's over-50s are "the most diverse, educated, wealthy and experienced generation to enter into retirement age". They are on average wealthier, healthier and enjoy greater life expectancy than any previous generation. The Future Laboratory says, "Over-50s are redefining what it means to be older as they embrace 'a second go at being youthful'."[29]

Retiring Super Boomers have a penchant for Australia's rural cities and regions. Many already live in regional areas and intend to stay there. Others are 'sea-changers' or 'tree-changers' who want to move to coastal areas or country towns.

> *"More than ever before, reaching 50 is the mark of new beginnings. Increased life expectancy, good health, greater financial flexibility and overall independence are transforming ageing; and Baby Boomers are embracing this to redefine the ageing experience. Rather than entering into old age, Baby Boomers are enjoying the third age. For many, regional Australia is the venue of choice for the third age experience. This means that Baby Boomers are not just another generation for regional Australia; they are a dynamic group capable of bringing real and positive change to communities. The rise of the Super Boomer has begun…"*
>
> Regional Australia Institute, 2014[30]

Super Boomers' attraction to places outside the major cities creates both opportunities and challenges for their future prosperity, as well as for those who live around them.

What are the implications for delivering services required or demanded by older Australians in places accustomed to more balanced age profiles? How will community life change as older people move in to replace younger people moving out? Will retirees prefer a quieter, less vibrant ambience that stymies a region's potential to attract tourists, especially young people?

People move to and from places. When they come, they bring their unique capabilities, attitudes and aspirations; when they go, their contribution is lost to that place and to the people, communities and businesses that remain.

Migration

Migration is a strong driver of economic growth. Migration doesn't just add to the number of productive workers in a place; it brings skills, experience, tastes and preferences that contribute vitality and vibrancy.

Migration directly improves several of our 10 dimensions of prosperity (especially skilled migration), including Human Resources, Innovation and Entrepreneurship, Leadership and Contribution, and Material Standards. Yet some people worry about its impact on other dimensions of prosperity, including Natural Resources, Social Capital and even Health and Safety.

Some are concerned that migration puts undue pressure on land and water resources, and strains the social fabric as efforts are made to integrate people from different cultural backgrounds, mores and traditions. Fears of ethnic or religious violence have emerged in recent years, leading some communities to fear rather than embrace new migrants.

For much of Australia's history, our attitude to migration has been welcoming and bipartisan. We are a 'settler' society and most Australians are descended from migrants, even if they themselves were born in Australia. Many people celebrate the diversity of cultural life, tastes and experience that migrants bring to this country.

29 Stiles, J (2014) 'Rise of the Super Boomers: is it fact or fiction?', The New Daily, http://thenewdaily.com.au/news/2014/08/05/rise-superboomers

30 Regional Australia Institute (2014) 'Talking Point: An Ageing (Regional) Australia and the Rise of the Super Boomer'.

Community

Gathering people together is one thing; binding them together is something else. A crowd is not a community. There has to be a sense of belonging – 'ties that bind' – and connectedness to the lives of others.

For people to flourish in place, they need to feel that they belong. Flourishing places have a strong sense of community, of shared values, identity and purpose.

A sense of belonging can grow in different directions and at different levels. Some loyalties transcend place, like those to family, faith, tradition or profession. Others are place-specific, such as those to a school, sporting club, town, state or nation.

Loyalties can be nested; supporting a particular football club need not conflict with loyalty to a suburb or city, let alone with higher loyalties to family and friends.

Community is hardest to forge when loyalties are so divided that we find little or no common ground. Places that languish are often places where communities are fractured, sometimes to the point of open conflict.

A flourishing sense of community is essential to prosperity in place.

Three emerging trends have the potential to influence the trajectory of place: urban sprawl, rapacious development and fractured communities.

Urban sprawl

Gathering people together in large agglomerations often creates urban sprawl. It raises the cost of travel in and around the city, increases the cost of infrastructure to deliver services, and potentially compromises public health and the environment.

Depending on the efficiency and cost of transport, and the location of local amenities, urban sprawl can undermine social connectedness and promote isolation. The trend towards more single-person households, whether in the suburbs or the inner cities, creates new challenges in maintaining social connectedness.

However, urban sprawl also offers people choices about where they live, what type of house they live in, the neighbours they have and how close they are. Many people didn't have these choices when they lived in crowded tenements in the decaying hearts of old cities.

As opportunities arose, people moved to the suburbs and outer urban regions, seeking a wider variety of lifestyle options. Today the inner-city lifestyle is another option and some people, including young professionals and 'empty nester' Baby Boomers, prefer its vibrancy and seek to build communities there.

> *"The most convincing answer to the question of why sprawl has persisted over so many centuries seems to be that a growing number of people have believed it to be the surest way to obtain some of the privacy, mobility, and choice that once were available only to the wealthiest and most powerful members of society."*
>
> Robert Bruegmann, 2008[31]

Rapacious development

Winston Churchill famously said, "We make our buildings and afterwards they make us." The built environment influences more than the physical layout of communities. It affects people's capacity to connect with one another and form relationships.

Up to a point, enlightened self-interest prompts property developers to think about people's need for community when designing residential developments. But people settle and build their lives in places from which developers inevitably move on. People develop a sense of ownership in place that transcends their pecuniary interest as landholders.

Rapacious development that serves the interests of developers at the expense of communities invites resistance, which in turn undermines shared purpose and vision. People want a say in how their places are formed and shaped.

Urban development that fails to account for the impact of the built environment on community can undermine flourishing in place. Higher-density communities require us to re-think the use of public and private spaces. Shared use of public spaces may encourage greater cooperation and social engagement, as well as improve efficiency.

31 Bruegmann, R (2008) *Sprawl: A Compact History*, The University of Chicago Press.

Both NIMBY-ism and the 'gated community' phenomenon can fracture a genuine sense of community by excluding rather than including outsiders.

High-rise apartment blocks or multi-unit dwellings with integrated shared spaces, such as communal swimming pools, laundry facilities, barbecue areas, gyms and gardens, can optimise precious floor space in a dense urban environment. Such shared spaces also enhance the social and community aspects of place by creating environments where residents can interact informally and connect with one another.

Fractured communities

A healthy sense of community welcomes difference and acknowledges mutual responsibility. It also recognises that local communities are themselves members of broader communities, and local concerns may have to be subordinate to wider interests.

Communities are fractured when subsidiary groups refuse to subordinate their interest to the needs of wider agglomerations. This is known as fortressing or NIMBY-ism ('not in my backyard'). Such attitudes might reflect inadequate consultation with subsidiary groups or wilful sidelining of their interests by larger entities. Whether justified or not, NIMBY-ism often corrodes communities.

Less obviously destructive of a genuine sense of community is the creation of 'gated or walled communities', where social connection is narrowed to members of a single socio-economic class or status. Bonds of mutual responsibility among those who live within the walled community are strengthened at the expense of bonds with those who live beyond its boundary.

It is always easier to support those whose outlook and interests you share. A genuine sense of community extends such support to those whose outlook and interests differ, sometimes markedly, from your own.

Both NIMBY-ism and the 'gated community' phenomenon can fracture a genuine sense of community by excluding rather than including outsiders, whether the outsiders come from another suburb, another town, another country or a different socio-economic class.

> "Walled and gated communities are a dramatic manifestation of the fortress mentality… As citizens divide themselves into homogeneous, independent cells, their place in the greater polity and society becomes attenuated, increasing resistance to efforts to resolve municipal, let alone regional, problems."
>
> Lincoln Institute of Land Policy, 1995 [32]

Technology

Technology can help people live more comfortably in close proximity; it can aid a sense of connectedness in a crowd and even partially substitute for physical proximity. When it does these things, technology smooths the sharp edges of agglomeration and aids flourishing in place.

The implications of technology for prosperity in place are profound – from the design of houses, offices and public buildings to the operation of city-wide infrastructure networks; from daily work routines to the delivery of goods and services.

Technology touches all aspects of our lives – where we live, work, rest and play – and how we use and experience place.

Three emerging trends could influence the trajectory of place: smart cities, diffusion of technology (early adoption), and connecting people and places.

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32 Blakely, E and Snyder, G (1995) 'Fortress Communities: The Walling and Gating of American Suburbs', Lincoln Institute of Land Policy, www.lincolninst.edu/pubs/537_Fortress-Communities---The-Walling-and-Gating-of-American-Suburbs

Smart cities

Smart cities apply digital technologies to make better use of infrastructure and public spaces, and to improve public safety. People interact in new ways, stimulating creativity and allowing the emergence of innovative clusters of businesses and more vibrant neighbourhoods.

Sensors and actuators can allow remote monitoring and managing of urban infrastructure services, including transport, telecommunications, energy, water, health and emergency services. This can improve service quality and allow the more efficient allocation of resources, such as by varying tolls to reduce road congestion or making better use of capacity in electricity networks.

