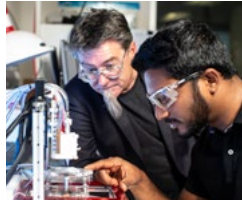


COMMITTEE FOR
GEELONG

Australia's Gateway Cities:

GATEWAYS TO GROWTH



University of Newcastle, Deakin University and University of Wollongong

For the Committee for Geelong, City of Greater Geelong, Wollongong City Council, and the City of Newcastle 2019



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Acknowledgement of Country: On the lands that we walk and live on in Geelong, Newcastle and Wollongong, we acknowledge the Traditional Owners and respect the nurture and care that they have given to country for tens of thousands of years.

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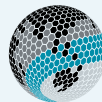
DISCLAIMER

The estimates provided in this report represent the research team's best efforts to provide a comprehensive and reliable overview of the economic and social contribution of Gateway Cities, based on the data and resources available. Estimates and subsequent views or opinions expressed in this document are those of the authors and do not necessarily represent those of the Committee for Geelong.

smart
infrastructure facility



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OF WOLLONGONG
AUSTRALIA



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CITIZENSHIP AND GLOBALISATION



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THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

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PART I. EXECUTIVE SUMMARY

Australia's Gateway Cities occupy a significant place within the economy. However, they have been underestimated in terms of public policy.

Current debates on fiscal rebalancing need to recognise the latent economic potential of Gateway Cities, while social policies should also incorporate the opportunities Gateway Cities offer in bridging the divide between metropolitan Australia and the regions.

Changes in the global marketplace are behind the growth of jobs and population in urban Australia. To accommodate that growth, Gateway Cities have capacity for more Australians to work, live and play here. We also have a capability to expand industry, manufacturing, property development, education and health services.

In this report we address the nature and contribution of Gateway Cities, consider the human dimension of these communities and their contribution to our national development and conclude with a review of policy settings and recommendations focused on future growth.

Geelong, Wollongong and Newcastle are three cities well positioned to make the most of the underlying utilities, surface roads, rail connections, skills and talents already in place, while welcoming newcomers, new infrastructure and new approaches.

We can do our part in facilitating the market's desires to provide space for people and jobs while also offering the social spaces of parks and recreation, the safe means of travel by all modes, amenity and public realm improvements that inspire people to love their (new) home.

In this report we address the nature and contribution of Gateway Cities, consider the human dimension of these communities and their influence on our national development and conclude with a review of policy settings and recommendations focused on future growth.

We are looking to assume responsible leadership in delivering high liveability, additional housing and new places of opportunity for all and be of great long-term benefit to Australia.

Australia is fortunate to have three globally-connected Gateway Cities that have demonstrated remarkable resilience over generations as they have adapted and adjusted to the pressures of globalisation and technology-driven structural change.

While important and significant in their own right, these Gateway Cities are even more important to the longer-term prosperity and security of Australia as they provide solutions and sustainable pathways for policy makers and civic leaders in helping to address some of our most pressing economic, social and security challenges.

It is especially critical that governments are willing and able to make the necessary long-term strategic investments in both physical and social infrastructure that will underpin not just regional growth but broader national interests.

We are doing well, but we can do more heavy lifting as a means of further unlocking future prosperity.



PART II. FROM OUR MAYORS

Our cities of Wollongong, Newcastle and Geelong have a proud history of contributing to the creation of Australia as we know it today. But we can do more.

This report identifies the characteristics that make Newcastle, Wollongong and Geelong – Australia’s Gateway Cities - unique places of work, education, culture, recreation and leisure.

At times, our cities have fallen between the gaps of national planning and population policy, occupying an uncertain world between our metropolitan capitals and the towns and cities of regional Australia.

By establishing the parameters of the greater contribution that our Gateway Cities can provide, we propose a set of recommendations that will further national economic and social prosperity.

We thank our three wonderful universities for their assistance in this project. This research was commissioned to delineate and further explain the concept of Gateway Cities in Australia. Hence the use of the term. This work has been made possible through the policy leadership of the Committee for Geelong (CfG). We are grateful to the Committee for its vision and ongoing advocacy for Australia’s Gateway Cities.

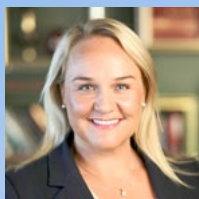
We commend the recommendations to our respective state governments and to the Commonwealth.

Our Gateway Cities have a history of innovation and transformation and we know that in the next decades these will stand Australia in good stead.



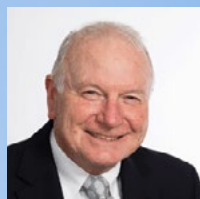
Cr Stephanie Asher

Mayor, City of Greater Geelong



Cr Nuatali Nelmes

Lord Mayor of Newcastle



Cr Gordon Bradbery AM

Lord Mayor of Wollongong

PART III. FROM THE COMMITTEE FOR GEELONG

The Committee for Geelong (CfG) was established in 2001 by local business leaders concerned for the future of Geelong and the greater Barwon region.

The Committee has focused its efforts on identifying opportunities for economic growth, attracting investment into Geelong and developing the next generation of business and community leaders.

We cherish the vibrancy, the culture and the sense of place that marks Geelong. We consider these are just as essential to community growth and resilience as economic investment.

Since 2015, the Committee for Geelong has also focused on the challenge of defining both the nature and the potential of Australian Cities.

This initially involved visits to the cities of Newcastle and Wollongong, where a similar sense of shared values and purpose created the basis for an effective collaboration between Newcastle, Wollongong and Geelong.

Subsequently, some members of the Committee for Geelong undertook an overseas study tour to further identify the characteristics of successful major cities and to refine a strategy for future growth.

The partnership between Geelong, Wollongong and Newcastle is now a strong one and this report amply demonstrates not only the shared assumptions of the three cities but also the extent to which all three share a common trajectory towards increased economic development, enhanced social inclusion and a quality of life that is unique to each of them.

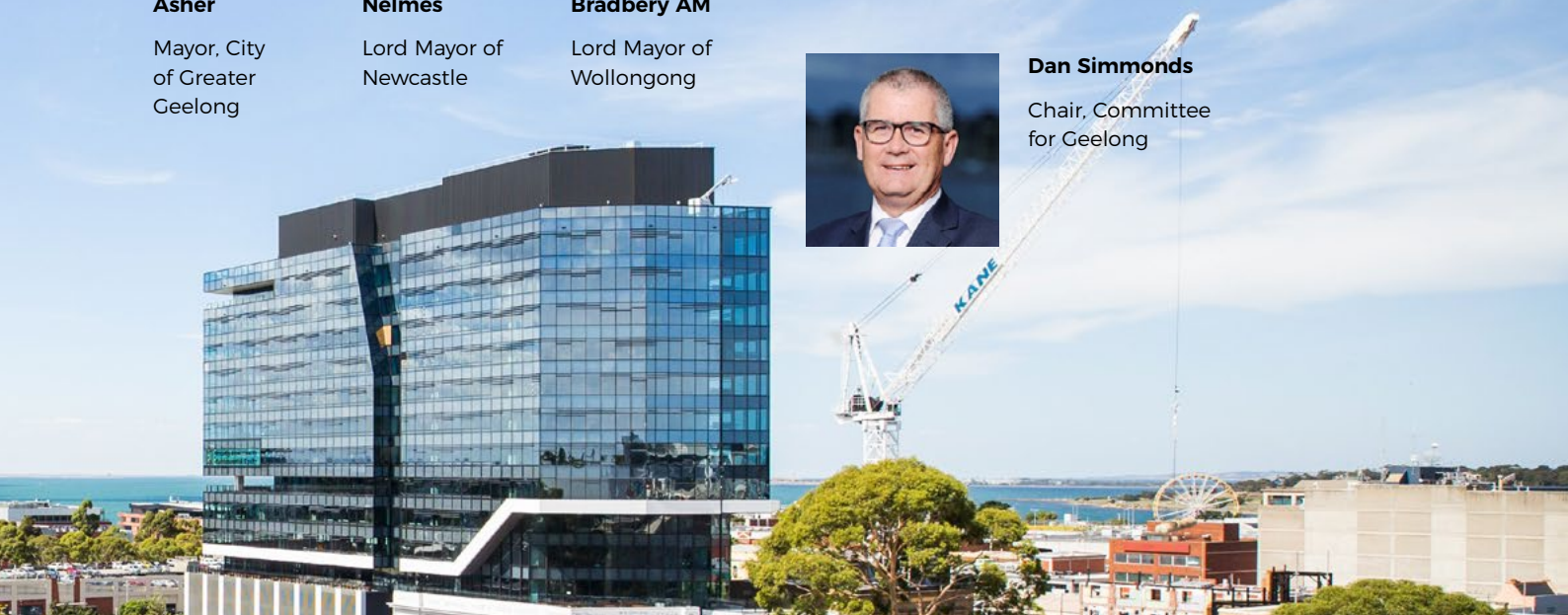
The Committee for Geelong exists only to serve its community and to seek out partnerships that can both amplify and extend the benefits of Gateway City living.

We join with the councils of Australia’s three Gateway Cities in commending this report to government, both for consideration and future action.



Dan Simmonds

Chair, Committee for Geelong



PART IV. WHO WE ARE

Newcastle

Newcastle is in Awabakal and Worimi country, at the mouth of the Hunter River on the NSW Coast.

Greater Newcastle has a population of 560,000 (City of Newcastle population totals 164,104; Newcastle and Lake Macquarie population totals 375,931).

Attracted by coal outcrops in the coastal cliffs, colonial authorities established what would prove to be a temporary penal settlement at the mouth of the Hunter River in 1797, and the coal produced became the colony's first export.

Permanent European settlement dates from 1804 (Coal River, later Newcastle) when another attempt at a penal settlement took place. That the bulk of the convicts sent there had been arrested as a consequence of the failed Castle Hill Rebellion proved a foretaste of the Hunter Region's deserved reputation for political and industrial radicalism.



Coal has been Newcastle's lifeblood for more than 200 years. From the earliest years of the 19th century, coal drove the Hunter economy, dictated patterns of settlement, ensured an international outlook for the community, and reflected the booms and busts of the Australian economy.

The economy of the Hunter region has been diverse since the 1820s, when free colonists began to make their mark. From that time, Newcastle has been both the gateway to and the export port of the rich agricultural and pastoral districts of northern and central western New South Wales.

Resources can be a catalyst for industrialisation, and in this respect, Newcastle has been no exception. Its social and economic impact has helped shape modern Newcastle.

The region has supported copper and aluminium smelting,

and it has been a major centre for ship-building. It also features mining-related engineering and steel-making as well as a diverse range of light and medium engineering and processing industries. Newcastle's transport gateways provide vital connections, regionally, nationally and globally. The Port of Newcastle is the epicentre of economic activity. Until late in the 19th century Newcastle

and its region relied on the sea for sustenance and communication. Today, the Port of Newcastle is the largest coal export facility in the world, shipping 160 million tonnes of coal in 2017. It has plans for further sustainable growth and diversification.

Newcastle Airport is also a global transport hub, used by more than 1.27 million people annually. Located adjacent to the Williamstown RAAF base, the airport is essential to seizing for Newcastle opportunities opened up by the Joint Strike Fighter program.

The region boasts a range of processing and advanced engineering enterprises, while the services sector has expanded markedly. Two of the region's largest employers are the Hunter New England Area Health Service and the University of Newcastle. The University occupies a critical position in the region's economy and its impact in research and innovation will be enhanced by the projected \$200 million STEM Precinct and further investment in innovation and creative industries at its city campus.

The John Hunter Hospital is the principal referral hospital for Newcastle and Northern NSW. Together with the Hunter Medical Research Institute, it will form the basis of a new Health and Innovation Precinct, supported by an investment of \$780 million from the NSW Government.

Innovation and creativity are similarly supported through a Smart City Strategy that emphasises Newcastle's future as an open, collaborative and connected city with technology supporting liveability and sustainability.

From its earliest years Newcastle has supported a vibrant cultural sector. The original theatre district hosted performers from around Australia and the world, and it has provided a home to a number of pre-eminent Australian artists. Similarly, the region also hosts national sporting teams in rugby league and soccer and offers a wide range of recreational activities.

In summary, this report is aligned with the *Greater Newcastle Metropolitan Plan* and seeks to reinforce its priorities, including strategies to increase infrastructure investment, promote workforce creation and provide improved quality of life, housing and connectivity for its population.



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The Port of Newcastle remains the economic epicentre of the region

Geelong

The City of Geelong is located on Wadawurrung land, around the shores of Corio Bay, and the eastern arm of the larger Port Phillip Bay on Victoria's south coast. First gazetted as a town in 1838, the current City of Greater Geelong has a population of 244,790 (Geelong C21 councils total 324,067).

After 1851 Geelong benefited from the discovery of rich goldfields less than 100 kilometres inland. Geelong came to see the Ballarat goldfields as their own. This gold boom was followed by an even longer period of prosperity based on the export of Western District wool.

Like Melbourne, albeit on a lesser scale, Geelong benefited from the industrialisation and growth in local manufacturing that accompanied the rise of the Victorian gold industry, becoming noted for its woollen mills, rope works, paper mills and breweries. James Harrison, founder of the Geelong Advertiser (1840), also became recognised as a pioneer in refrigeration, opening up the possibility of chilled and frozen meat exports to Britain, Europe and other markets.

But it was the wool export trade that gave Geelong much of its distinctive character. Large, imposing woolstores were constructed facing Corio Bay to meet the needs of the export trade and a web of rail lines beginning deep in Western Victoria converged on the town and the port to service the export trade.

Geelong officially became a city in 1910. By then it was recognised as the state's second major centre, leaving behind its rivals - the gold towns of Ballarat and Bendigo - as the gold industry peaked and declined. It would boast a thriving manufacturing sector, an internationally-focused business community, one of the oldest football clubs in the world, a notable regional art gallery and a major educator, the Gordon Technical College (1888).

Industrial expansion continued between two world wars, attracting the Ford Motor Company to establish a vehicle plant, Shell to build a refinery, as well as further woollen and knitting mills and a distillery. In the shadow of war,

in 1938, International Harvester opened a factory to produce agricultural machinery for both the domestic and export markets.

The importance of manufacturing in post-war Geelong and its role as a driver of economic and population growth was typified by the establishment of Alcoa's Port Henry aluminium smelter in 1962.

Like so many Australian centres dependent on medium and heavy manufacturing, changes to Commonwealth tariff policies after 1972 hit the local economy hard, while technological changes in the wool industry, particularly in handling wool for export, exposed the limitations of the Port of Geelong.

But while proximity to Melbourne and easy rail links have provided a measure of support, it has been the process of economic reconfiguration that is increasingly redefining Geelong.

It is true that the service sector, most notably in education and public health, has grown exponentially. But advanced manufacturing is also a significant growth sector, typified by companies such as Carbon Revolution, a manufacturer and exporter of single piece carbon fibre wheels. Deakin University is emerging as a research powerhouse, with its Waurin Ponds Future Industries Precinct acknowledged as a national leader in advanced manufacturing innovation and development, while other research facilities such as CSIRO's Australian Animal Health Laboratory and the Gordon Institute of TAFE serve similar functions in parallel fields.

While the economic transformation of Geelong continues, it is evident that manufacturing (advanced manufacturing technologies,



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It has been the process of economic reconfiguration that is increasingly redefining Geelong

food processing) continues as a key sector. The burgeoning growth in services, in particular education, aviation, health and medicine, as well as a lively creative industries and arts culture, has been materially supplemented by the relocation to Geelong of major government agencies, such as the (Victorian) Transport Accident Commission, the (Commonwealth) National Disability Insurance Agency, the Australian Bureau of Statistics, and WorkSafe Victoria.





Wollongong

Wollongong is a metropolitan area located between the Illawarra escarpment and the coast in Dharawal country, about 70 kilometres south of central Sydney. The population of the City of Wollongong is 216,071 (Illawarra 311,193), according to Australian Bureau of Statistics 2018 data.

With its urban shape and form dictated by geography, Wollongong is the regional capital of the Illawarra Region which includes the neighbouring LGAs of Shellharbour and Kiama.

In 1797, shipwrecked sailors, upon rescue and return to Sydney, reported coal seams outcropping from the sea cliffs in the Illawarra. They were followed by cedar cutters and pastoralists and by 1834 the small regional centre of Wollongong was gazetted as a town. The first road link to Sydney, down the Bulli Pass, was opened the following year.

Despite rich coal seams that were readily accessible along the coast, the local mining industry did not commence operations until 1849, due to the monopoly on coal mining held by the Australian Agricultural Company and its preference for mining in the Hunter Valley. But after the first Illawarra mine was opened that year at Mount Keira, the industry flourished, with no fewer than 15 mines opening along the escarpment by 1900. Coal continues to play an important role in the local economy as well as in the sense of what it is to live in Wollongong.