These smart systems generate data (such as the location of buses and trains) the public can use (either directly or through third-party apps), which helps people make the best use of their time. For example, Google uses GPS-enabled smartphones running the Google Maps app to detect traffic congestion.[33] These smartphones relay information such as user location and speed, allowing real-time updates in Google Maps.

Technology is revolutionising electricity generation and storage.[34] 'Distributed power' supplied through micro-generators (solar, wind-powered or gas-fired) combined with in-home storage in vastly improved batteries will literally rewire entire communities, reducing the need for centralised power generation and distribution (poles and wires).

Some assets such as land can be released for new uses. As technology revolutionises education, for example, land once devoted to classrooms and lecture theatres can be repurposed. Other assets such as roads can be used far more efficiently as smart systems improve traffic flows.

Digital technologies also power the 'sharing economy' in which people use the internet to trade spare rides in their cars, spare rooms in their homes, spare tools in their sheds or even spare time in their kitchens (The Economist, 2013).[36] This opens new frontiers in the efficient use of assets. Bringing idle capacity

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"The technology behind smart cities relies on the intersection of three technological trends: cheap sensors, always-on connectivity and machine-to-machine communication.

Cheap sensors: have recently emerged that allow for the observation and collection of data that was previously either too complex or too expensive to measure. The relatively modest cost in particular is especially transformative as it permits large scale rollouts of sensors across an entire city.

Connectivity: The rollout of mobile data networks that are now virtually ubiquitous across urban spaces has allowed devices to be permanently connected to the internet, and therefore to all other devices. This has expanded the physical scope of where data can be gathered and broadcast, as well as allowing for data collection in a continuous, real-time way.

Communication: machine-to-machine communication (M2M) is being developed to assist in the collation, interpretation and management of the large quantities of information being generated by the placement of cheap, real time sensors.

The culmination of these three trends has been the development of the mass-market consumer grade smartphone, which is now ubiquitous, affordable, continuously broadcasting information and continuously receiving information."

Smart City and Big Data Era, Mike Smith, 2014[35]

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33 Machay, J (2015) 'How does Google detect traffic congestion?' *Houston Chronicle*, http://smallbusiness.chron.com/google-detect-traffic-congestion-49523.html

34 *The Economist* (2015) 'Let there be light', www.economist.com/news/special-report/21639014-thanks-better-technology-and-improved-efficiency-energy-becoming-cleaner-and-more

35 Smith, M (2014) 'Smart City and Big Data Era', Chongqing Mayor's International Economic Advisory Council 9th Annual Meeting, research paper.

36 *The Economist* (2013) 'The rise of the sharing economy', www.economist.com/news/leaders/21573104-internet-everything-hire-rise-sharing-economy

Online health and education, as well as online shopping, make it easier for people to live outside major population centres without sacrificing all the benefits of agglomeration.

to market through innovative rental arrangements intensifies the use of existing assets, reducing redundancy and waste.

Smart technologies make places more productive and more liveable. They help to manage the downside of agglomeration and release more of the upside.

Diffusion of technology

Not only is technology affecting more aspects of our lives, it is doing so faster than ever before, and Australians are known for their early and willing adoption of new technology.

> "Australia is the second largest market for health technology adoption within the Asia Pacific despite fragmentation preventing robust development of Health IT across the country."
>
> IDG Communications, 2015 [37]

The development and adoption of new technologies tends to spill over from one firm to another, especially when they are in close proximity. The desire of businesses to keep up with the latest technology reinforces clustering as they learn from one another, often through personal interactions between

employees and customers. This diffusion of new ideas in turn stimulates more technological development in a mutually reinforcing cycle of innovation.

Innovative information and communications technologies (ICTs) create economic opportunities and foster social and political inclusion, contributing to shared prosperity. ICTs boost productivity and reduce transaction and information costs. They aid new models of collaboration that increase workers' efficiency and flexibility, foster entrepreneurship, create new business models, and provide alternative sources of project finance through crowdfunding platforms.

ICTs can improve access to basic government services, including public health, income support services and education. They facilitate more direct interaction between citizens and government, improve the efficiency, transparency and accountability of public administration, and provide new ways for citizens to participate in public policy making and decision making.

Connecting people and places

Technology can substitute for physical proximity, but never perfectly. Face-to-face communication remains vital for human relationships, both commercial and personal. People still travel regularly to attend meetings and meet friends and family, even in a world of ubiquitous telecommunication.

> "A significant benefit of broadband in the world of work is telework. Telework means reduced travel for workers. It also has the potential to increase labour force participation and create jobs among those who might not be working… [T]he possible economy-wide benefits… are in the order of an additional 25,000 full time equivalent jobs, worth an extra $3.2 billion to the Australian economy in 2020…"
>
> Deloitte Access Economics, 2013 [38]

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37 Karlovsky, B (2015) 'Rural hospitals lag on health technology adoption: Frost and Sullivan', IDG Health, http://health.idg.com.au/article/572479/rural-hospitals-lag-health-technology-adoption-frost-sullivan/

38 Deloitte Access Economics (2013) 'Benefits of High-Speed Broadband for Australian Households', report commissioned by the Department of Broadband, Communications and the Digital Economy.

However, opportunities for teleworking change the cost-benefit calculus for people living in regional cities and rural and remote areas. Telecommuting does not substitute for working close to other knowledge workers, but it widens the choices available. Analysts expect teleworking to increase labour force participation as people who won't or can't travel to work regularly, or who need arrangements that are more flexible, find that telework lowers the barriers.

Online health and education, as well as online shopping, make it easier for people to live outside major population centres without sacrificing all the benefits of agglomeration. They also avoid some of the disamenity. Digital technology has revolutionised supply chains, bringing many of the benefits previously available only in large cities to regional and remote locations.

Governance

Flourishing in place requires making a range of decisions. Some decisions can be left to individuals, who will judge according to their perception of the costs and benefits. Others require mechanisms for collective decision making because the costs and benefits to the broader community differ from those perceived by individuals.

Reconciling collective and individual choice is the essence of governance. Striking the right balance is essential to winning the consent of the governed when collective choices clash with individual preferences.

Good governance is the antidote to the fracturing of community; it unlocks the potential of place.

Two emerging trends could influence the trajectory of place: the challenges of planning, funding and delivering new infrastructure; and the need to engage individuals, communities and businesses in collective decision making.

Infrastructure

Ambitious social and economic investments to improve the prosperity of Australian places require forward-looking public policies and long-term commitments to realise their potential. At the same time, decision making needs to be streamlined and adaptable to changing circumstances.

These decisions are by their nature collective rather than individual, and they rely on appropriate governance structures. Decisions about infrastructure (an element of Physical Capital in our 10-dimensions framework) are an example.

Maintaining, upgrading or building new infrastructure relies on sustainable funding. It also requires delicate judgements about who bears the risk of under-utilisation, how to assess long-term social returns on infrastructure investments, and how to persuade citizens of the collective, longer-term merits of infrastructure investments that carry short-term costs for them personally.

Assigning property rights and compensating losers are perennial challenges but, where effectively handled (and financed), can clear the way to meet urgent infrastructure priorities.

Engagement

Engaging individuals, communities and businesses in collective decision making is essential to good governance in a representative democracy like Australia. At the same time, collective decisions are better informed and more durable when individuals, communities and businesses are engaged.

> *"Effective participation is where… all the relevant stakeholders take part in decision-making processes and are also able to influence the decisions in the sense that at the end of the decision-making process all parties feel that their views and interests have been given due consideration even if they are not always able to have their way."*
>
> Osmani, 2007 [39]

39   Osmani, S (2007) 'Participatory Governance for Efficiency and Equity', 7th Global Forum on Reinventing Government, 'Building Trust in Government'.

Engagement requires effective participation, which builds trust, and trust is essential to winning the consent of the governed, especially for long-term policy and planning decisions. The increasing technical complexity of collective decisions and the growing plurality of individual preferences make good governance more difficult to achieve.

Technology can help governments engage with citizens in new and creative ways. For example, technology creates opportunities for communities and groups of individuals to internalise collective choices by forming civil associations or social enterprises to provide collective goods and services – on a for-profit or not-for-profit basis – in place of governments.

Good governance explores new ways to win the consent of the governed for the hard choices needed to unlock the potential of place.

> *"In a shift away from public control, private delivery of goods and services, social enterprise and club service providers have flourished. They seem to offer a new alternative that bridges the gap between the rights-driven public services model and the profit-driven private sector. Many public goods and services can be provided by clubs or social enterprises, from management of communal swimming pools, to security services, roads and infrastructure. These models promote private investment in services. And by offering private answers to public questions, they encourage and empower neighbourhoods to solve their own problems. However, these approaches can also lead to fragmentation, making co-operation more difficult."*
>
> The Guardian Local Government Network Blog[40]

The dynamic forces of people, community, technology and governance together determine the trajectory of place.

Virtuous circles and vicious cycles

The dynamic forces of people, community, technology and governance together determine the trajectory of place. They propel places towards greater or lesser prosperity, depending on initial conditions and their relative strength.

Acting in concert, the four forces can be mutually reinforcing, catalysing virtuous circles of prosperity ('flourishing') or vicious cycles of decline ('languishing').

How would you recognise a flourishing place, and what actions could you take to sustain and enhance its circle of prosperity?

Equally, how would you know that a place is languishing – and what could you do to change its trajectory?

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40 Megele (2012) 'Local Government in 2020: Challenges and Opportunities', The Guardian Local Government Network Blog, http://www.theguardian. com/local-government-network/2012/apr/11/local-government-2020- challenges-opportunities

Flourish
or languish?

Flourish or languish?

The road to prosperity for Australia's cities and regions stretches before them, paved with four different types of 'bricks': people, community, technology and governance.

Proximity is the key to prosperity in a knowledge economy. Proximity unlocks economies of agglomeration by sparking people's creativity, which drives innovation and productivity, in turn improving our material standards of living.

But people care about more than their material circumstances, especially as incomes rise. The quality of our relationships, health, personal safety and the environment all matter for our prosperity. A well-paid job is very important, but there's more to life.

As we strive to harness the economies of agglomeration, we need to build community, deploy technology and design governance in order to tame proximity and avert the diseconomies of crowded places.

> "[We] flourish by understanding that well-designed cities provide a form of direct compensation to people that is often just as important to them as the size of the salary they draw from a job… The next phase of urban development will emphasize who we want to become, rather than what we must do to endure."
>
> Enrique Peñalosa, former mayor of Bogotá, Colombia[41]

Each of our five Australian regions exhibits different strengths and weaknesses on our 10-dimensional radar charts of prosperity – their 'flowers' all look different.

They start at different places. Yet the opportunity to flourish stands open, no matter where you begin.

Flourishing

Flourishing begins with people. A flourishing place attracts a steady stream of newcomers who settle

A flourishing place has a core of knowledge workers whose proximity to one another in the workplace sparks the creative innovation that drives productivity.

and build their lives because of the material and non-material rewards on offer (Figure 5.1).

Flourishing is its own reward. Depending on who they are and what they bring, the arrival of new settlers can improve the very conditions that attracted them to a place.

A flourishing place has a core of knowledge workers whose proximity to one another in the workplace sparks the creative innovation that drives productivity. Knowledge-intensive jobs are high-wage jobs; they also stimulate the imagination and creative instincts of knowledge workers.

Knowledge workers are mobile; their skills are generally transferable from place to place. They are attracted to places where they interact with other knowledge workers. This in turn supports the value they create and bolsters their incomes. Of course, they want more than a well-paid job. They also want a community that supports the other dimensions of prosperity – schools, hospitals, shops, restaurants, clubs, parks – and the people who make these and other services happen.

Knowledge workers in a flourishing place are supported by a network of service providers, from baristas to beauticians, barbers and bus drivers. Flourishing places attract these service workers because their incomes and lifestyles are secured by knowledge-intensive activities and the value they create.

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41 Peñalosa, E (2014) quoted in 'City Planet: Business Trends 2014', Deloitte University Press, http://dupress.com/articles/bus-trends-2014-city-planet

Knowledge workers want a say in how their communities are governed. They spend their lives thinking of creative ways to solve problems; they are accustomed to collaborating in teams. They expect their communities to reflect the same collaborative values they live by at work. They are willing to try new ways of doing things, including the 'sharing economy' to promote the more intensive use of assets, from cars and houses to garden tools and people's kitchens.

Knowledge workers are intimately familiar with technology and expect to encounter applications that

solve problems and improve the everyday amenity of their lives. They expect ubiquitous access to the internet, including in public places and on all public transport.

People who live in flourishing places tend to understand instinctively the purpose of place in a knowledge economy and the benefits that arise from large numbers of knowledge workers living and working in close proximity. Wherever possible, they alleviate the disamenity of larger numbers of people living closer together through the clever use of community, technology and governance.

Figure 5.1: The flourishing place
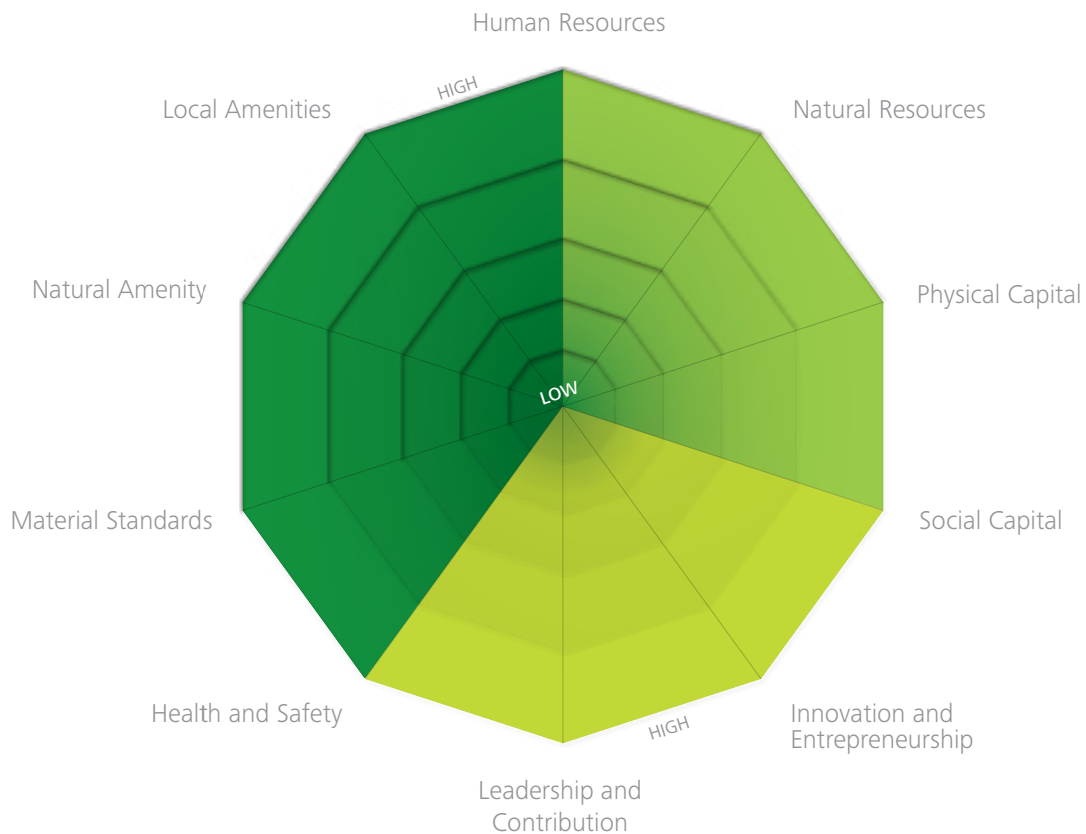
Inner city

Australia's inner cities have a head start on the road to flourishing. They already attract large numbers of knowledge workers and, as a result, make the greatest contribution to Australia's gross domestic product (GDP) of any of our five regions.

Educated young professionals gravitate to the inner cities, bringing with them aspirations, attitudes and skills highly attuned to the knowledge economy. They typically find the cosmopolitan ambience of the inner cities more attractive than other locales.

People who live in the inner cities enjoy the convenience of local amenity – shops, restaurants, cinemas and parks all within walking distance – as well as ready access to public transport, freeways and airports. The social diversity of inner cities adds vibrancy to the experience of living there.

> *"People do not move to the center of cities merely to be able to get to and from work a quarter of an hour faster. They are settling in cities – those who have a choice – in large part to experience the things that citizens of Paris and Vienna experienced a century ago: round-the-clock street life; café sociability; casual acquaintances they meet on the sidewalk every day."*
>
> Alan Ehrenhalt, 2012 [42]

Yet inner-city life can be unpleasant, unsafe and unhealthy. Air, water and noise pollution can detract from natural amenity; waterways can be festooned with litter; traffic is heavy; parks and gardens can be unsafe after dark.

Gregarious people enjoy the vibrancy of the inner city, yet the busy streetscape often conceals loneliness and isolation, especially for the elderly, the sick and the socially disadvantaged. More people are expected to live alone in the future: the number of single-person households in Australia is predicted to rise from around 2 million in 2009 to 3.1 million in 2031. [43]

Australia's inner cities have a head start on the road to flourishing.

For Australia's inner cities, flourishing necessitates a focus on natural amenity, health and safety, and on building social capital. While adding more people to Australia's inner cities will make them even more productive, greater emphasis on building social capital through community, implementing smart solutions to environmental challenges and creating inclusive local government will make them more liveable.