Coal also precipitated the growth of Wollongong as a major industrial centre. Steel was first smelted at Port Kembla in 1921, but it was the establishment of the Hoskins Steelworks - later Australian Iron and Steel in 1928 and the purchase of that plant by BHP in 1935 -



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Research, education and training are assisting the expansion of Wollongong’s regional manufacturing innovation ecosystem, along with advancing defence industry capabilities

that led directly to the creation of the largest concentration of heavy industry in Australia. These include iron, steel and coal production, copper smelting, fertiliser plants, locomotive repair and maintenance, coal and grain export facilities, industrial gas manufacturing, together with a host of dependant factories and workshops.

Steel production continues in Wollongong at greater scale than in Newcastle, and heavy industry maintains an important place in the local economy.

The University of Wollongong dates back to the establishment of an engineering college in the Illawarra by the New South Wales University of Technology in 1951. Having achieved autonomy in 1975, the University is now helping to transform Wollongong into a city of innovation, transitioning from a steel city towards a more diverse, highly skilled globally competitive region.

Research, education and training are assisting the expansion of Wollongong’s regional manufacturing innovation ecosystem, along with advancing defence industry capabilities. Work in these areas is also supporting local small and medium-sized enterprises (SMEs) to compete on both a domestic and global scale, while distributing opportunities across NSW for businesses to be exposed to a range of frontier materials and technologies.

The University’s Innovation Campus typifies the direction and influence of the University: premised on university/ industry collaboration, it leads cutting-edge research in such economically and socially relevant fields as intelligent materials, superconductors, future building design and construction, and health service delivery and policy.

New capabilities in technical services, defence procurement, scale-ups, finance and medical science are emerging, supporting Wollongong’s vision of a highly-skilled, vibrant community offering investment opportunities and work-life balance for its people.

PART V. GATEWAY CITY DEFINITIONS

AUSTRALIA'S GATEWAY CITIES SHARE THE FOLLOWING CHARACTERISTICS:

Geographically well-defined jurisdictions that are **predominantly urban while still allowing for a significant agricultural economic base**. Gateway Cities undertake significant public administration and public policy functions which may have a direct impact on the governance and well-being of the nation in addition to the relevant Capital City.

Economically significant and performing important production, the **logistical and trading functions** of Gateway Cities complement and reinforce the economic performance of the Capital City and the nation.

Gateway Cities have a history of contributing significantly to national and regional growth over an extended period of time (± 100 years), often **predominantly as a site for manufacturing and heavy industry**.

As a consequence of changing patterns of global economic activity and trade, Gateway Cities have the **capacity for economic transformation and regeneration**.

Gateway Cities are able to attain the necessary scale for economic, trade, logistical and social capital developmental responsibilities and impacts. **These cities are relatively large**, with a population ranging from 5 per cent to 50 per cent of that of the Capital City. In the Australian context, a Gateway City would require a population of at least 250,000.



Outward looking, Gateway Cities possess sufficient comparative advantages and related **strengths to encourage inward capital flows and private sector productive investment** to facilitate sustainable economic growth and development.

Gateway Cities support their existing and growing populations by providing **affordable quality accommodation and the full range of transportation options**, with efficient connectivity to the Capital City. They also provide residents with the choice of public, private and independent **schooling options** for their children.

The tertiary education system of Gateway Cities features a **full-service university and TAFE that are committed to their region and have demonstrated excellence in research and innovation** in specialisations perhaps unique to the institution and the region of the Gateway City and more broadly.

Gateway Cities have **full-service health and treatment facilities**, including teaching and referral hospitals, with high-tech diagnostics, specialist treatment and recovery – including palliative treatment options – on par or exceeding Capital City or national standards.

Recognised cultural, artistic and sporting activities help define, promote and integrate Gateway Cities domestically and within the global community. Creative industries, museums and galleries and sporting clubs also help facilitate their economic and social development.

Further information into defining Gateway Cities is contained within Appendix A of this report at www.committeeforgeelong.com.au/current-initiatives/

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Gateway Cities have a history of contributing significantly to national and regional growth over an extended period of time, often predominantly as a site for manufacturing and heavy industry



Identification of Australia's Gateway Cities

This table outlines the size, scale and characteristics of Gateway Cities. The criteria applied are specific to this project and can be adapted or modified as other centres seek such a status.

This data does not represent a claim to exclusivity in terms of infrastructure investment or broader population policy which necessarily will be applied to regions and

communities ranging from the most remote to regional capitals with populations exceeding one million.

Rather, it seeks to demonstrate the particular assets and advantages of Gateway Cities that can be deployed to maximise national economic growth, regional resilience, and job creation.



	Pop	Pfcr	Ed	Cn	Wtr	CI	SI	R&I	FsH	FsE	PAG	CAS	Er	Rei
Newcastle	✓	10.2/x	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wollongong	✓	6.3/x	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Geelong	✓	5.5/x	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gold Coast	✓	28.5/x	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Townsville	✓	7.6/x		✓	✓	✓	✓	✓	✓	✓		✓		
Cairns	✓	6.5/x		✓	✓	✓	✓	✓	✓	✓		✓		
Toowoomba	✓	5.8/x		✓	✓	✓	✓		✓	✓				
Ballarat	✓	2.2		✓	✓	✓	✓	✓	✓	✓		✓		
Bendigo		2.0			✓	✓	✓	✓	✓	✓				
Albury		1.9	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Launceston		41.6/x	✓		✓	✓	✓		✓	✓	✓	✓		
Mackay		3.4		✓	✓	✓	✓		✓	✓				
Rockhampton		3.3			✓	✓	✓		✓	✓				
Bunbury		3.7			✓	✓	✓		✓	✓				
Coffs Harbour		1.5			✓	✓	✓		✓	✓				



LEGEND*

- Pop** - Total population
- Pfcr** - Population - How many times larger the nearby First City is
- Ed** - Economic diversity
- Cn** - Connectivity, including through global trade
- Wtr** - Availability of reliable and adequate supplies of fresh water
- CI** - Critical infrastructure - including ports, rail, airports, roads
- SI** - Critical social infrastructure - including affordable quality housing
- R&I** - Research and innovation, including through university presence
- FsH** - Full-service health facilities
- FsE** - Full-service education options for school aged children
- PAG** - Public administration and governance
- CAS** - Cultural, artistic and sporting infrastructure / presence
- Er** - Demonstrated economic resilience and adaptive capacity
- Rei** - Long-standing regional economic linkages and community support

* For an extended discussion on Gateway City Criteria refer to Appendix A of this report at www.committeeforgeelong.com.au/current-initiatives/





Industry pioneers and innovation gateways for future economic growth

Australia's Gateway Cities are also playing a key role in the growth of advanced and additive manufacturing, with the development of technology-driven industries in areas such as carbon fibre, robotics, renewable energy and artificial intelligence

Australia's undisputed Gateway Cities are few in number but critical in the economic development of Australia due to their dynamism and significance in the world markets.

The Gateway Cities of Newcastle, Wollongong and Geelong have helped pioneer the development of Australia's mining and key export industries, most notably coal mining, forestry, wool, steel and aluminium. More recently, they have been innovators in global education, health and aged care, advanced manufacturing and clean technologies, finance and public administration and creative industries. A culture of innovation runs deep in each of these Gateway Cities.

Australia's Gateway Cities have also been key players in the development and expansion of regional full-service health care on a par with metropolitan standards. Their facilities provide first class local medical care but, through the work of medical institutes embedded within Deakin University (Geelong) and the universities of Newcastle and Wollongong and affiliated hospitals, also contribute to global medical research efforts.

Through the work of these universities, Australia's Gateway Cities are also playing a key role in the growth of advanced and additive manufacturing, with the development of technology-driven industries in areas such as carbon fibre, robotics, renewable energy and artificial intelligence.

NEWCASTLE CASE STUDY

Weathertex

Acquired from CSR 20 years ago, this independent company has carved out a high-tech niche manufacturing housing components from forest industry waste.

Now employing 120 staff, Weathertex exports a high percentage of its house panelling and other wood products.

Its panelling has strong environmental credentials. It is carbon positive and uses high-volume, low-value waste from forestry operations.

Weathertex produces market-leading products that outperform foreign competitors, are cost competitive and offer higher environmental credentials.

Cutting edge companies such as Carbon Revolution, Austeng, Vestas Renewable Energy, Marand and Quickstep have either established or relocated to Geelong, while innovative firms such as DSI Underground, Quarry Mining, Weathertex, Varley Group, Advitech Group and Hedweld have emerged in Newcastle. Advanced manufacturing companies prominent in Wollongong include Ecoheat, Stolway and Bisalloy.

Gateway Cities continue to play a critical role in Australian defence and national security, particularly through support for the Australian Navy in shipbuilding and Joint Strike Fighter sustainment at the major RAAF base at Williamstown, near Newcastle.

These cities also continue to make a significant contribution to Australia's sporting and cultural life. Similarly, each host a vibrant creative culture, with artists, performers, writers, musicians and artisans enhancing social life and creating new economic opportunity.

Each city hosts a successful club from one of Australia's professional football codes and each has the infrastructure to stage major national and international sporting events.

Each has also earned a deserved reputation for the quality of their civic art galleries.

Perhaps the most significant contribution these Gateway Cities have made to national development is their capacity to act as economic shock absorbers - they have a remarkable ability to deploy their diverse economic base to bounce back and withstand serious economic setbacks, community loss and natural disaster.

WOLLONGONG CASE STUDY

Bisalloy

Based in Wollongong, Bisalloy is Australia's sole manufacturer of high-tensile, abrasive-resistant steel plate.

Established in 1980, it now has a workforce exceeding 60 people and exports products to customers in Europe, Asia and North America.

Its steel plate has a variety of commercial uses. It is a world leader in military applications including armour plate for both land-based and marine hardware. It services a wide range of protective markets, including security, defence, commercial and private applications and is a market leader in abrasive-resistant steel for heavy duty industrial use.

The resilience and transformative capabilities of these three cities provide a national template for the inevitable structural economic changes to come. Such transformational capability has involved considerable investment in advanced manufacturing and information technology, as well as research-intensive innovation driven by a collaborative effort between local universities, industry and tiers of government.

Further support for the enhanced economic resilience of Australia's Gateway Cities will lay a foundation for future national economic success. In this respect, these cities also act as innovative gateways, identifying research pathways and solutions helping Australia meet the significant economic, social and environmental challenges of the 21st century.

While the challenge of transitioning to a low carbon economy are profound, Australia's demographic pressures, particularly the growing impact of an ageing population, presents perhaps the biggest challenge Australian governments need to face. Gateway Cities are perfectly positioned to provide a "release valve" to support a larger population on the eastern seaboard while also taking pressure off Capital City growth.

Significant economic diversification, the core natural and physical assets Gateway Cities enjoy and the significant social attraction stemming from high quality health and education services, affordable accommodation and natural amenity provide real nation building opportunities.

Australia's future prosperity will depend heavily on our capacity to continue to supply basic commodities and innovative services that are cost-competitive. Australia's Gateway Cities play a vital role in continuing to develop value-added, employment-rich service export industries and their history as export ports and proximity to international airports emphasises this role.

Universities and collaborative research hubs within our Gateway Cities – supported by ongoing commitment by the Commonwealth – will be essential in the development and application of new innovations and the ongoing evolution of emerging industries, including advanced manufacturing, information technology, artificial intelligence and robotics, clean technologies and renewable energy.

Gateway Cities will be critical in helping to meet international climate change obligations while simultaneously creating new economic and trading opportunities. The work that is already taking place in Gateway City universities in the development of technologies to support economic viability and reliability of renewable energy presents major environmental and economic opportunities.

Australia is fortunate to have three globally-connected Gateway Cities that have demonstrated remarkable resilience over generations as they have adapted and adjusted to the pressures of globalisation and technology-driven structural change.

While important and significant in their own right, these Gateway Cities are even more important to the longer-term prosperity and security of Australia as they provide solutions and sustainable pathways for policy makers and civic leaders to address some of our most pressing economic, social and security challenges.

It is especially critical that governments are willing and able to make the necessary long-term strategic investments in both physical and social infrastructure that would underpin not just regional growth but broader national interests.

The long-term dividends for Australia from doing so are immense.

GEELONG CASE STUDY

Carbon Revolution

Carbon Revolution is the world's sole manufacturer of single piece carbon fibre automotive wheels.

Originally spun out of doctoral research at Deakin University, Carbon Revolution now employs over 300 skilled workers at the modern facility at the University's Waurin Ponds campus.

Almost all of the company's production is exported to Europe and North America.

Carbon Revolution wheels are standard equipment on such marques as Maserati and Ferrari and are now supplied as original equipment on the Ford Mustang.





GATEWAY CITY ASSETS:

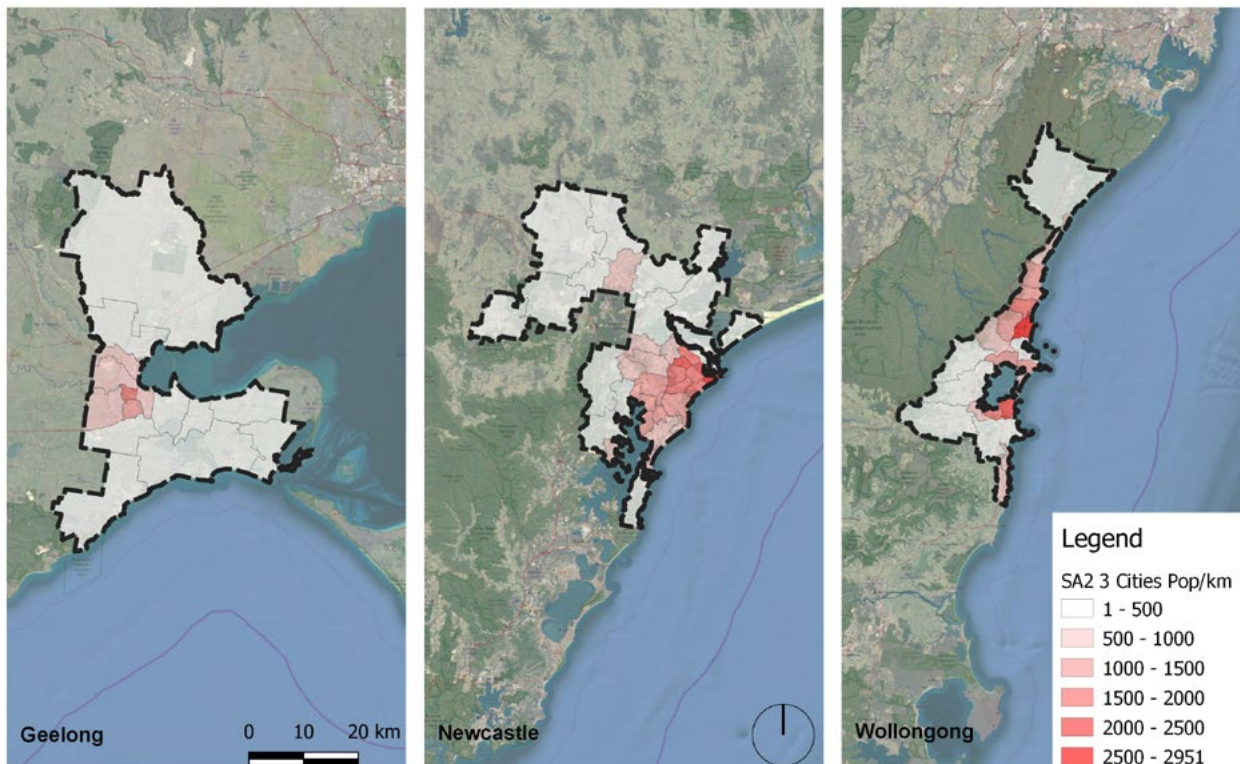
Spatial Density and Growth Potential

The three maps below illustrate the current built form of the three cities, demonstrating not only the potential for geographic expansion but also capacity for intensification of both population and economic investment.

IN SUMMARY, COMMON FEATURES ACROSS ALL THREE CITIES INCLUDE:

- Relative proximity to a Capital City (Sydney, Melbourne).
- More cost-effective operating costs than in a Capital City.
- Shorter travel times to work than nearby Capital City.
- Lower housing costs than nearby Capital City.
- Rich coastal and natural assets.
- High levels of amenity and liveability.
- Significant transport and freight infrastructure servicing international markets, capital city and regional hinterland.
- Excellent education and health services.
- Pockets of intergenerational economic, social and cultural disadvantage that have not recovered from major jobs displacement.

Three Cities, Six Density Gradients



The following pages catalogue some of the built, financial, human, social and natural characteristics of Wollongong, Geelong and Newcastle. These demonstrate that the Gateway Cities are unique places of work, education, culture, recreation and leisure.

The profiles are derived from LGA and regional plans, as well as ABS stats for these three cities.