Suburban and outer urban

Social capital and natural amenity are the strong suits of Australia's suburbs and urban fringes, respectively, as flourishing places. But while many knowledge workers live in these areas, very few work there because the knowledge-intensive jobs are elsewhere.

Knowledge workers commute to where the jobs are – generally in the inner city – and the time spent travelling detracts markedly from the appeal of suburban and outer urban regions. The productivity of proximity draws knowledge workers away from the suburbs and urban fringes to work in the inner city. The prosperity of these regions would grow with improved links to the inner city.

Using technology to shorten physical commutes and aid telecommuting would help, as would better public transport. Technology can improve the efficiency of existing transport infrastructure through better traffic management on rail and road systems, including improved signalling and time-of-day road pricing. Smart systems in cars can optimise travel routes and journey times through real-time monitoring of traffic conditions. Ride-sharing can help reduce traffic congestion, while improved telepresence can emulate proximity, reducing the need for travel, at least at the margin.

Limited access to physical infrastructure detracts from the prosperity of suburban and outer urban regions. People who live in the path of proposed new infrastructure, or who object to paying for it, can block

42   Ehrenhalt, A (2012) *The Great Inversion and the Future of the American City*, Knopf Doubleday Publishing Group.

43   Kelly, J-F and Donegan, P (2015) *City Limits: Why Australia's Cities Are Broken and How We Can Fix Them*, Grattan Institute, Melbourne University Publishing.

developments that serve the wider public interest. Improving this situation calls for new and innovative governance arrangements to bridge the 'access gap', and also resolve tensions between individual preferences and collective imperatives.

Knowledge workers are especially adept at engaging the machinery of local government to protect their vested interest in the status quo. Collaboration and engagement, including through new collaborative platforms, can help to identify workable compromises. If the collective gains are large enough, finding ways to compensate the losers will be a priority.

Using technology and governance to bring the suburbs and urban fringes 'closer' to the inner cities could improve the prosperity of both places. While the inner city would gain social capital and better access to natural amenity, the suburban and outer urban regions would become more attractive to knowledge workers spared the frustration of lengthy and tiresome commutes. Given back more time, they could add to the flourishing of their local communities through greater involvement and sharing their knowledge capital.

Regional cities

Our regional cities are situated in some of Australia's most picturesque locations. Their prosperity often reflects the availability of a natural resource and the associated dominance of primary industry as a source of jobs and income. Secondary industry – for example, textile manufacturing or motor vehicle assembly – has also been a major presence.

As both primary and secondary industries become more capital-intensive and less labour-intensive, some regional cities have struggled to provide a core of well-paid jobs around which to build a flourishing place. Service workers depend for their living on a core of high-paying jobs and these are increasingly found in knowledge-intensive sectors, which are typically located far away from regional cities.

Tourism is an exception, and regional cities turn to tourism when their natural attractions are especially appealing. But here too value must be built using the tools of the knowledge economy, including the creative use of destination branding, modern communications, festivals and other events that attract tourists. Infrastructure too is important for tourism and Australia's regional cities are often poorly served in this regard.

Yet regional cities are some of the safest and healthiest places to live in Australia. Community life is generally very strong, and high levels of social cohesion clearly contribute to people's prosperity and wellbeing.

Community engagement is a strength of regional cities. In larger agglomerations, people seek community and social engagement with those who share their interests or socio-economic status. In regional cities, allegiance often extends to the place itself rather than subsets of people. Loyalty to place is a uniting force.

This is a boon to civic engagement and the defeat of NIMBY-ism. Regional cities find it easier to resolve tensions between collective imperatives and individual preferences, and to get on with building prosperity. Social connectedness typically encompasses the whole community, giving people a strong voice and the ability to influence the direction of change.

But regional centres can be hard places to get to and from, unless there is an airport nearby or a good rail link or freeway. Having strong connections to other places is a big attractor. People, including knowledge workers, will make their lives in regional cities if they do not have to sacrifice too much proximity to inner-city activities. Like the suburban and outer urban regions of major cities, regional cities can build prosperity by enhancing their connections to inner cities.

As tertiary industry becomes more dominant in the national economy, regional cities face the challenge of transforming themselves away from over-reliance on primary and secondary industries. They need a core of knowledge workers. One way to acquire this is for governments and industry to locate significant knowledge-intensive activities in regional cities.

This can seed a virtuous circle of prosperity as the arrival of knowledge workers begins to change the socio-economic profile of regional cities. Proximity to other knowledge workers is the key. This can be achieved by improving transport and communication links with places where other knowledge workers live and work, or by encouraging them to move to regional cities.

Building a core of knowledge workers attracts more – they bring their human capital, stimulating innovation and entrepreneurship, as well as leadership and willingness to contribute.

> *"Many city leaders have promoted the dynamism of their regional economies by explicitly setting out to encourage entrepreneurial activity and the development of industry 'clusters' (sectors of many players collectively building specialized capabilities)."*
>
> City Planet: Business Trends 2014[44]

Rural and remote

Almost all of Australia falls into the category of rural and remote. Flourishing in these places is hard work, as generations of Australian farmers, graziers and miners will attest. Yet the love of place runs thick in the veins of these Australians. Banjo Paterson once observed, "…the drover's life has pleasures that the townsfolk never know".

Surely technology holds the key to flourishing in rural and remote Australia. Primary industry will become more and more capital- and knowledge-intensive as technology revolutionises farming, fishing, forestry and mining. Increasingly and inevitably, farmers, fishermen, foresters and miners will become knowledge workers too.

Technological innovation will underpin productivity growth in primary industry, which will increase in scale, just as it has since earliest times.

Skilled workers will be needed in rural and remote areas to service the machines and manage the demands of technically sophisticated processes. Not everything can be done remotely from a Patersonian 'dingy little office' in Sydney, Perth or Melbourne.

If people are to stay and flourish in these places, they need community and a sense of belonging. Flying workers in and out of remote locations can't be more than a temporary solution. Community life contributes to prosperous places, and it suffers when people are transient.

Transient workers are less willing or able to lead or contribute to building prosperity in a place – they are, after all, committed to another place. Worse, if their peripatetic lifestyle precludes commitment of any kind, the place where they live loses out as much as the place where they work.

The strength of rural and remote Australia is the character of its people – their courage, resilience and love of place. They are risk takers by nature and are willing to try different things to make place work for them and their families.

This can take surprising forms. Over the past four years, the town of Nhill in Western Victoria's remote Wimmera district has resettled more than 160 Karen refugees from the troubled northern border region of Thailand and Myanmar. Luv-a-Duck, a duck meat supplier, employs 54, while another seven work in businesses that supply Luv-a-Duck.[45]

The gradual integration of these new arrivals into the Nhill community and the commercial success of the factory have breathed new life into a place that looked set to languish, like many small rural towns experiencing population decline.

> *"Luv-a-Duck are delighted and honoured to be recognised for their work in assisting new migrants successfully settle into the Nhill community at the inaugural 2013 Australian Migration and Settlement Awards at Parliament House Canberra. Luv-a-Duck were specifically honoured with the 'Business Inclusion Award' for their work in training and employing over 60 Karen refugees through engagement with the Nhill community, AMES and local service providers to ensure workers connected with their neighbours and settled in a welcoming environment."*
>
> Luv-a-Duck 2013[46]

44 Kelly E, Lacks-Kaplan J and Star J (2014) 'City Planet: Business Trends 2014', Deloitte University Press, http://dupress.com/articles/bus-trends-2014-city-planet

45 AMES and Deloitte Access Economics (2015) 'Small towns, big returns – Economic and social impact of the Karen resettlement in Nhill', report.

46 Luv-a-Duck (2013) 'Luv-a-Duck Honoured by receiving the Australian Migration and Settlement Award', http://www.luvaduck.com.au/news/luv-a-duck-honoured-by-receiving-the-australian-migration-and-settlement-aw

Languishing

Every place has the potential to flourish but success is not guaranteed. Failure is also possible (Figure 5.2). Flourishing places build prosperity by playing to their strengths, while languishing places fail to seize opportunities to avoid ambiguity and watch prosperity drain away as dynamic forces of decline take hold.

Languishing is its own punishment. People leave because the key dimensions of prosperity compare unfavourably with job opportunities and lifestyles available elsewhere. Their departure makes the task even harder for those who remain. Even if new people arrive to replace them, they may have less to offer than those who left, reinforcing a vicious cycle of decline.

Places languish because they fail to catalyse the economies of agglomeration, or because they allow the diseconomies of congestion and disamenity – the ugliness of crowds and crowded places – to overwhelm economies of agglomeration.

Like Tolstoy's unhappy families, every languishing place languishes in its own way.

Figure 5.2: The languishing place

Inner city

With so much going for them in the era of the knowledge economy, what could possibly go wrong for inner cities? The downside of proximity includes congestion, pollution, noise and loss of privacy and amenity. Knowledge workers want to live near where they work, in close proximity to other knowledge workers, but they don't want to live in congested, noisy, ugly places.

> *"Intuitively, if labor is not moving to high wage cities… because of undesirable amenities – for example, workers may find these cities crowded, noisy and polluted – then increasing their size will increase aggregate output but not aggregate welfare."*
>
> Hsieh and Moretti, 2015 [47]

Balancing urban amenity against the pressure for proximity is a challenge. Inner cities languish if they overestimate knowledge workers' tolerance of the disamenity of crowded places. Building community can help, as can technology, while effective governance can give people hope that they can influence things for the better. But eventually knowledge workers vote with their feet and move to other cities with a more appealing balance of opportunity and amenity.

Even if inner cities get the balance right, there can be a self-defeating aspect of agglomeration: the phenomenon of places burdened by their own popularity. The more appealing an inner city becomes to knowledge workers, the more they are attracted there and the higher the price of inner-city accommodation becomes. There is a strong correlation between the growth of national income and house prices (Chart 5.1).

Chart 5.1: National income and house prices, Australia
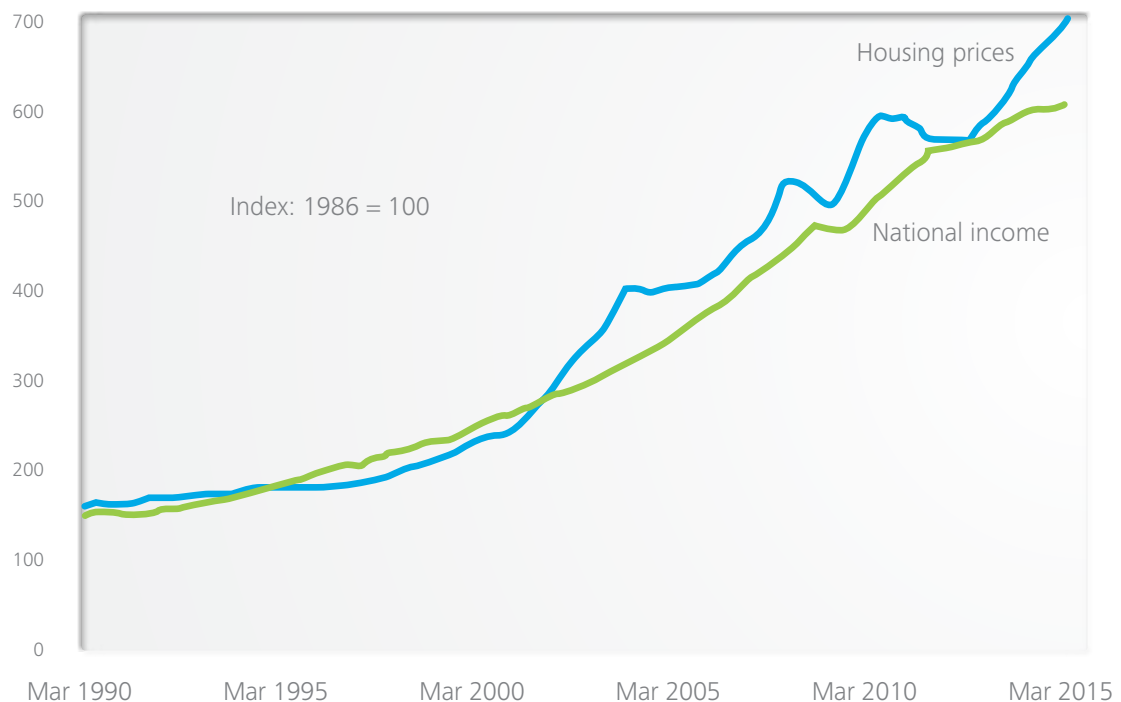
Source: Deloitte Access Economics 2015

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47   Hsieh, CT and Moretti, E (2015) 'Why Do Cities Matter? Local Growth and Aggregate Growth', NBER Working Paper No. 21154.

Suburbs and urban fringes languish when proximity to the inner city is reduced.

Knowledge workers can be turned away from a place as much by unaffordable housing as by urban disamenity.

Keeping housing affordable in the inner city is no easy feat. In the end, house prices reflect the interplay of supply and demand. Both supply of, and demand for, inner-city housing are price-inelastic – in other words, rising prices make little difference to the supply of inner-city housing or people's willingness to live somewhere else.

> *The Domain House Price Report for the June quarter of 2015 (Domain Group, 2015) reported that the median house price across the whole of Sydney has broken the $1 million figure, taking it higher than the average house price in London and approaching the average house price in New York City. According to Domain Senior Economist, Dr Andrew Wilson, "Sydney's median house price has increased by 22.9 percent over the 2014–15 financial year, which is one of the highest annual growth rates ever recorded by the city."[48]*

It can be difficult to augment the supply of inner-city housing when existing residents see their urban amenity or the value of their housing investments threatened. They are educated knowledge workers and they know how to block changes to local building regulations or urban development plans.

Yet whatever they gain in urban amenity, they risk losing by attenuating the economies of agglomeration.

Knowledge workers have an interest in seeing their incomes rise as the productivity of inner-city locations rises.

Good governance should be able to identify a way for existing property owners to gain more from allowing the economies of agglomeration to proceed than by blocking further development. If these conflicting interests can't be reconciled, the inner city languishes, or at least misses an opportunity to prosper.

Suburban and outer urban

Suburbs and urban fringes languish when proximity to the inner city is reduced. This happens as congested freeways and public transport make the commute to the inner city no longer tolerable for knowledge workers. Inner-city NIMBY-ism can be a source of this problem.

> *According to the TomTom Traffic Index, which uses GPS data to measure congestion, Sydney is Australia's most congested city. Paul Donegan and Jane-Francis Kelly of the Grattan Institute note that 29% of full-time employees living in Sydney spend almost three full weeks each year commuting. These commutes are stressful and can add thousands of dollars in transportation costs to annual household expenses – let alone the opportunity cost of that extra travel time.[49]*

Resistance to closer settlement within the inner city exacerbates urban sprawl across suburban and outer urban regions. Unless transport infrastructure keeps up with the need to travel longer distances by raising average transit speeds, urban sprawl lowers proximity to the inner city and to high-paying jobs for knowledge workers living in the suburbs and on the urban fringe.

With few opportunities for suitable work in a city's outer regions, and no longer willing to tolerate the commute to the inner city, suburban and outer urban knowledge workers will move to another city with better transport links. As these highly paid residents disperse, service

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48   Domain Group (2015) 'Domain House Price Report – June Quarter 2015'

49   TomTom (2015), TomTom Traffic Index, https://www.tomtom.com/en_au/trafficindex/#/city/SYD

workers find their job opportunities dry up as well. With fewer opportunities open to them to follow knowledge workers to different cities, they can themselves become part of fractured communities in declining suburbs – pockets of disaffected and idle people, increasingly alienated from work and social opportunity.

There is a limit to the appeal of open spaces on the perimeter of a large city when proximity to the inner city ceases to be a feature of the place and suburban life starts to fracture. Languishing can quickly descend into blight if people with the skills and attitudes needed to prosper in the knowledge economy make a bee-line for the exits. Apart from the income generated elsewhere that they previously brought into the community, they take with them their human capital, talent for innovation and willingness to lead and contribute.

Indeed, moving to a regional city can be even more appealing if other knowledge workers and retiring Baby Boomers have revitalised the prosperity of a place. Regional cities can grow at the expense of languishing suburban and outer urban regions of large cities if they offer a more attractive balance of knowledge work, civic life and public amenity.

Regional cities

Regional cities languish when they fail to transition from dependence on primary and secondary industries as the core providers of high-paying jobs. They have to attract knowledge workers with their proximity to inner-city jobs, via fast and reliable transport links and/or fast and ubiquitous internet connections, or by having knowledge workers dropped into their midst by government fiat or the commercial decision of a large business.

The stakes are high for regional cities. They are generally well ahead on community and amenity, and congestion and overcrowding are rarely, if ever, a problem. But without the economies of agglomeration, the core of high-paying jobs does not emerge, let alone grow, to release rising wages and incomes.

> *"A lack of focus and confident leadership limits communities, particularly the local economy. Without this confidence, organisations and individuals are significantly less likely to take the risks that often spur regional development. Without focus, they are unlikely to identify or realise their potential."*
>
> Regional Australia Institute, 2014 [50]

Regional cities compete with one another as well as with major cities, which adds to the pressures they face. People can move from one regional city to another with greater ease than moving to a capital city. House prices are likely to be similar across similar-sized cities, and other aspects of life in regional Australia may also be similar, especially if there are good transport links. Moving to another regional city may require less emotional adjustment than moving to the suburbs or outer fringes of a large metropolis.