Wollongong



BUILT

- Dramatic increase in demand for inner city living, with close to 1,500 dwellings in the CBD forecast to be delivered over the next three years. This development will result in a population increase transforming the city centre to a more vibrant and amenity-rich urban hub.
- Port Kembla (5km south of Wollongong) is NSW's largest hub for motor vehicle imports and the second largest coal export port. A gas terminal has recently been approved and cruise ship visits are also a priority.
- Accessibility to Sydney by road (80km) and rail. Access to Brisbane and Melbourne through a regional airport.
- The CBD has undergone a significant transformation, with \$1.5B in investment in recent years and another \$400M in the pipeline.
- Major investments recently completed include: \$268M upgrade to Wollongong Central, \$134M expansion of the Wollongong Public Hospital, and \$120M new private hospital on Crown Street. The University of Wollongong is also spending \$300M in infrastructure from 2016-2020 to support its growth.
- Most locations in Wollongong offer double and triple fibre redundancy options, and the CBD was an early rollout site for the NBN.

FINANCIAL

- Wollongong's Gross Regional Product is \$13.4B, around 60 per cent of the Illawarra region's \$23B economy.
- The CBD is home to over 25,000 jobs, with 20 per cent jobs growth since 2011.
- Advanced manufacturing is an important growth sector. Wollongong's diverse manufacturing industry taps into the city's unique industrial capabilities, skilled workforce, competitive business costs, modern business infrastructure and connectivity.
- The emerging sector of knowledge services is attracting increased corporate investment from outside the region.
- The Advantage Wollongong partnership between the University of Wollongong, Wollongong City Council and the NSW Department of Premier and Cabinet works to promote Wollongong as a superior business location.



HUMAN

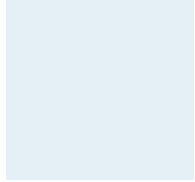
- The University of Wollongong ranks among the top 250 of universities in the world and the top 1% for research excellence and for quality of its graduates. The University is home to an award-winning Innovation Campus and a purpose-built business incubator - iAccelerate.
- Wollongong's workforce is highly educated, with around two-thirds holding tertiary qualifications. The number of workers with a bachelor degree or higher qualification has increased by nearly one-third since 2011.
- Around 23,000 Illawarra residents commute to Greater Sydney each day for work, providing an attractive pool of potential employees for any business operating in the city.

SOCIAL

- Wollongong is the third largest city in NSW.
- The CBD has experienced a cultural renaissance with over 80 new cafes and small bars opened since 2012.
- The population is culturally diverse - close to a third of residents were born overseas, and a fifth speak a language other than English (ABS Census, 2016).
- Wollongong has a vibrant cultural precinct based around art galleries, theatre and live performance and flourishing artisanal craft economy.
- Wollongong has the NBL Illawarra Hawks and the NRL St George Illawarra Dragons, which add to the region's sporting pride.

NATURAL

- Attractive natural setting that encourages growth in housing and tourism.
- Located south of the Royal National Park, with 17 patrolled beaches and rich agricultural land.
- Tourism contributes more than \$1B to the local economy.



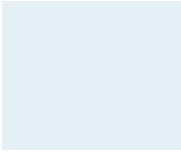
Newcastle

BUILT

- The *Greater Newcastle Metropolitan Plan* is a first for a non-capital city in Australia. It aligns with the vision of the *Hunter Regional Plan 2036* for a leading regional economy with a vibrant, new metropolitan city at its heart and a number of complementary locations to deliver new jobs and homes.
- An urban revitalisation strategy is being implemented in the City of Newcastle to a) increase density, transport connections, infrastructure and mix of high density residential and commercial; and b) to boost human capital in the finance, education and professional service sectors.
- Newcastle Port is a world-class deep water port central to the region's development. The proposed cruise ship terminal (now a temporary structure) is an important, complementary initiative.
- The Hunter Expressway has increased connectivity for industry in the Hunter region.
- Greater Newcastle has ample spare capacity in its port and airport infrastructure.

FINANCIAL

- Newcastle's Gross Regional Product in 2018 was \$16.9B, which represents 35 per cent of the Hunter region's GRP of \$50B.
- The manufacturing sector has core strengths in mining-related activity, food and beverage manufacturing, and a range of niche areas in advanced manufacturing. Resource and agricultural industries in the Hunter region continue to generate a significant level of economic activity.
- Newcastle Port is the largest exporter of coal in the world.
- The nearby Williamstown defence base is the maintenance facility for the advanced Joint Strike Fighters (F-35) operated by countries in the Asia Pacific region. The Williamstown airport and defence hub are crucial to Greater Newcastle's access to domestic and global markets.
- Proximity to Sydney enables growing domestic visitation, with increased international visitors expected due to investments in Newcastle Airport and the new Newcastle Cruise Terminal.
- Development of the world's first automated vehicle (AV) implementation strategy is supported by the NSW Government. This will leverage the city's strengths in advanced manufacturing and aeronautical engineering.



HUMAN

- Greater Newcastle is the centre for the provision of health, education and a broad range of services for the Hunter hinterland, the North Coast and the New England and North-West regions of NSW.
- The University of Newcastle is in the top 10 for research income in Australia and was recognised in the top eight in the recent Excellence for Research in Australia evaluations.
- Significantly, 93 per cent of Newcastle's knowledge-intensive workers work locally in Newcastle and the Hunter region.
- Professional services and health, education and tourism sectors are the largest and fastest growing industries.
- The legacy of the manufacturing and mining sectors gives the region a skill base that has contributed to its emerging role as a defence industry hub.
- The Hunter Medical Research Institute is a world-class institute that attracts top medical specialists and associated businesses and professionals.

SOCIAL

- Newcastle is the second largest city in NSW.
- The Newcastle CBD has played a lesser role in the Greater Newcastle economy than is the case with other similar-sized cities. This lesser role is the downside to Greater Newcastle's dispersed population, which means that the city centre benefits from greater attention to activation. The city-centre revitalisation strategy is designed to offer increased amenity and vibrancy.
- The revitalisation strategy aims not only to increase amenity but also to stimulate greater investment and create new, sustainable jobs.

NATURAL

- Rich in natural assets, including the Hunter and Manning rivers, the Hunter Valley, and Yengo, Wollemi, Mt Royal and Wattagan National Parks.
- The Hunter region is also the largest coal producing area in NSW.
- Iconic tourist destinations include world-renowned vineyards at Pokolbin and surf beaches. Increasingly vibrant city centres and national sporting events, like Surfest and Supercars, will bring Greater Newcastle to the global stage.



BUILT

- All levels of government have invested in the \$355 million Geelong City Deal to deliver major projects including a 1000-seat convention centre, the Shipwreck Coast Master Plan and the Revitalising Central Geelong Action Plan.
- Geelong is a major infrastructure hub, with international air and sea ports linked with state and national road and rail networks. This includes the Geelong Ring Road and Princes Freeway, Geelong Port and Avalon Airport.
- Geelong has Victoria's largest bulk port that can service agricultural demand, which is increasing.
- There is strategically located land available for designated growth areas and agricultural production.
- Mapping and investigation of renewable energy resources suggest that the region's strength is in geothermal power.

FINANCIAL

- Geelong's Gross Regional Product is \$8.14B, with Greater Geelong's GRP estimated at \$14.4B.
- Over the past 10 years, the drivers of economic growth in Geelong have been health care, education, construction and retail. Current trends indicate a continuation of growth in the health, education and construction sectors.
- The pristine coastline provides opportunities for aquaculture and marine industries.
- There is a growing services and events sector that is worth more than \$66M and is supporting jobs growth.
- Geelong operates as a 'food portal' within the region, providing major food and agricultural products and related distribution through national road and rail networks and regional saleyards.

HUMAN

- Well positioned close to Melbourne, Geelong performs an important role as a service centre for the state's south-west.
- The City of Greater Geelong and its community have a 30-year vision for Geelong to become a "Clever and Creative City." This positioning was strengthened in 2017 when the UNESCO Creative Cities Network designated Geelong as a City of Design.
- Deakin University is Australia's fifth largest university with over 62,000 students and is in the top cohort of research intensive universities in Australia.
- Biotechnology is an emerging industry through educational institutions such as Deakin University, Barwon Health and two CSIRO facilities.



- Geelong's Performing Arts Centre, its noted Regional Gallery and the Geelong Library and Heritage Centre demonstrate the depth of Geelong's creative industries and cultural programs.
- GROW (the G21 Region Opportunities for Work) brings together government, community, business and individuals to address joblessness in areas of high unemployment through social procurement and impact investment.

SOCIAL

- Geelong is the second largest city in Victoria.
- The Committee for Geelong offers a unique capability in supporting the future design and growth of Geelong while the G21 Region Alliance plays a key role in regional planning and connectedness throughout the municipalities of Colac Otway, Golden Plains, Greater Geelong, Queenscliffe and the Surf Coast.
- The Greater Geelong municipality accommodates over 75 per cent of the region's population and housing activity. The western area of Melbourne is experiencing rapid growth. This will have an impact on the region in terms of infrastructure and service utilisation.
- The Geelong Football Club is a source of economic stimulus and community pride.

NATURAL

- Environmental features include the Bass Strait coastline and marine national parks, the Otway forests and national and state parks. Port Phillip Bay and Corio Bay coastlines also distinguish the region.
- Tourism and recreation opportunities include the coast, food and wine, nature and walking/cycling experiences, and events.
- The region includes a number of natural resources and extractive industry operations that provide energy, construction materials, landscaping and agricultural products.
- The rural areas in the central and western parts of the region are highly productive and enjoy relatively high rainfall compared to other parts of the state.



The human dimension of Gateway Cities

Businesses and economic investment sustain communities but it is people who make them. It is imperative to acknowledge the robustness of our Gateway Cities derived from the cultural, social, educational, environmental and sporting priorities of the people who live in these three cities. This section addresses the human dimension and connectivity of Gateway Cities.

LIVEABILITY

Gateway Cities have been recognised as having greater liveability than larger metropolitan centres. One can attribute their attractiveness to a more “human scale” of interaction and more ready access to physical amenities.

Newcastle and Wollongong are noted for the amenity of their beaches, clean environment and affordable homes. Geelong has been ranked as one of Australia’s most liveable cities, aided by its proximity to the famed Surf Coast.

All three have included liveability objectives into civic renewal strategies, with similarities in approach. All

promote amenity and access to beaches. All have identified growth sectors such as medicine and public health, education, transport and logistics and advanced manufacturing that support jobs and investment.

Their smart city initiatives also anticipate the effectiveness of the Internet of Things to improve economic, social and cultural attraction.

There are a number of salient, competing scales used to rate liveability internationally, but there are common factors that emerge: health, education, culture, the economic climate, transport infrastructure, recreation, the environment and stability in government.

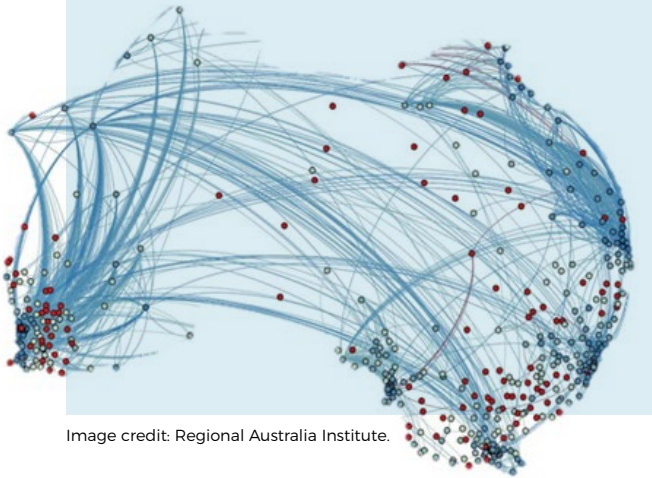


Image credit: Regional Australia Institute.

CONNECTIVITY

Gateway Cities occupy a strategic position within the hierarchy of Australia's network of cities and towns.

In addition to acting as a release valve for larger metropolitan areas, they can also serve as an important sink for talent – places where skilled workers can move to, enjoying the advantages of Gateway City lifestyle while working full or part-time in an adjacent metropolitan area.

Obviously, the efficacy of Gateway Cities depends on adequate investment in effective physical transport links and high speed digital connectivity.

On the other hand, the economic, social and cultural benefits of Gateway Cities flow through to their extended hinterlands. A direct correlation exists between the higher levels of services and infrastructure in Gateway Cities and the higher-rated access to such services enjoyed by surrounding small towns.

Gateway Cities have a clear role in providing tertiary education access to their regional areas, contributing to attracting and retaining younger people in the regions. Recent work by the Productivity Commission and others also suggests that the better health services of a Gateway City improves access to quality health services in adjoining towns and communities. Thirdly, Gateway Cities have a clear role in providing effective financial services to their hinterland, serving as a further stimulant to regional economic development.

• *Connectivity and location are discussed in greater detail in Appendix C of this report at www.committeeforgeelong.com.au/current-initiatives/*

POPULATION TRENDS: GATEWAY CITY GROWTH AND RETENTION

While attention has focused on the size and scale of major metropolitan centres, a unique set of attractors has also ensured the vitality of Australia's Gateway Cities. A number of demographic factors contribute to their economic and social growth, including:

High amenity and high liveability: a trend for many millennial graduates to prioritise lifestyle choice over career, seeking access to culture and leisure activities. This high-productivity, innovation-friendly demographic represents a pivotal opportunity for Gateway Cities.

Younger adults with families: seeking more affordable housing, this group brings the benefits of skill and workforce experience, while also promoting opportunities for family migration, increased school enrolments and participation in community activities.

Semi-retirees: technological change and the rise of the service sector economy creates more opportunities for older workers beyond normal retirement age. Greater labour force participation rates have positive implications for Gateway Cities.

Migrants: there exists a spill-over effect in international and inter-regional migration, with numbers of migrants attracted to Gateway Cities due to economic opportunity.

Gateway Cities compete effectively for population and economic growth due to lower housing costs, higher density labour markets and city-like amenity. For businesses, the lower cost of land, efficient transport and logistics infrastructure and access to skilled labour make Gateway Cities attractive sites for investment and growth.

• *Issues related to population trends are discussed in greater detail in Appendix B of this report at www.committeeforgeelong.com.au/current-initiatives/*

Gateway City Population and Growth Rates

(For the ABS-defined labour markets)

City	2017 population (millions)	5-year growth (%)	1-year growth (%)
Newcastle-Maitland	0.48	5	1.0
Wollongong	0.30	6	1.2
Geelong	0.26	12	2.7

www.blog.id.com.au/2018/population/population-trends/the-50-largest-cities-and-towns-in-australia-by-population-2018-update/ - 29/7/19 ABS statistics

PART VI. NEED FOR A NEW POLICY APPROACH

As Australia's population continues to grow, strains of rapid urbanisation in Sydney and Melbourne intensify. Gateway Cities are well placed to facilitate the ongoing sustainable growth and development of the Australian eastern seaboard by accommodating bigger populations and being able to support them through employment, world-class health, education and communication services and affordable accommodation.

At a Federal level, the Infrastructure, Regional Development and Cities portfolio addresses many of the policy challenges faced by Gateway Cities, not the least by seeking to coordinate jobs growth, productivity improvement, economic growth and sustainable social and infrastructure investment, including to regional Australian centres.

While many initiatives may be cited, what they have collectively provided to Gateway Cities is less clear. The beneficial effect of City Deals is readily acknowledged but we also seek a more holistic approach to growth and sustainability, based on our shared Gateway Cities vision.

We believe that applying many of the concepts embedded in the National Settlement Strategy, as proposed by the Planning Institute of Australia, provide an important - and accurate - context for our ambitions and advocacy.

Priorities that underpin our advocacy for greater strategic investment in Gateway Cities include:

- Identifying long-term growth and liveability outcomes.
- The benchmarking of indicators relating to health, education, labour market formation and growth and digital connectivity.
- Long-term targets for housing, population and jobs growth.

Step-by-step recommendations for action

The three cities are well positioned to make the most of the underlying utilities, surface roads, rail connections, skills and talents, newcomers and new approaches.

We can facilitate the market's desires to provide space for people and jobs while also providing the social spaces of parks and recreation, the safe means of travel by all modes, amenity and public realm improvements which inspire people to love their (new) home.

A clearly outlined plan should include targets we can achieve, jobs spaces we can provide, along with integrated road and rail upgrades to support the housing and job locations.

Therefore, we have considered the four steps each tier of government can take to work in lockstep with each other. These are listed in the the following table.



GOVERNMENT/ STEPS

FIRST STEP

Collaboration and prioritisation strategy



SECOND STEP

Housing, services and infrastructure



THIRD STEP

Mobility and access options



FOURTH STEP

Project priorities



OUTCOMES

FEDERAL ROLE	STATE ROLE	CITY ROLE
<p>Work with cities to develop a whole-of-government approach that identifies the most appropriate programs to fund continuing economic investments to support Gateway City population growth.</p>	<p>Establish a central pathway for communication for cities to facilitate whole-of-government consideration.</p>	<p>Establish a coordinated communication and consultation approach for identification of key priorities for each city.</p>
<p>Generate a list of Gateway City priority projects that are in the national interest and from these establish which have the greatest potential to support accelerated population growth in Gateway City areas capable of accommodating substantial growth.</p>	<p>Create a comprehensive spatial plan based on new population growth areas being linked to existing areas and acknowledge that all such areas should have an array of amenities and services if they are to draw new population growth.</p>	<p>Review land use and infrastructure provision and suggest where land can be rezoned. Also note what infrastructure will need to be in place to accommodate various thresholds of population increase.</p>
<p>Support the states to align standards so that they are regulated across the country with an objective to improving the daily life of most people in most places.</p>	<p>Establish or revise a set of transport standards, facility design, robust parks and public realm standards, and environment management.</p>	<p>Increase multimodal travel options so that future travel requirements increase the public realm connection and increase 'liveability'.</p>
<p>Review the population base and potential future population. Apportion revenue streams towards projects deemed to have gone through planning gateways, which have proven project management oversight and have completed public consultation.</p>	<p>Liaise with all levels of government and stakeholders on their list of priorities and budget.</p>	<p>Identify priority projects which benefit the national economy and local community. The public consultation will be important in identifying and clarifying priorities.</p>
<ul style="list-style-type: none"> • Happier cities, happier residents. • Improved health. • Evidence of revenue streams being used to generate yet more revenue streams. • More time with family and community. • Increased productivity. • Decreased congestion in metropolitan centres. 	<ul style="list-style-type: none"> • A more even spread of population growth. • Increased housing affordability. • Reduced motor vehicle congestion, costs. • Benefits of each state's expenditures are captured in economic terms as both costs are avoided and spare capacity is taken up. 	<ul style="list-style-type: none"> • Higher population growth. • Larger labour force, attraction of investors (especially job creators). • Improved infrastructure to support this growth while measurably increasing the liveability of the city.

PART VII. RECOMMENDATIONS

We are three cities of lengthy industrial heritage that have transitioned and continue to transition as changes in the global marketplace alter the local jobs market. We have capacity to accept more people and expand industry, manufacturing, property development, education and medical science.

Our request is for a stable source of transparent funding for ongoing investment. This consistency creates confidence on which to plan, invest and build more great cities for Australia. The Gateway Cities of Australia are now willing to assume responsible leadership in delivering high liveability, additional housing, open new places of opportunity for all and be of greater long-term benefit to Australia.

Our Gateway Cities have clean waterfronts as attractive settings for families and older Australians. Our specialised industrial locations and ports will continue into the future as sites for freight logistics and advanced manufacturing. These are the sites of jobs and work that can grow the economy when well invested in.

We are also cities with universities and TAFEs. These higher education institutions not only educate the best and brightest already here but also attract people with ambition, entrepreneurs, and those with a willingness to bring their best to the Australian economy. They address industry and community needs and help existing and emerging industries adopt new technologies.

Our hospitals not only provide care. They offer good long-term employment and original research into aged care, biomedicine, public health and training.

We can offer a great deal to the Australian economy and quality of life, but we will need additional focus and resources from all tiers of government to make this work for the benefit of Australia.

“

We can offer a great deal to the Australian economy and to its quality of life, but we will need additional focus and resources from all tiers of government to make this work for the benefit of Australia.

Shared interests

1. The Committee for Geelong to act as Secretariat and lead the development of an Alliance between the City of Newcastle, the City of Wollongong and the City of Greater Geelong to collaborate, share information and develop a timeline for advocacy to state and federal governments on shared opportunities and challenges for these cities. This Alliance will be guided by a memorandum of understanding and this Alliance will be used as an inclusive platform to advocate for strategic government assistance in core economic, social and environmental policy and investment.
5. While the three cities continue to provide world-class public health care through their networks of hospitals, an investment in the research-intensive medical, bio-medical and public health activities of related research institutions has the potential to deliver enormous benefits to effective treatment, service delivery and the management of health services costs. We propose that the Federal Government reserve a percentage of the MRFF to support an expansion in the work of Gateway City medical researchers in these critical medical and public health research areas.

Infrastructure

2. The Alliance seeks Federal Government support to develop the most accessible, sustainable transport connections for both passengers and freight for the three cities. We acknowledge that such planning is under way in some circumstances at both a state and federal level.
3. Each of the three cities faces challenges in relation to managing growth and the strategic development of their CBDs and other strategic precincts. Initial research indicates that each city is drawing different lessons based on their historical experience. Members of the alliance should share the fruits of their experience in managing growth and developing strategic precincts within their cities.

Innovation and economic growth

4. Continuing economic growth and diversification within the context of fiscal rebalancing is crucial to recognise the latent potential of Australia's Gateway Cities. The Alliance will seek strategically-directed support from state and federal governments for emerging industries such as advanced manufacturing, information technology and robotics, artificial intelligence, public health, education, food and fibre, mining and professional services. We anticipate that this will take the form of support for infrastructure, capital expenditure, export promotion and skills and training or a mixture of all of these.

6. The Alliance should explore the benefits of coordinated action for the provision of greater access to education for regional and remote students, strategic investment in research focused on economic development, job creation, enhanced productivity and competitiveness, improved amenity and liveability of Gateway Cities, public health and environmental improvement and remediation.

Human and social capital

7. The Alliance recognises that economic prosperity and social cohesion depend on an agile, literate and skilled workforce. Gateway Cities are already exemplars of supporting the transition to a global, digital economy supported by an appropriately skilled workforce. Nevertheless, key gaps remain. The Alliance seeks Federal Government support for integrated planning to identify:
 - Future and emerging workforce skills, effective modes of partnership with key employers and industries in order to ensure the right mix of training and education pathways.
 - Necessary future skills.
 - Necessary benchmarks and metrics to ensure timely training for our transitioning economies.
8. The Gateway Cities have each identified areas of long-term economic, social and cultural disadvantage. It is imperative that in implementing these recommendations 1-8 that the Alliance ensures that its members focus on delivering benefits to the whole community to ensure that those facing challenges can benefit from growth and prosperity.

Australia's Gateway Cities:

GATEWAYS TO GROWTH



PART VIII APPENDICES AND CASE STUDIES

available at [www.committeeforgeelong.com.au/
current-initiatives/](http://www.committeeforgeelong.com.au/current-initiatives/)

These documents have been commissioned as part of a second-tier cities study. In the course of this study, researchers have recommended the adoption of the term "Gateway Cities".

Appendix A National Second City Policy Development Framework: Defining the 'Second City' and Key Criteria for Australian 'Second City' Eligibility

Appendix B Population and Migration Debate in the Context of Second Cities

Appendix C Connectivity and Location

Appendix D Anchor Institutions: Old and New

Case Study 1: Advanced Manufacturing in Newcastle

Case Study 2: Anchor institution profile - Value of the John Hunter Health and Innovation Precinct to the region and beyond

Case Study 3: Gold Coast as a Second City: A Case Study

Case Study 4: How does Geelong 'win from second'?

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Australia's Gateway Cities:

GATEWAYS TO GROWTH

APPENDICES

University of Newcastle, Deakin University
and University of Wollongong

For the Committee for Geelong,
City of Greater Geelong, Wollongong City
Council, and the City of Newcastle 2019



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DISCLAIMER

The estimates provided in this report represent the research team's best efforts to provide a comprehensive and reliable overview of the economic and social contribution of Gateway Cities, based on the data and resources available. Estimates and subsequent views or opinions expressed in this document are those of the authors and do not necessarily represent that of the Committee for Geelong.

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CITIZENSHIP AND GLOBALISATION



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FOUNDATION CENTRE



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APPENDIX A

National Second City Policy Development Framework: Defining the Second City and Key Criteria for Australian Second City Eligibility

Professor Andrew Reeves et al, Deakin University

Introduction

In recent years there has been a growing interest in the economic and social opportunities emanating from cities and large regional districts beyond the major or First Tier Cities. This in part reflects the increasing globalisation of economic activity and the significant pressures strong population growth and infrastructure constraints are placing on our largest cities.

As policy makers, investors and researchers explore ways to leverage the current and prospective economic contribution of smaller cities and regional centres, it is important that there is a general understanding and acceptance of what constitutes a Second City and the key attributes that not only help define such cities, but which may guide future investment and the framing of public policy.

In the Australian context, what clearly emerges despite the almost unavoidable subjectivity that is inherent in any definitional and city ranking methodology, is that only a small number of our regional cities and towns appear to genuinely fulfil the attributes of Second Cities.

This does not detract from the attractiveness and strong developmental and quality of life potential of many Australian towns and cities, but any Federal and State Government strategies to target the regions need to adopt clear and unambiguous definitions and boundaries for the setting of policy, including with the provision of possible fiscal incentives.

The relatively unique financing arrangements within the Australian Federation, particularly with respect to the policy objectives and administration of Commonwealth grants to the States to achieve horizontal fiscal equalisation (HFE), raise issues relating to the independent revenue base of certain cities in the smaller jurisdictions, including First Cities, that can be a source of legitimate political tension if Government financial incentives or related public policy initiatives are seen to favour emerging Second Cities in the smaller jurisdictions. The sensitivities arising from these structural issues should at least be noted and possibly pre-empted in any future strategy to develop or promote an Australian Second City.

Definitions

The concept of the Second City and its possible public policy and economic development implications has been of increasing interest to researchers and planners as the urbanisation of the world's population has grown dramatically, particularly since the Second World War.

Despite the growth in the research literature, there remains considerable debate and division as to what really constitutes a Second City and the degree to which it is possible to identify objective and rigorous criteria to classify cities according to meaningful tiers or rankings.

The United Nations defines a Second City as an urban area that has a population somewhere between 100,000 to 500,000 people.

This definition in part follows the work of D.A. Rondinelli in the 1970s and early 1980s, who defined Second Cities as primarily urban settlements with a population of at least 100,000. However, this is somewhat limiting given the international experience with some secondary cities in China for example, having populations well exceeding 3 million.

Others (Roberts et al 2014) argue that rather than adopting a numerical population size, a proportional approach vis-à-vis the primary or First City in a country or geographical jurisdiction is more apt.

On this basis, there appears to be some consensus that a Second City will have a population ranging between 10-50 per cent of the First City.

However, even this is limiting and throws up distortions noting that Geelong, officially recognised as Victoria's Second City - only has a 2017 population of a little over 5 per cent (260,000) to that of Melbourne which very recently reached 5 million inhabitants.

Newcastle-Maitland, with a 2017 population of 482,000, just makes 10 per cent of Sydney's 2017 population, while Wollongong with 299,200 residents in 2017, represents only 6.3 per cent of Sydney's recorded population.

Conversely, Launceston, with a 2017 population of 87,000, recorded a population 42 per cent the size of Tasmania's 'First City' Hobart, making Launceston a clear cut Second City if this methodology is adopted.

As important as population size is for defining a Second City – particularly given the economic multipliers and opportunities generated from the size of local markets – there are other critical defining characteristics.

Functionality and placement within a national hierarchy are also important defining characteristics of Second Cities.

Functionality is especially significant and will include overall governmental responsibilities which may also extend to national public administration and policy development responsibilities. Such responsibilities may have evolved historically over time or may be relatively recent outcomes of deliberate national political or policy decisions.

For example, Geelong is home to the national headquarters of the recently established National Disability Insurance Scheme (NDIS) which, once fully implemented, will become one of the most significant components of Australia's welfare system.

The diversity, scale and national economic significance of Second City industry and its overall productivity is also a critical defining feature.

The overall contribution or capacities within the city to develop human and social capital, through the existence of world-class institutions of higher learning and innovative research hubs, first-class health facilities and critical infrastructure to support global trade and interconnectivity, are further critical defining characteristics of Second Cities.

A Second City, therefore, may be defined not necessarily by the size of its overall population – and the demographic profile of that population, which will have a direct impact on its actual and potential productivity, including its overall impact on national outlays and revenues – but by their economic geography and supporting infrastructure.

The rapid globalisation of world trade, finance, technological innovation and the movement of people also suggests that a Second City needs to be outward looking and possess sufficient comparative advantages or natural assets to encourage private investment both domestically and from overseas.

Private inward capital flows and productive investment are critical to facilitate the development of sustainable physical infrastructure and to maximise overall economic and social development.

Similarly, a Second City needs to be able to sustain its inhabitants and provide a quality of life at least commensurate with the broader standards and expectations of its nation state.

As growth and development necessitates a healthy demographic with sufficient pull and retention factors, particularly for high skilled labour, the Second City will need to have the infrastructure and services to support families and young children with affordable quality accommodation, transportation, education and health services.

Cultural, artistic and sporting activities and the infrastructure supporting such activities will be an important defining characteristic of a Second City reflecting the size and likely diversity of its population.

Cultural, artistic and sporting activities may also help define and support the broader national or global recognition of the Second City, supporting its overall economic integration and development.

A reasonable working definition of a Second City can be set out as follows:

- Second Cities are geographically well-defined jurisdictions which are predominantly urban while still allowing for a significant agricultural economic base.
- Second Cities undertake significant public administration and public policy functions which may have a direct impact on the governance and wellbeing of the First City. A Second City will be economically significant and perform important production, logistical and trading functions that complement and reinforce the economic performance of the First City and the nation. The Second City will be outward looking and possess sufficient comparative advantages and related strengths to encourage inward capital flows and private sector productive investment to facilitate the sustainable economic growth and development of the Second City. To attain the necessary scale for economic, trade, logistical and social capital developmental responsibilities and impacts, the Second City is relatively large with a population ranging from around 5 per cent up to 50 per cent to that of the First City and in the Australian context would require a population of at least 100,000 residents. A Second City will need to have demonstrated economic and social resilience and a proven capacity to successfully respond to structural and technologically-driven changes to its economy and industrial base through diversification, adaptation and innovation that facilitates continued growth and improved living standards.
- A Second City will be expected to have made a critical contribution over a prolonged period to the development and sustainability of its local regional economy and community through the provision of national standard economic and social services including in health, education and law enforcement.

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- The Second City will need to adequately support its existing and growing population by being able to provide affordable quality accommodation, the full range of transportation options with efficient connectivity to the First City and the ability of parents to choose between public, private and independent schooling options for children.
- The Second City education system will also feature a full-service university that has demonstrated competencies in research and innovation in specialisations perhaps unique to the institution and the locational region of the Second City and more broadly.
- The Second City will have full-service health and treatment facilities with high tech diagnostics, specialist treatment and recovery - including palliative treatment options - on par or exceeding First City or national standards.
- The Second City will have recognised cultural, artistic and sporting activities that help define, promote and integrate the city domestically and within the global community - which also helps facilitate its economic and social development.

Second City: Eligibility Criteria

There are several economic, social, administrative, cultural and historical criteria that are relevant in helping identify and categorise all cities and to discern between those that have legitimate strong claims to Second City status and those that do not.

Almost all the criteria are interrelated with economic factors that have an impact on the social, administrative and the cultural and vice-versa.

However, it is still important to isolate and identify specific criteria as one or more may be significant in the assessment of any city. Some may necessitate greater attention from a public policy or town planning perspective to support the growth and development of any city, not just a recognised Second City.

Economic Criteria

1. Industrial economic base of the city.

The industry base will need to be sustainable, diverse, preferably export or trade exposed and involve some local value adding and wealth enhancement.

Strong sustainable cities require economic diversity and the capacity to minimise economic disruption from an overly heavy reliance on a single dominant industry and the vagaries of the economic cycle.

2. Quality and extent of critical infrastructure assets

A major city with claims for Second City status will require significant natural and man-made assets to support diverse economic activity, trade and future investment.

These assets include deep water harbours, port and dry dock facilities, quality roads and truck handling facilities, rail and shunting facilities and an existing or imminent airport and air logistic infrastructure that can handle international movements.

The Second City must be able to demonstrate it has the capacity to support a growing population and industrial activity through the supply of reliable, clean and affordable fresh water with the water treatment infrastructure to support such supplies.

Efficient and reliable irrigation systems are also critical for those Second Cities with a significant agricultural industry footprint or who aspire to grow through intensive food production.

3. City economic footprint

The overall economic contribution of the city to the state and nation will help demonstrate its overall significance in the present time.

A Second City can be expected to make a significant economic contribution as measured as a proportion of Gross State Product (GSP) or Gross Domestic Product (GDP) and may be a significant point of export.

Smaller economic footprints need not demonstrate an inability to claim Second City status in future, particularly if the natural assets and resource endowment of the city can be harnessed for future development.

4. Development of human capital

A Second City will need to demonstrate a capacity to develop human capital and make a significant contribution to the state and national research effort.

This will require the existence of a quality university that has a demonstrated capacity to undertake research and innovation both unilaterally and collaboratively with other recognised institutions of higher learning domestically and internationally as well as with government and industry, preferably in areas of current and prospective economic significance, in addition to providing quality teaching programs.

5. Market interconnectivity

The Second City would be expected to demonstrate a connection to the broader market - with its First City, the nation and in a globalised economy, internationally.