Regional cities can languish even as, or perhaps because, their near neighbours flourish.

Rural and remote

Languishing in rural and remote Australia is largely due to the loss of people. As people leave, key services are withdrawn – including banks, supermarkets, doctors and pharmacists – and rural townships slowly die. Those living in remote areas must travel even further to access services increasingly available only in larger regional cities.

These places need people to come and stay, and they in turn need a reliable source of income. Even if houses are cheap, without reliable work that pays reasonable wages or an income sourced from elsewhere, people simply can't afford to live in rural and remote areas.

Australia's rural and remote regions include some of the places most vulnerable to the cycle of decline. When people have few options for moving elsewhere or feel emotionally or even spiritually anchored to place

50   Regional Australia Institute (2014) 'Prosperous Futures: Understanding the Potential of Australia's Regional Cities', report.

Getting places to flourish rather than languish is a collaborative effort. It needs people, communities, businesses and governments to work together – like an ecosystem.

(as many Indigenous Australians do), languishing can set in to a distressing extent, unleashing a range of pressing and desperate social problems.

For all their natural resources, Australia's rural and remote regions can be places where social exclusion is rife. This especially affects opportunities for children, who have a key stake in the future of a place. Languishing places can have families in which three generations have never held down a full-time job.

> "…areas with high child social exclusion are much more likely to be rural than urban, with large numbers of SLAs away from the populous and urbanised coastal areas falling into the bottom one or two social exclusion deciles."
>
> Ann Harding et al, NATSEM, 2006[51]

People in prosperous places have opportunities to improve their lives; in languishing places people are without hope of a better future in their current location.

What about your place?

Is the place where you live flourishing or languishing? Are more people coming or going? What sorts of jobs are they coming to or leaving for?

Is community life vibrant or flagging? Is technology ubiquitous or intermittent and outmoded? Do you have a say in what happens to your place, or are these decisions out of your hands or dominated by loud voices and well-heeled vested interests?

We all want our places to flourish. We have an interest in trying to catalyse virtuous circles of prosperity and avert vicious cycles of decline in the places where we live and work.

It's clear that individuals and communities gain from flourishing places. So do governments – flourishing places can support a wider range of public services and better schools and hospitals.

Businesses too have an interest in making places flourish. Knowledge workers create value in the knowledge economy; their interaction fuels innovation, which in turn drives profitability and growth. Investing in place makes good commercial sense when economies of agglomeration are the key to creating value.

> "A growing number of cities are bases of distinctive ecosystems fuelled by local institutions, infrastructure, culture, and government. These are not always intentionally designed as formal clusters, but are the result of unique combinations of past decisions, present capabilities, and local needs."
>
> City Planet: Business Trends 2014[52]

Getting places to flourish rather than languish is a collaborative effort. It needs people, communities, businesses and governments to work together – like an ecosystem.

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51 Harding, A, McNamara, J, Tanton, R, Daly, A and Yap, M (2006) 'Poverty and disadvantage among Australian children: a spatial perspective', NATSEM, University of Canberra.

52 Kelly, E, Lacks-Kaplan, J and Star, J (2014) 'City Planet: Business Trends 2014', Deloitte University Press, http://dupress.com/articles/bus-trends-2014-city-planet

Getting started

Australia needs to start a conversation about the changing purpose of place.

Our declining terms of trade and the pressures of an ageing population will drag down Australian living standards over the next decade and beyond (Chart 6.1). We need to boost productivity growth to sustain rising levels of material welfare in our country.

Like other developed nations, Australia looks to knowledge-intensity and creativity to drive innovation and productivity growth. Understanding the evolving purpose of place is the key to making places flourish in the knowledge economy.

Our places can deliver greater prosperity for current and future generations of Australians if we catalyse the process of flourishing and arrest that of languishing in place. This involves harnessing economies of agglomeration and taming diseconomies of congestion and disamenity.

Like other developed nations, Australia looks to knowledge-intensity and creativity to drive innovation and productivity growth.

Creating flourishing places across our five types of regions could be Australia's greatest source of created (as opposed to endowed) comparative advantage. This, in turn, could produce endogenous growth in our living standards while improving the aesthetic and cultural appeal of life in Australian places – catalysing a genuinely virtuous circle of prosperity.

Chart 6.1: Growth in Australian living standards (per capita GDP) (components, actual and forecast)

% Percentage points contribution, annual average
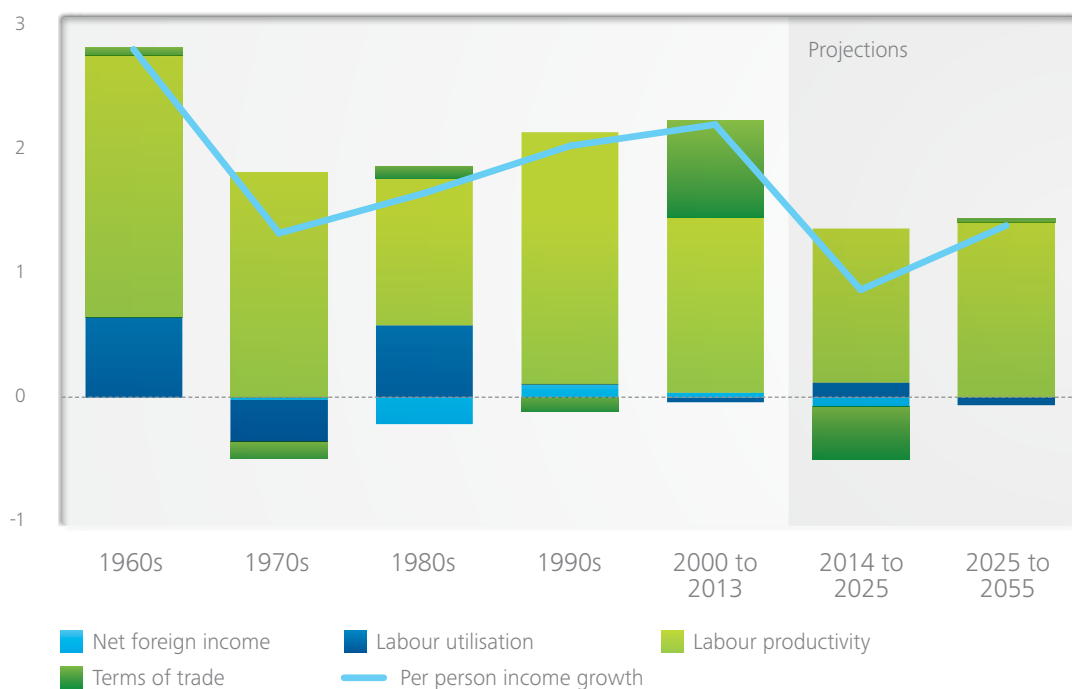
Source: Australian Treasury (2015)[54]

53   Carroll, L (1871) 'The Walrus and the Carpenter', from *Through the Looking-Glass, and What Alice Found There.*

54   The Treasury (2015) *2015 Intergenerational Report*, Commonwealth of Australia.

Who can act?

Australians have traditionally looked to governments for nation-building. Individuals and communities don't have the resources – or so it's thought – while businesses are widely perceived to be dedicated to building wealth for owners, rather than the nation.

Businesses have also been regarded as less committed to place than individuals, communities and governments. Businesses make no bones of the fact that they can shift from one place to another, including overseas if necessary, to pursue their objectives.

Individuals and communities are more committed to place than businesses, but they too can relocate. By contrast, governments are riveted to place; their very reason for being is bound to place.

So it's not surprising that people look to governments to do the heavy lifting – they have the wherewithal and the motivation.

But the changing purpose of place should make businesses, in particular, think again about the potential of place as a driver of commercial success. Businesses need increasing returns to drive growth in profits. Catalysing economies of agglomeration raises productivity, which in turn grows profits and the return on capital invested. What's more, ignoring this dynamic can lead to missed opportunities and stranded assets.

Could it be that making places flourish pays off at least as much for businesses as it does for individuals, communities and governments? Could economies of agglomeration be the greatest source of increasing returns, rising productivity and living standards since the Industrial Revolution?

If the key to rising productivity in the knowledge economy is innovation, and innovation stems from the creative potential released by agglomeration, every person and organisation has an enlightened self-interest in helping to create places that flourish rather than languish.

"In both the well-established, relatively stable cities of developed economies and the dynamic, fast-growing cities of emerging economies, we are sure to see far more use of technology and partnerships to help in a wide range of innovations directed at critical infrastructure and quality of life. Those businesses that commit to participating in such activities will weave themselves into the essential fabric of the future… As part of their "city strategies," companies must figure out when, where, and how to insert themselves into dynamic and rapidly evolving city networks of relevance to their business."

City Planet: Business Trends 2014[55]

Where to next?

Agglomeration spurs innovation because it catalyses the creative interaction of diverse groups of people, especially knowledge workers. Collaboration is vital.

Reconsidering the purpose of place is a call to all actors – individuals, businesses, communities and governments – to collaborate. They each have something to contribute and collectively much to gain from creating flourishing places.

The drivers of prosperity in place – that is, people, community, technology and governance – are not the exclusive province of any one actor. Engaging the dynamic forces to catalyse virtuous circles of prosperity calls for collaborative effort.

Reconsidering the purpose of place begins with four questions:

1. **What does flourishing look like?**

2. **Which of the 10 dimensions of prosperity most need to improve?**

3. **Which of the four dynamic forces will most likely catalyse a virtuous circle of prosperity?**

4. **How can each of the four actors best collaborate with the others to set the process in motion?**

55   Kelly, E, Lacks-Kaplan, J and Star, J (2014) 'City Planet: Business Trends 2014', Deloitte University Press, http://dupress.com/articles/bus-trends-2014-city-planet

A vision of flourishing

Having a vision of flourishing in place is an essential spur to action. "Where there is no vision, the people perish," says the writer of the Book of Proverbs.

Seeking to capture the essence of place – what it is that excites people about place, why they love place, and what they dream about a place becoming – is the stuff that powerful and emotive brands are made of. Businesses understand the power of brands to build loyalty and custom, and governments understand the power of symbols to motivate citizens (think of the Australian flag and the national anthem).

Seeking to capture an inspiring vision and a distinctive identity for the future of a place is an exercise in brand-building and symbolism that can start an animated discussion about what flourishing looks like. It's a natural subject for collaboration between businesses and governments, although individuals and communities must eventually join the endeavour if the brand is to catch on and be invested with meaning and purpose.

> "*Vivid Sydney highlights the role brand-building can play in fostering a sense of place. Started as a government initiative to support tourism, the annual 18-day festival of light, music and ideas attracted 1.7 million visitors in 2015. It has expanded beyond the core areas of Sydney Harbour and the Opera House to the University of Sydney in the inner west and Chatswood in the north. For Creative Director, Ignatius Jones, Vivid Sydney gives communities access to entertainment and creativity in a sensory-rich outdoor environment. It is an innovative way of branding the knowledge economy and creating new business opportunities.*"
>
> www.vividsydney.com [56]

Scope for improvement

Establishing where a place stands on the 10 dimensions of prosperity identifies areas where improvement is needed to encourage flourishing. Forming an accurate picture of the status quo requires reliable information.

Governments are often custodians of rich data, some of which are subject to privacy provisions but which, when aggregated, can give a detailed impression of the prosperity of a place. Increasingly businesses and non-governmental organisations also gather and analyse data for their own purposes, at least some of which could be shared.

Individuals supply more and more data voluntarily as they interact with governments, businesses and community organisations. For example, customers of retail stores such as Nordstrom allow their movements to be tracked when their smartphones sign up to the in-store Wi-Fi.[57] This can provide valuable information on customers' browsing habits, influencing store layout and allowing the retailer to offer product discounts in real time. For their part, customers hope to benefit from goods and services more closely tailored to their needs and preferences.

Establishing a rich information infrastructure can be as important to catalysing prosperity in place as building physical infrastructure. In the knowledge economy, data are the raw material from which information is extracted and knowledge forged. making data more freely available fuels collaboration and sparks creativity.

> *Lateral Economics (2014) reports that 'open data' creates economic value by improving transparency and accountability in government, enhancing strategic thinking by allowing lessons to be drawn from past experience, and empowering consumers.[58] Other benefits include engendering greater trust in government, which may increase citizen participation and create opportunities for innovation and improved efficiency in service delivery.*

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56   Vivid Sydney (2015), Destination NSW, www.vividsydney.com

57   Henry, A (2015) 'How retail stores track you using your smartphone (and how to stop it)', http://lifehacker.com/how-retail-stores-track-you-using-your-smartphone-and-827512308

58   Lateral Economics (2014) 'Open for Business: How Open Data Can Help Achieve the G20 Growth Target', Lateral Economics report commissioned by Omidyar Network.

Collaboration is emerging as a powerful disruptor of traditional ways of doing things – from exercising political power to sharing a car ride.

Catalysing the forces of change

Does bringing more people to a place build community, or do you build community first to attract more people? Does improving governance build community, or do stronger communities demand more inclusive governance? And does technology attract people or the other way around?

Asking questions like these is like asking whether the upper or lower blade of a pair of scissors cuts the paper. The answer is that both do; they are mutually reinforcing. The same is true of the dynamic forces that drive prosperity or adversity in place.

Which forces you start with depends on the relative strengths of the place you're trying to make prosper. If people are already coming, perhaps you need to start with community and governance, and add technology to maintain momentum as flourishing gets underway. If community is strong but there are too few people, starting there might be a better bet, with technology or relaxed planning and zoning rules (that is, governance) acting as the drawcard.

Collaboration

In the knowledge economy, networks displace hierarchies, power is dispersed and people trust peer-to-peer engagement more than they trust top-down authority mediated through institutions.

Collaboration is emerging as a powerful disruptor of traditional ways of doing things – from exercising political power to sharing a car ride. The internet enables collaboration across time and space like never before. At the same time, collaboration continues to evolve in more and more elaborate ways.

Gathering larger numbers of different people together in one place releases economies of agglomeration, while making life more complex. Collaboration is the key to reconciling the potential of diversity to spur our creativity and drive prosperity with its capacity to divide and alienate us from one another.

"Only connect… Live in fragments no longer," urges a character in EM Forster's famous novel, *Howards End*.

Prosperity, in the end, isn't all about luck. It results from deliberate actions that set the virtuous circle in train. Any of our four actors can take the initiative to drive prosperity in place. Individual entrepreneurs can transform places with their own bold visions for the future – "…connect[ing] the prose and the passion", as David Walsh has done in Hobart with his Museum of Old and New Art (MONA).

Communities can change places when they act together to rebrand their vision of the future. The tiny hamlet of Clunes in country Victoria rescued itself from oblivion by holding an annual book festival, now one of the largest of its kind in Australia. People no longer think of Clunes as a dying former goldmining town; the community rebranded itself and found new purpose and a new pride in place.

Businesses can make places prosper by investing in them, locating key facilities there, supplying infrastructure and services, and working with communities and governments to attract potential residents, workers and customers. Businesses can make places prosper by doing business there.

Through collaboration, shared value seeks to identify ways in which commercial objectives and wider social and community priorities can reinforce one another.

For example, Bell Bay Aluminium in Tasmania collaborated with nearby George Town-based CPT Engineering to develop CPT's capacity to meet Bell Bay's need for replacement anodes.[59] As a result, it won a $3.7 million contract in open contest against a Chinese competitor. Building local capacity saved on logistics, deepened the local pool of engineering skills, created three new jobs in George Town and helped develop Bell Bay's capacity for supply chain innovation.

Another example is the Australia Business Roundtable for Disaster Relief and Safer Communities, which brings together the CEOs of six very different organisations.[60] The roundtable identifies investments that mitigate disaster risks and save governments, communities, businesses and individuals the onerous cost of cleaning up after the event. These investments build resilience in places exposed to natural disasters such as bushfires, floods and cyclones. Each of the organisations involved advances its own objectives when the high cost of disaster relief is averted. But their collaboration also helps to catalyse prosperity in disaster-prone places.

While burnishing a business's reputation for social engagement, such strategies are also commercial. They aim to deliver higher profitability by growing the prosperity of places. A kindred idea was conceived by Michael Porter and Mark Kramer when they popularised the notion of shared value "…which involves creating economic value in a way that also creates value for society by addressing its needs and challenges".[61] Through collaboration, shared value seeks to identify ways in which commercial objectives and wider social and community priorities can reinforce one another.

> "…[S]uccessful shared value programs will seize the opportunity to bring together multiple forms of expertise, resources, and skills. Community and non-profit organisations will bring social acumen, and decades of experience working on extraordinarily complex social issues, to the table. Business will bring financial resources, market penetration, and product innovation skills. Governments can bring a wealth of social outcomes data, experience in social services, enabling approaches to the regulatory environment, and incentive schemes."
>
> Social Outcomes, 2015[62]

59 Preston, P (2014) 'How a Local Community Wins from Supply Chain Investment', Shared Value Project, http://sharedvalue.org.au/2014/11/how-a-local-community-wins-from-supply-chain-investment

60 Australian Business Roundtable for Disaster Resilience and Safer Communities, http://australianbusinessroundtable.com.au

61 Porter, ME and Kramer, MR (2011) 'Creating Shared Value', *Harvard Business Review*.

62 Social Outcomes (2015), *Shared Value in Australia: A Report by Social Outcomes*.

Finally, governments can catalyse prosperity by implementing public policies that attract people to live in a place, businesses to establish there and community life to grow there. By deciding to locate public facilities such as hospitals, universities and government departments in particular places, governments can kick-start wider developments that buttress the rejuvenation of places.