Market interconnectivity will involve physical linkages to the First City and beyond through transport and communications infrastructure, collaboration in research and development and the broader delivery of health and education services, trade through shipping and air movements as well as the public policy settings to welcome targeted foreign and domestic investment - preferably as part of a well-developed strategic plan for the growth of the Second City.

6. Economic pull and retention

A Second City will need to have strong economic 'pull' factors to draw in the capital, private investment and skilled labour that is critical to further growth and development.

It also needs to have the attributes and ability to retain the skilled labour and the capital investments.

Although natural comparative advantages such as an abundance of natural resources, minerals, a favourable climate and overall location are critical, the overall policy settings and quality of local governance and administration are fundamental.

Quality of life factors such as affordable housing broadly commensurate with First City and national standards, adequate quality schools, local transport and health services are critical to attracting and retaining labour and capital investments.

A diverse economic base generating employment options across low and high skilled categories is a fundamental feature of a viable or aspiring Second City as it is better able to offer younger residents, particularly with critical lifetime opportunities.

7. Economic resilience and transformative capacity

A Second City will need to be able to demonstrate genuine economic and community resilience over a prolonged period and the capacity to adapt to exogenous shocks that challenge its economic and industrial base and long-term viability.

These shocks could be as diverse as structural economic changes driven by domestic or global policy settings, technological change or natural and humanitarian disasters.

The bona fide Second City will need to be able to adapt to change, which may include the loss of longstanding wealth generating industries and the transition to in-demand global industry - most likely driven by and necessitating cutting edge technological innovation - as well as managing the 'maturing' of the local economy through the growth of world-class health and education services which are able to support the local and national economies as well as providing opportunities for export income and global connectivity.

There are many examples of large cities in the industrial United States, the United Kingdom, and large parts of Europe, particularly in Eastern Europe, that experienced rapid growth and wealth creation from the late nineteenth century but faltered and declined as the economic base supporting the city failed to withstand adverse external developments and a changing economic landscape.

This has also been evident in various Australian regional towns and centres that boomed particularly following gold discoveries and record prices for various agricultural goods but which stagnated and declined once the boom passed.

8. Demonstrated long term regional and national economic integration

A Second City will need to demonstrate its historical and ongoing importance to the economic development and sustainability of the local region it supports, including through the provision of critical community services, as well as its overall integration into the state and national economies and its scope to be a hub for global trade.

This will require more than a theoretical connection or a relatively recent economic or trading relationship, but a long-term pioneering impact that proved critical to the economic development of an entire region and that remains critical today.

In the Australian context, this is best illustrated through the impacts of Newcastle, Wollongong and Geelong in the economic development respectively of the Hunter Valley, the Illawarra and the Greater Geelong region including parts of the Victorian Western District. All three regional towns had their foundations in coal mining and various forms of agriculture, especially wool, and have diversified over time to include manufacturing and heavy industry to maintain relevance in the modern era. All three regional towns have developed and maintained significant infrastructure to provide services and support to the broader developing regional areas.

9. Strength of the revenue base: considerations of Federation

A key feature of the Australian Federation, much more so than in any other federation around the world, is the central commitment by the Australian Government to attain Horizontal Fiscal Equalisation (HFE).

This essentially means that every state and territory should have access to a proportionally equal amount of revenue to allow for a similar provision of services to the Australian people irrespective of which jurisdiction they choose to live.

These arrangements were formalised in 1933 with the establishment of the Commonwealth Grants Commission in part following a threat by Western Australia to secede from the Australian Commonwealth.

In light of the significant differences in the size and economic base of the Australian States and Territories, including the mineral wealth enjoyed by states such as Western Australia, the larger states have traditionally been required to effectively subsidise the smaller states and territories, often by a large amount.

NSW, Victoria and Western Australia have long been net donors with South Australia, Tasmania, the Northern Territory and the ACT significant net revenue recipients.

Queensland has also long been a net revenue recipient – in large part reflecting its large scale, dispersed population and stage of development. However, Queensland is now almost a parity state and will no longer rely on NSW, Victorian and Western Australian subsidies.

The degree of subsidisation is very significant for some jurisdictions and is a source of tension and political sensitivity, particularly for Western Australia, which has been a very large net donor since the development of its mineral resources industry and especially following the mining boom from around 2002 to 2012 which delivered large mining royalty payments.

In the absence of HFE and the willingness of the larger states to subsidise the smaller jurisdictions, not only would the smaller state and territory governments find it almost impossible to offer critical health, education and law and order services to an acceptable Australian standard, but they would need to impose much higher state and territory taxes, all of which would act as a serious disincentive to growth and development, including to all of their towns and cities.

These issues are relevant in the context of identifying and developing a Second City strategy in that the 'Second City' candidates in the net donor states are by definition coming from a stronger and more sustainable jurisdictional revenue base compared to those in the net recipient states and territories.

These structural issues need not rule out a possible Second City strategy for a promising candidate in a smaller jurisdiction, but to the extent that any strategy calls on additional financial assistance or incentives from the Commonwealth – and in effect further subsidisation by NSW, Victoria and Western Australia – there are likely to be legitimate political sensitivities and matters of equity that will need to be addressed.

Population criteria

1. Size and scale of local population

The Second City will require a large and diverse population that has the capacity to sustain the local economy and to contribute materially to future growth and development.

The attainment of sufficient scale and related efficiencies for national and possibly global competitiveness will likely require a population ranging from a minimum of 5 per cent to that of the First City and can be as high as 50 per cent.

While the population density of the Second City will be expected to be less than that of the First City, it is likely to be significantly higher than smaller towns and cities within the state, given the larger degree of urbanisation within the city.

2. Demographic profile of population

The demographic profile of the Second City population will need to be broadly commensurate or better than that of the First City to attract critical investment to facilitate economic growth and development.

A younger demographic with scope to increase population naturally, and which may require relatively less demand on long term health services, may provide an existing or prospective Second City with greater scope to maintain and enhance local productivity, including by having a relatively larger population contributing to the revenue base.

Administrative / Governance criteria

1. Demonstrated competent governance and public administration

The Second City will need to demonstrate a capacity to efficiently and effectively govern itself consistent with its legislative responsibilities.

This will require a standard of service delivery, revenue raising and expenditure that is consistent with that of the First City or, where that is not possible, consistent with other cities of approximate size and distance from the nearest First City.

2. Existing or prospective capacities for national or state public administration

The Second City should have the capacity, or if necessary quickly facilitate, the undertaking of governance functions of significance to the state or the nation.

This could involve administrative responsibilities relating to a whole of state function or nationally. It could relate to the relocation of a department or agency of state to the Second City or an executive decision to undertake a national responsibility from the Second City.

Social criteria

1. Community supporting infrastructure

A Second City will need to demonstrate quality social infrastructure and expertise in supporting the local population with the scope to contribute at a state and national level.

This relates primarily to the existence of quality health services, including full-service hospitals that also have the capacity to collaborate with local and other institutions in both research and general service delivery.

The Second City will also require a mix of primary and secondary education facilities with demonstrated outcomes on par with those of the First City and commensurate with national standards and expectations.

Educational options for school-aged children should include a mix of public, private and independent institutions consistent with First City offerings.

Cultural and sporting infrastructure

1. Extent and significance of cultural, artistic and sporting activity and supporting infrastructure

A Second City can be expected to have well developed and supported cultural, artistic and sporting activities and the supporting infrastructure reflecting the size and diversity of its population and overall demographic.

Art galleries with eclectic collections or strong collections of local or indigenous work; museums; live theatre; regular musical performances by recognised artists; libraries and local sporting clubs with active members across all age groups involving the most popular codes would be present in an outward looking and viable Second City.

In the Australian context, the Second City would be expected to participate and be represented in national sporting codes such as Australian Rules Football, the National Rugby League and the A League Soccer.

The sporting infrastructure to support such activity would be on par with First City standards and possibly world class and be able, and be made available, to host international sporting fixtures.

Second City: disqualification characteristics

Any consideration of what may constitute a Second City needs to also directly address what doesn't.

While this is relatively straightforward in many cases and involves a reverse application of the eligibility criteria for Second City status, in practical terms it may not always be clear cut, especially for relatively large and prosperous regional towns and cities with good infrastructure.

Despite the unavoidable subjectivity involved in the application and interpretation of the criteria, it is contended that any city or town possessing the following characteristics cannot rationally be categorised as a Second City, at least not when the application of such a ranking is a precondition, or otherwise becomes a basis for attracting existing or prospective budgetary investment incentives and other publicly funded assistance.

Any city, town or regional centre possessing some or all of the following characteristics cannot realistically qualify for Second City status:

- Irrespective of population size, a lack of diversity in the economic base, perhaps characterised by the dominance of a single industry be it in the resources sector, agriculture or manufacturing and/or a reliance on a government function, such as defence, which may be subject to future changes in government policy and national priorities.
- An inadequate or unreliable supply of fresh water.
- A highly challenging climate, especially for young families and the elderly.
- Deficient or physically constrained natural assets, such as deficient harbours which may limit the scope for trade and economic connectivity.
- Long distances from First Cities and other major regional centres increasing the cost of growth and the difficulty in attracting and retaining skilled labour and young families.
- Inadequate or insignificant capacities for research and innovation and the potential to value add through the development of new intellectual property. This usually involves the absence of a university or recognised institution of higher learning with demonstrated competencies in research and innovation.
- A health system that does not provide a full range of services, including diagnostics and speciality treatment.
- A lack of diversity and choice in the primary and secondary education system with possible capacity constraints even with small increases in population.
- Lack of affordable quality accommodation for the full spectrum of residents.
- Any city or collection of suburbs or towns which in aggregate constitute a relatively large population but which otherwise reside within the unofficial or generally understood boundaries of a recognised First City. Such towns or 'cities' may be seen as satellite cities of the First City and simply represent outlier urbanisation of the First City. In the Australian context, Paramatta and the rapidly expanding suburbs within the outer Melbourne western City of Wyndham revolving around Werribee, Wyndham Vale and Point Cook are good illustrations.
- Any city comprising a collection of smaller and dispersed rural and regional towns that may share the same 'city centre' and local government authority but which otherwise lack the integration, population density, consolidated services and broader connectivity with the First City.

Australian Second Cities: who they are and qualifying characteristics

Although there are many vibrant, diverse and growing regional cities and towns in Australia across almost every jurisdiction, there would appear to be only three cities that compellingly satisfy the key criteria for Second City status.

These cities are Newcastle and Wollongong in New South Wales and Geelong in Victoria.

While the Gold Coast satisfies many of the criteria for Second City status, its claims are weaker reflecting the less diversified nature of its economic base, its relatively limited exposure to adverse structural economic change and therefore its limited demonstrated capacity to sustainably transform itself in response to long lasting exogenous shocks.

The Gold Coast's claims are also hampered by the weaker fiscal independence and dexterity of both its home state and primary First City relationship.

Attachment 2 identifies the 15 largest towns and cities around Australia as measured by raw population excluding the First Cities. The cities are assessed in accordance with the key criteria discussed above for Second City eligibility.

Only Newcastle, Wollongong, Geelong tick all of the boxes and with confidence – with the Gold Coast ticking many, but not all.

All three cities have a large and diverse population, critical assets facilitating national and global economic integration, first class health and education facilities, and they have demonstrated research and innovation capacities through well established and growing universities.

Despite some challenges in local governance at times, the three leading cities have demonstrated their capacity to administer themselves and to play an important role in relation to existing and future needs for public administration and policy development.

All three cities have world-class sporting and cultural infrastructure and are key participants in relevant national sporting codes.

Significantly, the cities have also been seriously 'stress tested' – be it through the closure of mainstay industry, including BHP in Newcastle, steelworks in Wollongong and the demise of automotive manufacturing in Geelong. Newcastle has also experienced significant natural disasters including earthquakes and flood.

Despite the significant structural adjustment difficulties and hardship these events generated for local residents, the cities have or are currently in the process of transitioning to exploit their core strengths and comparative advantages and the opportunities of the new economy.

These are critical attributes of a viable city and which auger well for any properly developed Second City strategy that has genuine buy-in from all key stakeholders.

The residents of Geelong, Newcastle and Wollongong are also in effect net donors to those Australians living in South Australia, Tasmania, the Northern Territory and the ACT through the structural nature and policy responses to Horizontal Fiscal Equalisation (HFE) within the Australian Federation.

This simply serves to underline the much stronger and diverse economic base supporting these cities and the jurisdictions in which they are based that further reinforces their claims for Second City status ahead of much smaller cities and towns around the country.

Australian Second Cities: nation builders and pioneers of economic development and structural adjustment

Although very few Australian regional towns and cities clearly satisfy all of the eligibility criteria for bona fide Second City status, the three cities that meet the core criteria significantly exceed the criteria in light of the pioneering impact they have all had, not only for their local regions and respective First Cities, but the economic development of the country.

Newcastle, Wollongong and Geelong have been key drivers of the Australian economy and development essentially since European settlement.

The cities have been pioneers in the development of Australia's key export industries, particularly with respect to coal mining, forestry, wool, steel and aluminium and more recently in global education and health services.

Much of Australia's export income has been generated through the industries and supporting infrastructure of its Second Cities.

Even in 2019, coal remains in the top two Australian exports with much of it passing through the Port of Newcastle, which remains one of the largest trading ports in the world.

The cities have also been initiators or innovators with respect to Australian heavy manufacturing and allied industry, particularly in the automotive industry, engineering and ship building.

Newcastle, Wollongong and Geelong have long invested in the critical infrastructure that has facilitated Australia's key exports, including world class ports and docking facilities and road networks.

Australia's Second Cities have also been key players in the development and expansion of regional full-service health facilities that are on par with First City and global best practice standards.

All three Australian Second Cities have been pivotal in the provision of world-class education services and have pioneered the growth of Australian regional tertiary education and the development of the higher education export industry for regional Australia.

This has involved the establishment and phenomenal growth in the post-war period of the University of Wollongong (1951), the University of Newcastle (1965) and Deakin University (1974), all of which have established themselves as leading providers of degree programs to thousands of overseas students from more than 130 countries.

Through the work of their respective universities and TAFE's, Australian Second Cities are playing a key role in the development of cutting edge technologically driven industries in areas such as carbon fibre technology and renewable energy, including applications such as solar batteries.

The contribution of Australia's Second Cities to the education sector has also been critical in the area of primary and secondary school education as many of the towns and centres in regional areas rely on the educational infrastructure and support services of the Second Cities.

APPENDIX A

Schooling in Second Cities has often been of such a standard and reputation that has resulted in international recognition for Australia. Geelong Grammar School, for example, has long been a provider of world-leading schooling through its boarding and day student programs for thousands of children in Greater Geelong and the Western District of Victoria, as well as hosting students from across the globe.

Australia's Second Cities have played a critical role in Australia's defence and national security endeavours, particularly through support of the Royal Australian Navy through ship building, maintenance and repair; the Royal Australian Air Force's Joint Strike Fighter program; and the Australian Army's land combat systems.

All three Second Cities continue to make a significant contribution to Australia's sporting and cultural life. This is evident particularly in Australia's respective professional football codes which have hosted highly successful teams from the Second Cities for many years, as well as the quality galleries and heritage listed architecture in all three cities.

As Australia's population continues to grow and the strains of rapid urbanisation in Sydney and Melbourne intensify, the Second Cities are well placed to facilitate the ongoing sustainable growth and development of the Australian eastern seaboard by accommodating bigger populations and being able to support them through employment, world class health, education and communication services and affordable accommodation.

Perhaps the most significant contribution that Australia's Second Cities have made to national development is the remarkable ability they have all demonstrated to bounce back and withstand serious economic setbacks, community loss and disaster.

The resilience and demonstrated transformative capacities of Newcastle, Wollongong and Geelong, not only in recent years following the closure of BHP operations in Newcastle and Wollongong and the closure of Ford Australia in Geelong but since the earliest days of settlement, provide a national template for the inevitable structural economic changes to come, many of which will create profound changes for the way we work and live.

To the extent that policy makers and community leaders can identify cost-effective ways to further enhance the resilience and economic dexterity of Australia's Second Cities, they will be helping lay a foundation for the future economic success of the nation as a whole.

Attachment 1: Australia's 50 Largest Cities, Towns and Regional Centres by Population

Based on 2017 ABS Population data, the 50 largest cities, towns and regional centres are identified below.

The population numbers have been rounded upward.

The numbers below have not been updated to reflect the growth in population throughout 2018 which has seen Melbourne, for example, officially reach a population of 5 million in September 2018.

The rankings, however, remain the same.