In February 2009, the Victorian Government relocated the headquarters of its Transport Accident Commission (TAC) to the regional city of Geelong. With 650 employees working from this office, the move gave a boost to the local building industry, as well as flow-on economic benefits to the local community. The relocated TAC complements Barwon Health (formerly Geelong Hospital) and Deakin University in establishing Geelong as a health hub. The opening of Epworth Geelong in mid-2016 will add a comprehensive acute and rehabilitation private hospital to the mix.

Only connect…

In all of this, collaboration is essential. While each of the four actors can act alone, the power of the four dynamic forces is unleashed exponentially when they act in concert.

Letting places languish is wasteful and a lost opportunity for people to lead more prosperous lives. As prosperity links more closely to place in the knowledge economy, individuals, communities, businesses and governments need to think deliberately about place. Their strategies for success cannot ignore the potential of place to drive prosperity.

We all need to reconsider the purpose of place.

Appendix

How we measured the prosperity of place in 10 dimensions

Inputs

Theme	Statistical indicator	Description	Data source	Time period	Weighting
Human Capital	Working-age population	People aged 15-64	ABS Census	2011	14.3%
	Level of education (1-11)	Weighted average of education level across the population (1 = 'did not go to school, 11 = 'postgraduate degree level')	ABS Census	2011	14.3%
	Participation rate	Population working or seeking work as a proportion of working-age population	ABS Census	2011	14.3%
	Tertiary or VET	Percentage with tertiary or VET qualification	ABS Census	2011	14.3%
	Living in work region	Those living in the same region in which they work as a proportion of the working population of the SA2	ABS Census	2011	14.3%
	Living – working population	Ratio of those living in SA2 with those working in SA2	ABS Census	2011	14.3%
	English	Proficiency in spoken English for non-native speakers	ABS Census	2011	14.3%
Natural Resources	Mineral deposits	Mining employment/ working population	ABS Census	2011	20%
	Agricultural resources	Agriculture employment/working population	ABS Census	2011	20%
	Forest resources	Forestry employment/ working population	ABS Census	2011	20%
	Fishing resources	Fisheries employment/ working population	ABS Census	2011	20%
	Rainfall	Evapotranspiration/area	BOM	1961-90	20%

Theme	Statistical indicator	Description	Data source	Time period	Weighting
Physical Capital	Mobile coverage	Mobile quality rating in area – 'very good', 'good' and 'limited' availability	MyBroadband	2014	16.7%
	Proximity to highway	GIS calculation of average distance for residents and businesses to nearest major road	RAI (Geoscience Australia)	2003	16.7%
	Proximity to rail	Average distance from SA1 to nearest rail station	RAI (Geoscience Australia)	2003	16.7%
	Proximity to aviation	GIS calculation of average distance for residents and businesses to nearest commercial airport	RAI (Bureau of Infrastructure, Transport and Regional Economics)	1985-2011	16.7%
	Proximity to port	GIS calculation of average distance for residents and businesses to nearest port	RAI (Ports Australia)	2012	16.7%
	Broadband quality	Broadband quality in area – from 'A' (best) to 'E' (worst)	MyBroadband	2014	16.7%

Boosters

Theme	Statistical indicator	Weighting	Comments	Time period	Weighting
Social Capital	Volunteers	Percentage of people living in area who are volunteers	ABS Census	2011	25%
	Support in crisis	Persons aged 18 or over who are able to get support in times of crisis from people outside the household	Social Health Atlas	2010	8.3%*
	Give support	Persons aged 18 or over who gave support to other relatives living outside the household	Social Health Atlas	2010	8.3%*
	Feels safe walking after dark	Persons aged 18 or over who feel very safe or safe walking alone in local area after dark	Social Health Atlas	2010	8.3%*
	Acceptance of other cultures	Persons aged 18 or over who disagree or strongly disagree with acceptance of other cultures	Social Health Atlas	2010	25%
	Inequality	Inequality calculated using total household income (weekly equivalised)	ABS Census	2011	25%

* These three indicators were deemed similar enough to be weighted equally as shares of 25%.

Theme	Statistical indicator	Weighting	Comments	Time period	Weighting
Innovation and Entrepreneurship	Business owners	Proportion of business owners	ABS Census	2011	33%
	Business innovation	Number of R&D managers/working population	ABS Census	2011	33%
	Own business income	Percentage of income by own business	ABS Census	2011	33%
Leadership and Contribution	Voter turnout	Voter turnout at federal level	Australian Electoral Commission	2013	25%
	Informal voting	Informal voting at federal level	Australian Electoral Commission	2013	25%
	Voluntary voting	Voter turnout at voluntary council elections (SA)	SA Electoral Commission	2014	25%
	Leadership capacity	Managers and professionals/ working population	ABS Census	2011	25%

Outputs

Theme	Statistical indicator	Description	Data source	Time period	Weighting
Health and Safety	Health risk	Estimated number of people aged 18 or over with at least one of four of the following health risk factors – smoking, harmful use of alcohol, physical inactivity, obesity	Social Health Atlas	2007-08	33%
	Mortality	Avoidable mortality	Social Health Atlas	2009-12	33%
	Crime rate	Offences as a percentage of population	Various	NSW 2014 VIC 2013-14 SA 2012	33%
Material Standards	Household income	Average household income	ABS Census	2011	25%
	Unemployment rate	Population actively seeking work/labour force	ABS Census	2011	25%
	Mortgage stress	Households in the bottom 40% of income distribution spending more than 30% of income on mortgage repayments as a proportion of mortgaged private dwellings	Social Health Atlas	2011	25%
	Rent stress	Households in the bottom 40% of the income distribution spending more than 30% of their income on rent as a proportion of rented private dwellings	Social Health Atlas	2011	25%

Theme	Statistical indicator	Description	Data source	Time period	Weighting
Natural Amenity	Proximity to nature conservation	GIS calculation. Average distance for a region's residents to the nearest nature reserve or national park	RAI (Geoscience Australia)	2004	25%
	Size of conservation area	Percentage of area that is protected	National Regional Profile	2015	25%
	Coastal proximity	GIS calculation. Distance from midpoint of each LGA to nearest coastline	RAI	2013	25%
	Outdoor tourism	Number of domestic day and overnight trips by calendar year	Tourism Research Australia	2014	25%
Local Amenities	Access to stores	Number of workers in retail trade, accommodation and food services/area	ABS Census	2011	33%
	Access to arts and recreation	Number of workers in arts, recreation, sports, heritage, creative arts and performing arts/area	ABS Census	2011	33%
	Access to local finance	Number of workers in financial services (e.g. banking, building society operations and credit union operations)/area	ABS Census	2011	33%

Ranking methodology

Each of these statistical indicators was collected at the SA2 level for the whole of Australia (or converted to the SA2 level) before being aggregated into averages for each of the five regions (inner city, suburban, outer urban, regional cities, and rural and remote).

Under each indicator, a Z-score was computed for each region:

$$Z\text{-}score = \frac{Region\ score - average\ score\ for\ all\ regions}{Standard\ deviation\ of\ score\ for\ all\ regions}$$

This captures how many standard deviations a region's score is above or below the mean for the entire group (e.g. the whole of Australia) on that indicator.

Under each theme, all regions were given a weighted average for the indicator Z-scores, which was then used to derive the ordinal rankings.

Deloitte offices

Adelaide
11 Waymouth Street
Adelaide SA 5000
Tel: +61 8 8407 7000

Alice Springs
9 Parsons Street
Alice Springs NT 0870
Tel: +61 8 8950 7000

Brisbane
Riverside Centre
Level 26, 123 Eagle Street
Brisbane Qld 4001
Tel: +61 7 3308 7000

Canberra
Brindabella Business Park
Level 2, 8 Brindabella Circuit
Canberra Airport ACT 2609
Tel: +61 2 6263 7000

Darwin
Level 11, 24 Mitchell Street
Darwin NT 0800
Tel: +61 8 8980 3000

Hobart
ANZ Centre
Level 8, 22 Elizabeth Street
Hobart Tas 7000
Tel: +61 3 6237 7000

Launceston
117 Cimitiere Street
Launceston Tas 7250
Tel: +61 3 6337 7000

Melbourne
550 Bourke Street
Melbourne Vic 3000
Tel: +61 3 9671 7000

Perth
Brookfield Place
123/125 St Georges Terrace,
Perth WA 6000
Tel: +61 8 9365 7000

Sydney
Grosvenor Place
225 George Street
Sydney NSW 2000
Tel: +61 2 9322 7000

Western Sydney
Eclipse Tower
60 Station Street
Parramatta NSW 2150
Tel: +61 2 9840 7000