1. Sydney -	4,742,000	26. Bundaberg -	70,600
2. Melbourne -	4,700,000	27. Melton -	65,500
3. Brisbane -	2,330,000	28. Wagga Wagga -	56,200
4. Perth -	2,005,000	29. Hervey Bay -	53,500
5. Adelaide -	1,315,500	30. Mildura/Wentworth -	51,500
6. Gold Coast/Tweed Heads -	664,000	31. Shepparton/Mooroopna -	51,200
7. Newcastle/Maitland -	481,200	32. Port Macquarie -	47,000
8. Canberra/Queanbeyan -	447,500	33. Gladstone / Tannum Sands -	45,000
9. Central Coast -	330,000	34. Tamworth -	42,400
10. Sunshine Coast -	325,400	35. Traralgon / Morwell -	41,700
11. Wollongong -	299,300	36. Orange -	40,000
12. Geelong -	260,200	37. Bowral / Mittagong -	39,300
13. Hobart -	208,500	38. Busselton -	38,300
14. Townsville -	180,500	39. Geraldton -	38,000
15. Cairns -	152,000	40. Dubbo -	37,700
16. Toowoomba -	136,000	41. Nowra / Bomaderry -	37,000
17. Darwin -	133,000	42. Warragul / Drouin -	36,550
18. Ballarat -	104,000	43. Bathurst -	36,450
19. Bendigo -	97,100	44. Warrnambool -	35,000
20. Albury/Wodonga -	92,000	45. Albany -	34,150
21. Launceston -	87,000	46. Kalgoorlie / Boulder -	30,550
22. Mackay -	80,500	47. Devonport -	30,150
23. Rockhampton -	79,000	48. Mount Gambier -	29,500
24. Bunbury -	74,500	49. Lismore -	28,800
25. Coffs Harbour -	71,000	50. Nelson Bay -	27,600

Attachment 2: Identification of Australia's Second Cities

Attachment 2 sets out the 15 largest non-metropolitan Australian cities and towns by population size as recorded in 2017.

Through the application of the key Second City criteria, it is possible to identify those Australian cities outside the recognised First Cities – that appear to make a compelling case for Second City status.

While a small number of towns and cities satisfy the key population criteria both in absolute numbers and as a proportion of relevant First City population, they remain lacking in other key criteria, particularly a sufficiently diverse economic and industry base.

	Pop	Pfcr	Ed	Cn	Wtr	CI	SI	R&I	FsH	FsE	PAG	CAS	Er	Rei
Newcastle	x	10.2/x	x	x	x	x	x	x	x	x	x	x	x	x
Wollongong	x	6.3/x	x	x	x	x	x	x	x	x	x	x	x	x
Geelong	x	5.5/x	x	x	x	x	x	x	x	x	x	x	x	x
G.Coast	x	28.5/x	x	x	x	x	x	x	x	x	x	x		
Townsville	x	7.6/x		x	x	x	x	x	x	x		x		
Cairns	x	6.5/x		x	x	x	x	x	x	x		x		
Toowoomba	x	5.8/x		x	x	x	x		x	x				
Ballarat	x	2.2		x	x	x	x	x	x	x		x		
Bendigo		2.0			x	x	x	x	x	x				✓
Albury		1.9	x	x	x	x	x	x	x	x	x	x		
Launceston		41.6/x	x		x	x	x		x	x	x	x		
Mackay		3.4		x	x	x	x		x	x				
Rockhmpn		3.3			x	x	x		x	x				
Bunbury		3.7			x	x	x		x	x				
Coffs Harbour		1.5			x	x	x		x	x				

LEGEND:

Pop – Total Population

Pfcr – Population - How many times larger the nearby First City is

Ed – Economic Diversity

Cn – Connectivity, including through global trade

Wtr – Availability of reliable and adequate supplies of fresh water

CI – Critical Infrastructure – including ports, rail, airports, roads

SI – Critical Social Infrastructure – including affordable quality housing

R&I – Research and Innovation, including through University presence

FsH – Full-Service Health facilities

FsE – Full-Service Education options for school aged children

PAG – Public Administration and Governance

CAS – Cultural, Artistic and Sporting Infrastructure / presence

Er – Demonstrated Economic Resilience and Adaptive Capacity

Rei – Longstanding Regional economic linkages and community support

APPENDIX B

Population and Migration Debate in the Context of Second Cities

Dr Anthea Bill, HRF Centre

In recent years, population and migration have risen to prominence in public and academic debate, both in Australia and around the world (Dauvergne and Marsden, 2014; O'Sullivan, 2015). There is an implication that Australia's rapid population growth in its capital cities¹ is giving rise to an increasing number of unintended negative consequences - what economists might term 'negative externalities'. Rapid growth and over reliance on metropolitan areas puts pressure on housing and inflates prices, increases congestion, heightens environmental pressures and impacts (such as noise and pollution), and increases competition for access to key services and infrastructure.

Australian Treasury (2018:49)² note that:

These pressures exist regardless of migration, but a growing population exacerbates existing pressures, particularly if policy and planning efforts by Commonwealth, State and Local Governments do not keep pace.

Notwithstanding, little has been mentioned of the role that regional areas and Second City population centres can play to alleviate such pressures.

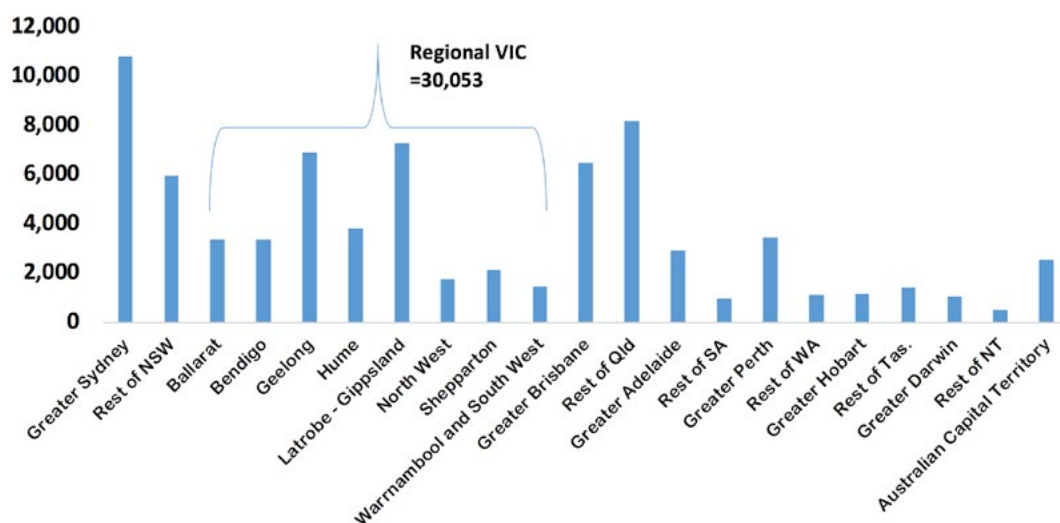
Australia's Population Movements: Key Trends Relevant for Second Cities

A net influx of **overseas migrants** has been the main driver behind Australia's population growth between 1996 and 2016. Migration accounted for 54 per cent of the increase in the population (Australian Treasury, 2018:12). A net figure of 90,154 overseas migrants arrived in Sydney in 2016-17, largely in the 15-44 year age group. Similarly, Melbourne over this period received a net figure of 82,938 international migrants, again predominately people aged 15-44 years.

Importantly, internal migration, not immigration from overseas, is the principal driver of the spatial redistribution of population in Australia. Its dynamics are important for understanding the dynamics of population growth and change in Second Cities. It has led to growth in the fringes of our major cities as well as in selected regional and coastal centres.

Figure 2 Where do Greater Melbourne's Out-Migrants Relocate? (2016-17)

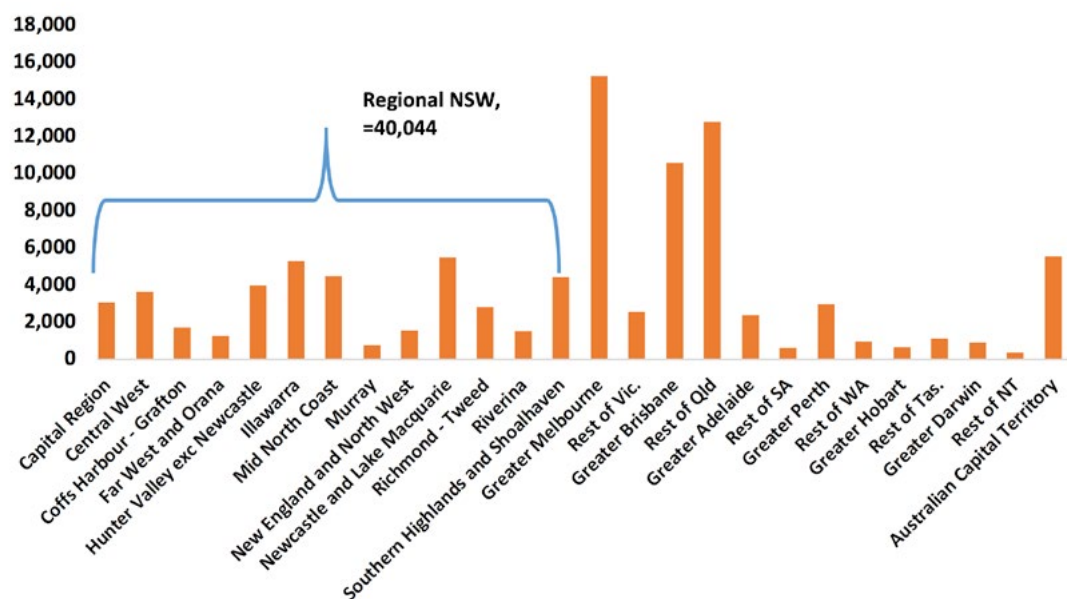
Source: ABS, Regional Internal Migration Statistics.



1. Dean Smith (2018), 'Population Debate About More than Just Migrant Numbers', Australian Financial Review (AFR); <https://www.afr.com/news/economy/population-debate-about-more-than-just-migrant-numbers-20180801-h13elt> 'FactCheck: Is Australia's population the 'highest-growing in the world?', <https://theconversation.com/factcheck-is-australias-population-the-highest-growing-in-the-world-96523>
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Figure 3 Where do Greater Sydney's Out-Migrants Relocate? (2016-17)

Source: ABS, Regional Internal Migration Statistics (Annual).



Interestingly, in Sydney, much of the internal net outward migration appears to be occurring in the family-formation (households with children aged 0-14 years) age groups of 25-44 years, as well the older 45-64 year olds. A figure of approximately 40 per cent of Greater Sydney's net loss occurs from this age group.

Unlike Greater Sydney, Greater Melbourne experienced a net population gain (10,173) for 2016-17. However, net losses occurred in inner eastern and outer eastern Melbourne as well as inner south of Melbourne. Greater Melbourne has also experienced overall net losses in the 45-64 year age group, but gains in other age groups. Inner Melbourne has experienced sizeable net losses in the family-formation group of 25-44 year olds, and accompanying losses in households with 0-14 year olds. It seems likely families are moving to more affordable housing in the city fringe or elsewhere.

Second Cities appeal to shifting priorities

Second Cities are likely to grow organically in a number of ways, and they can be seen to be already doing so. Growth patterns include a number of groups including:

Millennials attracted by high amenity/high livability: There is increasing evidence that millennial graduates are prioritising lifestyle choices over careers, seeking access to cultural and leisure facilities. This age group is being priced out of capital city markets. This high productivity and innovation-friendly age group presents a pivotal opportunity for Second Cities (Macroplan Dimasi, 2017:9).

Retirees: *The 2015 State of Australian Cities* report identified retirees as one group moving from capital cities to inner regional areas. No longer needing to live close to work, for them, amenity and cost of housing become more important factors than income or employment for retirees.

Family formation age groups seeking more affordable housing: *The 2015 State of Australian Cities* identified that younger adults (15-24 year olds) are more likely to move to capital cities whereas the family-formation age group has the benefit of skill and workforce experience. They also present a greater likelihood of family migration, bolstering school enrolments, service use and rate of participation in community activities (RAI, 2019).

Older working population, semi-retired: Technological change and the rise of the service sector economy will create more opportunities for older workers to work beyond normal retirement age. The projected increase in participation rates (participation in the workforce) in the older age cohorts (55-64 years and 65-74 years) will have positive implications for Second Cities with a higher share of retirees.

Spillover of international migrants: While capital cities capture the great bulk of overseas immigration flows, there is potential for spill-over to larger regional cities, such as Newcastle, Geelong and Wollongong. Migrants are capitalising on the economic opportunities provided by these cities (Macroplan Dimasi, p. 21).

Role for policy and policy hurdles

While migrant flows are happening naturally, that is, without specific policy to drive it, and working to some degree in favour of Second Cities, enhancing liveability in regions will increase the trends assisting to reduce pressure on capital cities (RAI, 2019):

The desirability of a capital city lifestyle is being challenged. Improvements in regional city and town infrastructure that further enhance their livability will increase the flow of people out of congested cities without the need for individual relocation incentives.

At various times, there have been strategies to promote population growth in regional locations. Among skilled migrants, the highest priority is given to those seeking to migrate to regional areas (Productivity Commission, 2016). This policy is designed to address skill shortages in regional Australia and has helped to attract skilled migrants to areas where they are needed. However, retaining skilled migrants, just like retaining skilled Australian-born residents, in regional and remote locations remains a challenge.

Implications

While capital cities can offer deeper labour markets and a broader range of amenities, Second Cities can compete due to the lower cost of housing and lower cost of doing business. Unlike smaller regional locations, Second Cities also offer diverse, higher density labour markets and city-like amenity with relative accessibility. For businesses, the lower cost of land, efficient transport infrastructure, and a lower cost of skilled labour may make Second Cities a competitive choice.

Second Cities might be expected to ease the pressures of population growth in capital cities by attracting population outflow from Australia's fast growing capitals. There is evidence that they are already doing so 'organically', that is, without policy measures in place. That said, further policy interventions in planning and infrastructure may assist to build the capacity of Second Cities to attract people from the capital cities and from overseas.

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APPENDIX C

Connectivity and Location

Dr Leonie Pearson, Consultant to HRF Centre

There is growing awareness that Australia, one of the world's most urbanised nations with four out of five residents living in cities, has a network of cities across its vast brown land. Key to Australia's prosperity is connectivity within this network - the ability to support a flow of goods, information and people. Within such a network, Second Cities can play a key role not only as regional hubs but also as 'relief valves' for nearby capital cities.

Internationally, a network of cities is seen to be composed of **hubs and spokes** in an inter-connected form. It has been shown that nations with a strong city network have the potential to create stronger labour productivity and a more resilient economy. While evidence is not conclusive on all of the economic benefits of city networks, the EU Cohesion Policy encourages city networks across and within cities to strengthen connections and improve EU economic performance.

Figure 1 Connection and Location

Regional Australia Institute (2011)



Australia's population is spread across capital cities, Second Cities, regional centres, and rural and regional towns. Regional cities have always been identified as hubs, crucial to the connection of regional and rural Australians to wider markets, customers and ideas.

Investigation of city networks has shown two types of **networks**, which are defined by:

structural elements - physical links between cities, such as road and rail, and **functional elements** - what access or services are connecting the cities, such as service delivery roles like health or education.

In relation to these functions, the strength of the Second City or 'regional capital' affects the whole region. A regional city with a higher level of **service and infrastructure** has been shown to occur where surrounding smaller rural towns have higher-ranked access to services and infrastructure. Second Cities can be seen as an important **sink of talent for capital cities**, a place where skilled workers move to. Such moves can ensure liveability benefits for workers. Second Cities are also an attractor of talent from regional areas. Thus, the relationship of Second Cities to capital cities and regional areas appears to be crucial to understating the networked view of city connections.

Second Cities have a clear role in providing **tertiary education** services to their hinterlands. The provision of tertiary education is seen as a crucial ingredient for regional economic development because it attracts and retains young people longer in regions. It provides necessary skilling and qualifications for local workers now and the capacity for them to earn higher incomes into the future. Tertiary education institutions also attract workers to the region by creating jobs with higher income levels in areas of high creativity and learning. If regional cities have better access to tertiary education, so do their hinterlands.

Health service access is an important role that regional cities play across Australia. Recent work by the Productivity Commission has identified that better access and streamlined health services are essential to improving the productivity of the workforce and national economic performance. Evidence suggests that if a regional city has a better score for health services access, then its hinterland spokes will have comparatively better scores, indicating better access to health services. As the population ages, Second Cities may also be a 'relief valve' in providing innovative aged-care solutions in wider settings than capital cities can provide.

Second Cities also have a clear role in providing **financial services** to their hinterlands. Access to financial services is important for regional economic development in two ways. First, these services (bankers, accountants, loan managers) stimulate small business creation and deliver a vibrant local business ecosystem that drives local economic growth. Secondly they provide the necessary services to drive growth in other local businesses, such as farms or manufacturing, and ensure that local business managers get the best advice to grow local jobs and output.

Implications

Second Cities should be seen as crucial hubs in Australia's multi-city network. Any policy about Second Cities has implications for the surrounding regional areas as well as for any nearby capital cities. This holds for infrastructure and services, jobs and population, healthcare, finance and tertiary education.

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APPENDIX D

Anchor Institutions - Old and New

Dr Robert Perey, Consultant to HRF Centre

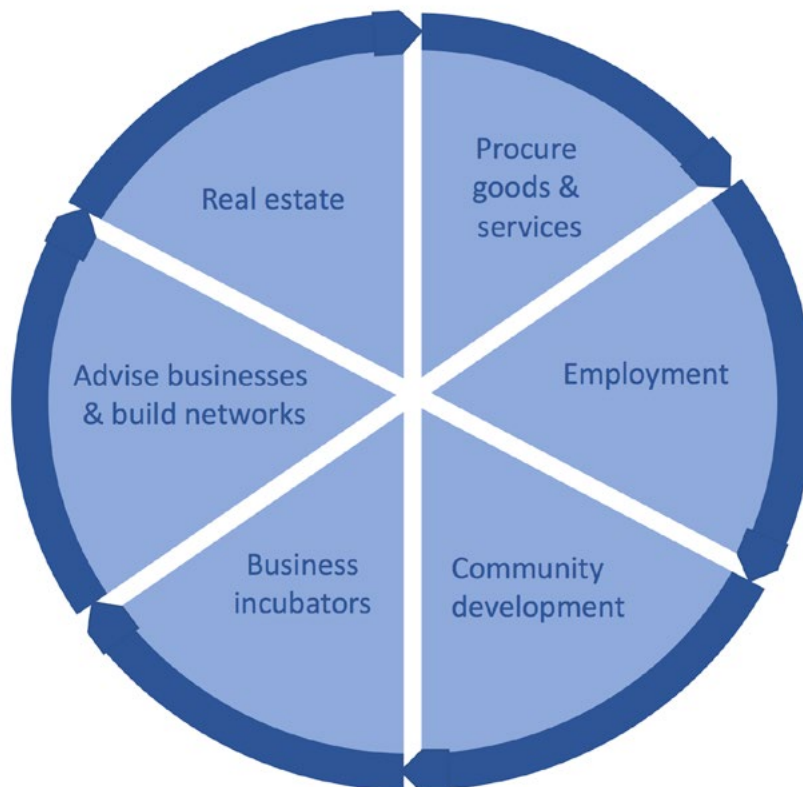
In a Second City, a small number of anchor institutions can be central to the region's economic fortunes. The nature and function of such anchor institutions has changed, with universities, hospitals and government departments increasingly playing that role and thereby multiplying the value of investment in them.

Anchor institutions in historically industrial cities once would have relied on manual labour, such as steel mills, manufacturing plants and port facilities. Today, these sorts of institutions may have disappeared, evolved, or left a legacy. For example, the decline in manufacturing in Australia, and in the First World more generally, has given way to pockets of advanced manufacturing. Empty factories are sometimes able to provide a haven for start-ups and arts enterprises. Though such developments can be featured in reports on economic diversification and revitalisation, they are not individually fulfilling the role of an anchor institution. Anchor institutions today are more typically in health care, government and higher education. They earn their centrality by being more than just a major employer and a steady economic engine during economic fluctuations.

The concept of 'anchor institution' relates to the role of a place-based institution in building a successful local economy and community through a variety of functions. These functions can include being a foundation stone of a community identity, serving as a major employer, acting as a source or incubator of innovation, providing a foundation of cultural education, recruiting individuals or households with high human capital and being a place of research as well as a business partner, purchaser of goods and co-investor.

Figure 4 Strategies for Anchor Institutions

Source: After Devins et al (2017)



Kleiman et al. (2015:3) argue that universities, medical centres and hospitals are obvious partners for local leadership because,

More than just local job engines, anchor institutions are the exact kind of business most communities want in today's knowledge-based economy, where product value emanates from innovation, not mass production. Medical centers and research universities foster an entrepreneurial climate that attracts other young professionals and leads to spin-off companies in the growing tech economy ... [They] provide a knowledge foundation for their home cities by educating many local teachers and issuing professional degrees in high-demand fields ..., and [they] have transformed large swaths of abandoned and under-used land and breathed new life into downtown areas (p.3).

Universities and medical centres are recognised as reliable institutions, whereas businesses can be subject to the capriciousness of the market.

A shift away from businesses as anchor institutions has favoured higher education, especially universities, as keystones. Universities are seen as pivotal to high-tech growth, particularly based on salient experiences in North America (e.g., Stanford University and Silicon Valley), the UK and Europe. Universities are seen to facilitate innovation districts, fostering an entrepreneurial climate that attracts young professionals and leads to spin-off companies.

Universities are also often associated with healthcare facilities, such as through teaching hospitals. The hospital itself can also become an anchor institution. It can be part of a 'health and innovation' precinct or corridor, reflecting the rise in prominence – and substantially increased investment – in the life sciences this century. Such a corridor is strongly evident in Cleveland, Ohio. A decaying manufacturing centre, Cleveland has become a healthcare and medical research powerhouse, albeit with decaying areas observable outside the medical precinct.

Large offices of government departments also have the capacity to become anchor institutions. That can be understood to be behind the on-again, off-again push by the Australian Federal Government for decentralisation of government offices and is evident in the distributed locations of the Australian Tax Office and the Australian Bureau of Statistics. It can also be argued that defence bases have the potential to play a valuable, multi-faceted role in their home communities.

Some claim that anchor institutions need cities as much as cities value these anchor institutions. A city's business sector, government sector and university can form a mutually advantageous, interdependent relationship when shared interests are identified, ambitious goals are agreed on and the parties work together to achieve those goals.

One example of such an interrelationship is the Waterloo-Toronto corridor, which now produces 16 per cent of Canadian GDP (McKinsey and Co. 2016) from less than 10 per cent of the region's 6.1 million population. The University of Waterloo is a catalyst for the development of its region, now part of a 100-kilometre innovation corridor with Toronto. That corridor comprises a number of anchor institutions, with several universities, an entrepreneurial school, 5,200 start-ups and over 200,000 employees. Investment capital in the region has grown by over \$200 million in the space of five years.

In Australia's Second Cities, Wollongong is undertaking a transition from steelmaking with the help of innovative university research in such economically and socially relevant fields as intelligent materials, superconductors, future building design and construction and health service delivery and policy. Newcastle has an emerging innovation hub centred on its NeW Space city location, which is a keystone for the revitalisation of the city centre and the nearby riverfront, Honeysuckle district. It also features the John Hunter Hospital, a major precinct for health care and research, servicing the northern parts of New South Wales. Geelong has its Waurm Ponds 'Future Industries Precinct' focusing on advanced manufacturing. Geelong has been recognised through UNESCO's Creative Cities Network as a City of Design.

Existing and emerging examples reflect a shift from the manufacturing history of Wollongong, Newcastle and Geelong toward a knowledge economy that more closely resembles that of capital cities. The shift can be seen to be accelerated by the strategic interplay between the respective universities, nearby firms, entrepreneurs, research labs and independent inventors. That contributes to what analysis from the Brookings Institution finds: that every dollar spent by a university generates \$1.90 of economic activity in the city.

Implications

There are strong economic arguments for investment in universities specifically, but also for investment in other types of anchor institutions, such as hospitals and major offices of government departments. The legacy of a manufacturing centre, such as Geelong, Wollongong or Newcastle, does not need to be lost. A city's abilities in advanced manufacturing, for example, can usefully be augmented by institutions that can incubate, invest, broker and build capabilities of local staff and residents.

CASE STUDY 1

Advanced manufacturing in Newcastle

Professor Will Rifkin, UON

Status and promise of manufacturing in Greater Newcastle and the Hunter

Manufacturing has traditionally 'punched above its weight' in terms of export earnings and innovation within the Australian economy, contributing 25 per cent of Australia's business research and development (R&D) spend and one-third of our national merchandise exports. Australia's fastest-growing advanced services exports are in engineering services.

Manufacturing has historically been a training ground for many of the practical skills underpinning Australia's economy and critical to its future sustainability. A decade ago, manufacturing accounted for 35 per cent of all traditional trade apprenticeship completions.

The key global megatrends shaping the future of manufacturing in the Hunter are:

- The Asian century – Asia is a market, as well as a competitor
- Globalisation – of markets and value chains
- Technological change – particularly digitisation of the economy e.g. 3-D printing
- Advanced manufacturing – 'mass customisation' not 'mass production'; innovation intensive niche markets
- Demographic imperative – ageing population and workforce.

Manufacturing was the third largest industry of employment in the Hunter region in 2014, behind health and social assistance and retail trade. This standing deteriorated by the 2016 Census due to strong headwinds the sector has faced through increasing global competition, a period when the Australian dollar was strong, and more recently the downturn in mining investment in the region. The majority of the Hunter's manufacturing employment is in small to medium sized enterprises (SMEs) in the machinery and equipment manufacturing and primary metal and product manufacturing sectors.

Enablers of Competitiveness

Local manufacturers who had weathered some of the challenges facing the sector shared some or all of the characteristics highlighted in national and international studies of innovative businesses:

- Information seekers and users – they scan their business environment, find or develop niche markets, know about value chains, and have a customer/problem-solving focus
- Innovators – investing in R&D (mostly in-house), value-adding through 'servitisation', focusing on core capabilities rather than products, and selective collaboration (including with competitors with complementary capabilities)
- Investors in their people – particularly apprenticeships, traineeships and in-house training
- Re-investors – they have access to capital to reinvest in the business
- Leaders – fostering a culture that is strategic and outward looking, use lean operations, and import strategically

These characteristics are associated with important enablers of competitiveness:

- Collaboration – with customers, suppliers, research organisations (universities and CSIRO), and selectively with competitors
- Innovation – incremental improvement in products, services or processes
- Strategic planning – with a medium to long-term view, and the assistance of external advice (e.g., from a board of directors)
- Being part of a global supply chain.

Barriers to Competitiveness

The impact of the global mega trends on Hunter manufacturers was evident in the major external and internal challenges they identified, including:

- increased competition, particularly from overseas, but also within the domestic market
- changes in major industries they supply, especially mining, rail, defence
- off-shoring of major projects
- need to change / innovate / evolve business models and processes
- increased costs including wages and other business costs (taxes, transport, energy).

In addition, local manufacturers nominated lesser, but still important, challenges in accessing funding to change or grow the business, availability of suitable staff or training, the increased cost and complexity of accreditation, permits, tender preparation and the like, and the high Australian dollar and state of the Australian economy.

Barriers to increased competitiveness and access to broader markets for Hunter manufacturers are interrelated and in many cases the reverse side of the coin to the enablers. They include operating in isolation, lack of information about how to implement a recognised need for change, lack of strategic or business planning process, and exclusion from global supply chains.

Hunter manufacturers showed a strong link between declining profitability (as a measure of lack of competitiveness) and not having a formalised strategic business planning process and not being part of a global supply chain.

Examples of Advanced Manufacturing in Greater Newcastle/the Hunter

The Hunter region hosts an array of small to medium sized enterprises with advanced manufacturing capability. Companies involved in traditional heavy manufacturing for mining services are now adopting advanced manufacturing methods to carve out market niches in the face of stiff price competition from overseas. They are combining that with agile management strategies to enable rapid response to their clients. There is also a transition among some companies to 'systems integration' – combining their existing skills in manufacturing with the ability to select and combine components manufactured overseas, such as large electric motors from Spain with controllers from Taiwan. The following are examples of such advanced manufacturing enterprises in the region.

Quarry Mining

Quarry Mining now has 63 employees, including a small operation in Queensland (Mackay). The manufacturing operation at Beresfield operates 24/7, 365 days a year. They employ computer-guided tooling and robotics, producing tailored equipment for soft-rock mining, primarily coal. They respond to orders often at very short notice in response to rapidly changing conditions in a mine operation.

They are operating in a niche market that demands very high quality materials (in this case, steel) and a high quality product. Quarry Mining has recently diversified to make products for hard-rock mining in Western Australia. It also exports to Europe specialty pumps that were designed in house, though that is still a small market. Quarry Mining is a high-volume, low-margin producer. Its primary focus is on lowering the cost of goods sold (COGS), with the goal of maintaining margins and 'keeping smart jobs here'.

Hedweld

The Hedweld Group of Companies are a family owned and operated business, first established as a one-person operation in the Hunter Valley in 1980. Today, they employ 85 people, host an advanced manufacturing facility, and produce safety and maintenance equipment for the mining, agriculture and other sectors.

Hedweld provides products to a large domestic market, and it exports to Indonesia, the US and 32 other countries. Its export operations include profile cutting, machining and welding of metal tube and plate components in Australia, which are then shipped to its factory in the US. The Hedweld factory in Twin Falls, Idaho assembles the components, powder coats the product and ships it on to their North American customers.

Hedweld products range from access systems – ie ladders and railings – to the cab of large earthmoving equipment used in the mining industry to metal preparation work for road bridges in NSW. With niche products and a growing advanced manufacturing business, Hedweld has been NSW Exporter of the Year four times since 2012, for enterprises up to \$30 million per year.

CASE STUDY 1

Managing Director, Ian Hedley, who started the company, has always maintained a close connection with the local Hunter Valley community. He sits on the Community Consultation Committee for the Mt Thorley Warkworth Mine, for example, and Hedweld has strong links with many other local companies and community events.

In addition to exporting, Hedweld also imports, for example, its hydraulic components and electronics. Increasing its import of materials would provide more opportunities to commercialise new products, such as the automated cattle barrier Gate Gate.

Weathertex

Paul Michael and a partner purchased the Weathertex site 20 years ago from CSR. They took over production of exterior siding for homes made from waste from the forestry industry. The company has been profitable ever since, particularly from the mid 2000s due to increasing interest in the product's environmental benefits. Weathertex is now growing at 10-15 per cent per year.

The panelling it produces has strong environmental credentials. It is carbon positive – storing more carbon than is generated in its production. Plus, the company is using the high-volume, low-value waste from the forestry industry. They have a niche product, where the buyer is a little less sensitive to the sale price, but nevertheless price does make a difference.

Weathertex avoids the larger-volume commodity market for siding, such as that served by competitors. It has two overseas timber panelling competitors and no domestic competitors. The competition's products are different – harder to work with and with lower environmental credentials. The Weathertex panels are half the price of cedar shake siding.

The company now employs 120 staff, plus a sales force on the east coast of Australia. Its shipping agent was employed part-time, as it was sending just 5-10 containers off shore per year. Now, the agent is full-time. For export markets, Weathertex relies on distributors overseas. The company forges personal relationships with the owners of these distributors. It aims for medium-sized partners with a turnover of between \$20 million and \$100 million a year.

The plant opened in 1939, and it originally manufactured Masonite. The pulpwood currently used in production is all sourced from within 150 kilometres of the factory. It is a by-product of the timber industry. For every tonne of low-volume, high-value saw logs going to a sawmill, there is 4-5 tonnes of pulpwood. Weathertex takes 2-3 tonnes of that pulpwood, a total of 45,000 tonnes per year; the rest is left in the forest as waste.

DSI Underground

DSI Underground has an annual turnover of \$260 million. It is a subsidiary of a German company and employs 200 staff across Australia. Its main facilities are in the Hunter region and Western Australia and it hosts regional distribution centres and sales offices.

The company serves the domestic and international mining industry with a range of products, a key one being rock bolts – which hold up the roofs of underground mines. The steel bolts that DSI Underground manufactures are typically up to 2-3cm in diameter and 1-2 metres in length. The size and qualities of each bolt that DSI sells depend in part on the nature of the rock that it is to be used in, which can change from one location to another in a given mine. The product also has to reflect the particular preferences and needs of the client, with different companies taking different approaches to roof bolting.

DSI Underground's business is high volume, low margin. It takes approximately eight weeks for the product to go from a billet from BlueScope to being a bolt at DSI Underground. At any stage of that process, a 5 to 10 per cent difference in price would be a threshold for customers, for example, in a \$20 million contract.

Implications

These examples of Newcastle's advanced manufacturing capability provide evidence of the role that private capital can have in regional economic vitality and uplift.

Australia's Second Cities have a capable workforce and insightful business managers, who have an eye for new markets domestically and abroad. The workforce and managers have been adapting skills employed in one sector, such as mining or manufacturing, to generate profit in another sector, a process that is the essence of innovation.

The Second Cities also have land – both greenfield and brownfield sites – that is available for industrial development. Additionally, the transport, water and power infrastructure invested in in the past continues to work hard for such industries.

Land and infrastructure enable development that provides a platform for reaching global markets and concurrent job creation and prosperity. Thus, the industrial heritage in these Second Cities is not merely part of local mythology but, as these cases suggest, represents a productive combination of built capital, human capital and social capital.

CASE STUDY 2

Anchor institution profile – Value of the John Hunter Health and Innovation Precinct to the region and beyond

Anthea Bill and George Pantelopoulos, UON

Following recent work by the Brookings Institution (Katz and Wagner, 2014), a new model is emerging nationally and internationally of 'health-centred' innovation districts. This model comprises a number of elements including:

- a hospital as a regional anchor institution
- collaboration among knowledge-intensive sectors (universities and research institutions) to share ideas and practice open innovation
- talent attraction, retention and development
- transport connections and a diverse growing population.

Often, universities and hospitals are the largest non-governmental employers in their home cities. As such, these anchor institutions are obvious partners for city leadership, being socially embedded in their local communities and spatially immobile. In the majority of metropolitan regions, these institutions have eclipsed all other sectors as the lead employer, providing a significant and growing number of jobs. They also provide investment, incubation, partnership and innovation as well as research and education.

More than local job engines, anchor institutions – as noted earlier – are the businesses that most communities want in today's knowledge-based economy, where product value emanates from innovation, not mass production (Kleiman et al., 2015:3). A growing body of scholars see universities as the key ingredient for high-tech growth or so-called innovation districts. Innovation districts are geographical spaces in which leading anchor institutions are present, companies and businesses have the ability to cluster, collaborate and connect and they possess accessibility via transport.

Medical centres and research universities foster an entrepreneurial climate that attracts young professionals and lead to spin-off companies in the growing tech economy. These institutions also provide a knowledge foundation for their home cities by educating many local teachers and issuing professional degrees in high-demand fields, such as computer science and engineering.

Precinct employment

The John Hunter Health and Innovation Precinct (JHH&I precinct) is the Hunter region's single largest site of employment. In 2016, approximately 4,000 workers travelled to work there. JHH&I precinct employs a higher proportion of staff with a bachelor degree and higher qualifications than the region overall.

The precinct has a higher share of professional employment than the region, as well 65 per cent compared to 24 per cent in the workforce of Newcastle and Lake Macquarie, generally. More than 60 per cent of the people travelling to work at the JHH&I precinct in the week of the 2016 Census have a bachelor degree or higher qualification.

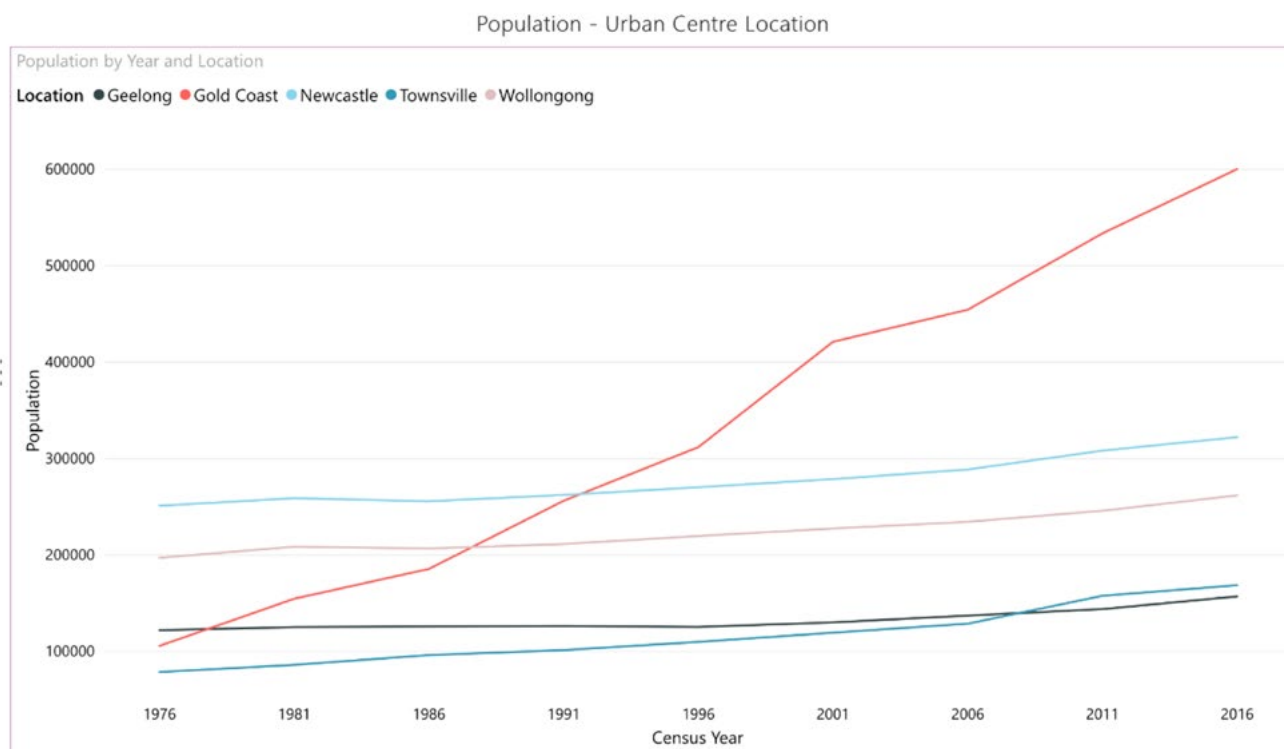
CASE STUDY 3

Gold Coast as a Second City: A Case Study

Professor Will Rifkin, UON

The Gold Coast, Queensland, occupies a unique place in the history and mythology of suburban development in Australia. A range of factors have contributed to the Gold Coast outstripping growth in other regional/suburban/metro areas in Australia. This growth can be seen in Figure 5 below, comparing ABS Census counts of population in the Gold Coast since 1976 to those figures for Geelong, Newcastle, Wollongong and Townsville.

Figure 5 Population Growth in the Gold Coast compared with other, non-capital cities



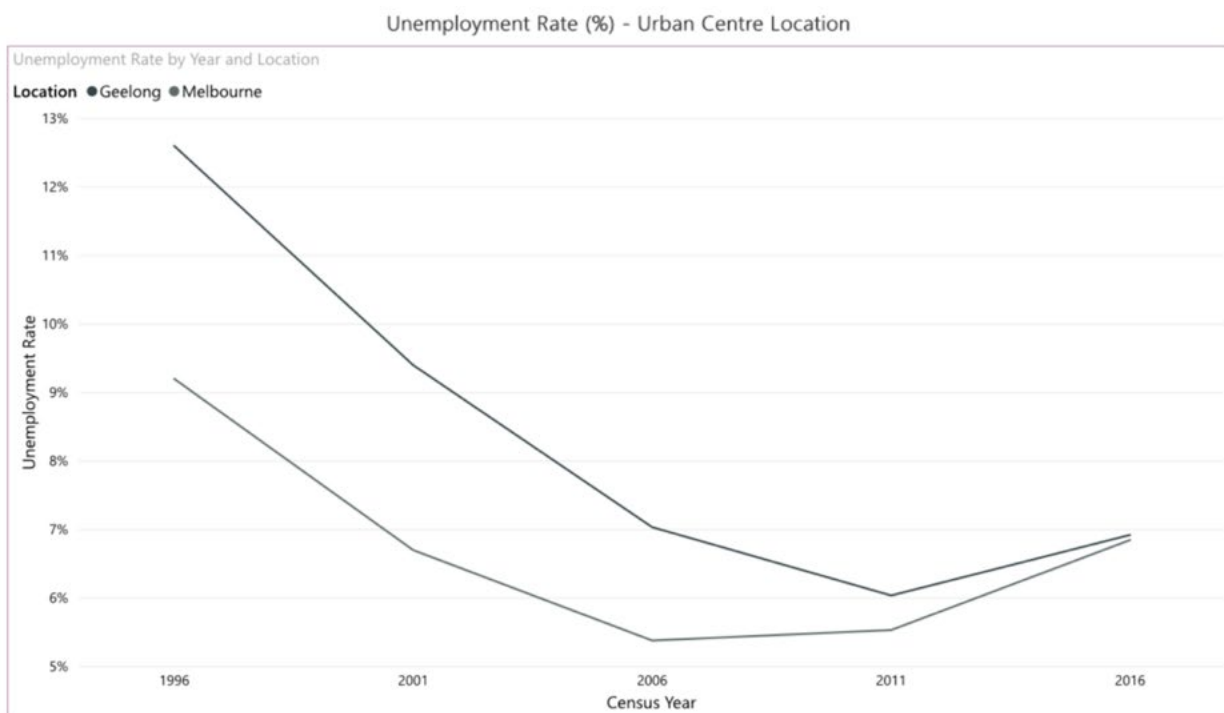
The Gold Coast has created an international image as an appealing holiday destination and a place to retire to. It now features burgeoning suburbs and a light rail system.

The Gold Coast has flourished as a hub for the conurbation in Southeast Queensland, with Brisbane being the other hub. The unemployment rate of the Gold Coast approaches that of Brisbane (Figure 6). This convergence suggests that the two cities are sharing a labour market: that is, someone in the Gold Coast has access to employment in the Brisbane metro area, and vice versa. The same can be said about the convergence in unemployment rates for Geelong and Melbourne (Figure 7).

Figure 6 Unemployment in the Gold Coast approaches that of Brisbane



Figure 7 Unemployment in Geelong approaches that of Melbourne



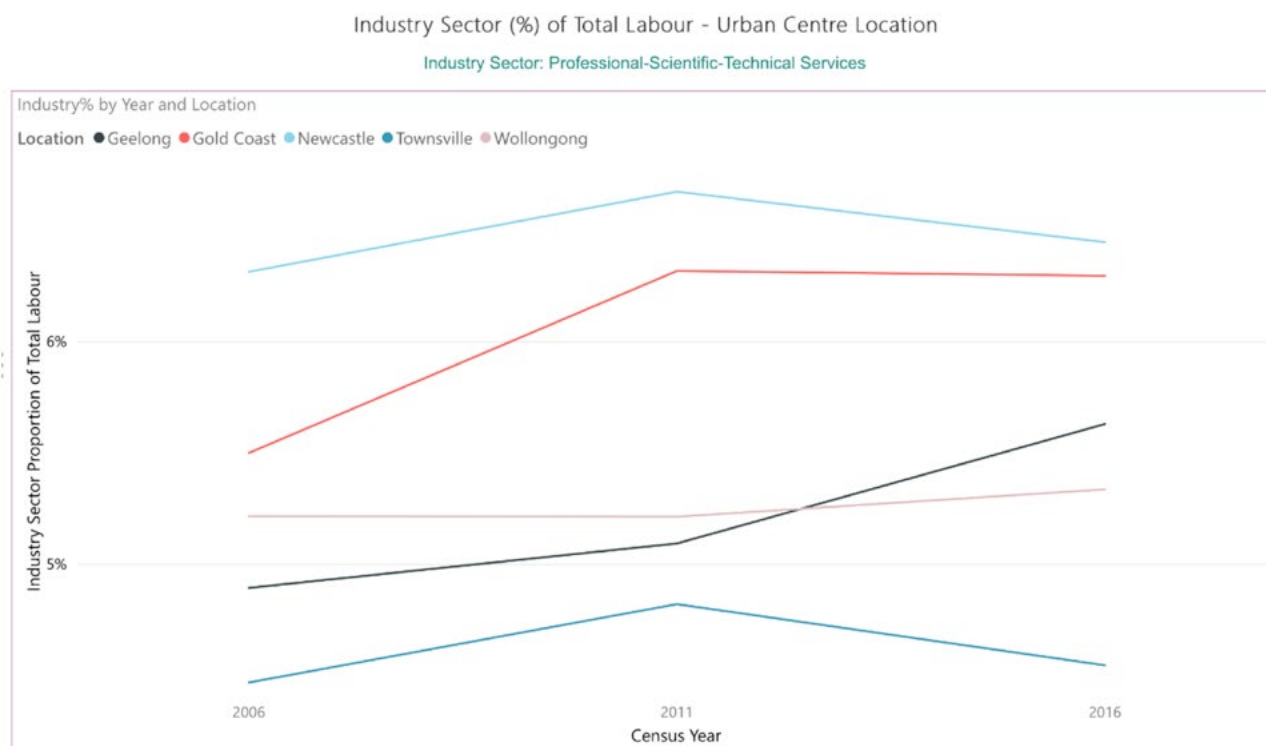
CASE STUDY 3

The unemployment rates in Newcastle and Wollongong still trail that of Sydney by one percentage point. That gap has closed from five percentage points in 1996.

The comparative figures on unemployment raise the question of whether the four cities – Geelong, Wollongong, Newcastle and the Gold Coast – are at different points on similar trajectories. Are they all growing until they merge their labour market with that of the nearby capital? To explore this question, this section provides an overview of the development history, issues and opportunities for the Gold Coast, which can be compared with the overviews of the development in the other three cities, provided elsewhere in this report. One can then determine what lessons the Gold Coast can provide for Australia's Second Cities and whether it is a model or just an historical accident, or some combination of the two.

Accounts of the history of the Gold Coast have a focus on tourism and lifestyle. That differs from accounts of Wollongong, Geelong, and Newcastle, where the focus is on their industrial heritage. That said, localities in the Gold Coast region are now highlighting areas of economic productivity outside the leisure industry. That can be seen in a growing sector for professional, scientific and technical services (Figure 8).

Figure 8 Percentage of workforce in professional, scientific and technical services



Real estate innovation and entrepreneurship

The Gold Coast can be seen as an historical accident given its role in recent decades as an incubator for innovation in real estate development (Coiacetto, Reid, & Leach, 2016). It has been an incubator in terms of types of real estate developments, types of buildings, the size of apartment blocks and hotels, their appearance, and the types of investment structures – such as strata title and timeshare. This incubator role makes the region a trend setter in the high risk/high reward domain of property development, given the relatively long lead times characteristic of the sector. The intensity of attention to real estate development in the Gold Coast, particularly in the coastal strip, has resulted in juxtaposition of high rise towers with sites that have been redeveloped multiple times overlooking 'low-rise flats from the 1970s, 1960s motels, and 1950s fibro shacks' (Coiacetto, Reid, & Leach, 2016, p.66).

The region also benefitted from alignment in the advertising domain between developers and the media and among local, state and federal tourism agencies. Publicity driven by big personalities with flamboyant developments gave way to publicity backed by big corporations. Success of the larger players, some argue, helped the smaller players. The implementation of strata titling and timeshares, along with changes in tax regimes, supported real estate investment while the Gold Coast was in a crucial growth phase. This favourable regulatory regime and investment ferment attracted entrepreneurial undertakings in the real estate sector, with the entrepreneurs essentially developing 'real property' instead of 'intellectual property'. The ferment led to the sector gaining political control, which in turn enabled more development approvals. This sequence occurred either through direct election of officials or through other, less overtly legal pathways.

Who is attracted to the Gold Coast?

The orientation of the region can be seen as being toward families, those with children or couples at retirement age. Families who visited the region on a holiday could reframe it as a year-round place of residence. Analysis suggests that a drop in Asian tourism in the late 1990s had a cooling impact on the real estate market. That would have driven down prices on investment properties, which could have been appealing to Australian residents seeking to buy and live in the region long term. The downturn also stimulated the Gold Coast Visioning Project, a joint investment of a university-based cooperative research centre, a casino and Gold Coast Airport. The project was also described as a response to changing relationships between business, government and the community (Faulkner, 2002). The ground had moved, with the conditions for rapid, entrepreneurial development dissipating and a more strategic, structured approach to planning and development starting to emerge (Potts, Gardiner & Scott, 2016). As a result, this period saw significant investment in parklands and the foreshore.

Externally, the perception of the Gold Coast as a haven for 'shonky businessmen' persisted, although residents characterised it as a great place to live. Such perceptions should not be allowed to cloud perceptions of what the Gold Coast experience can teach other cities or policymakers seeking greater regional development.

Is the Gold Coast a Second City?

The Gold Coast differs from Geelong, Wollongong and Newcastle in its lack of a manufacturing past and lack of a port facility. However, it has had a dominant industry - real estate - that can be seen to have undergone a transition in the late 1990s. It has also had significant international exposure that a port facility would offer, though for the Gold Coast that exposure has been via its tourism industry. On this basis, one can argue that the Gold Coast can be seen to have undergone an accelerated version of the 'industrial' development that the other cities have seen.

The rapidity and longevity of growth in the Gold Coast can be attributed, in large part, to the alignment between business interests and government, as well as to the national and international exposure creating a ready availability of 'buyers' for the real estate industry's production. Although it can be argued that the alignment between business and government in the Gold Coast smacked of corruption, it can also be argued that more transparent and legal alignment across sectors can lead to benefits in other regions. The ready attraction for residents from around Australia and overseas are a potential that Geelong, Wollongong and Newcastle recognise but have not yet fully realised.

A cautionary tale about the Gold Coast would address the environmental impacts of the real estate development and ongoing spatial sorting of different socioeconomic groups, which can lead to enclaves of entrenched disadvantage. These challenges would be shared with Geelong, Wollongong and Newcastle.

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CASE STUDY 4

How does Geelong “win from second”?¹

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Introduction

Geelong, 75 kilometres south west of Melbourne, was a successful port and Second City in the colony of Port Phillip in the 1830s – a mantle it lost to the inland mining centre of Ballarat during the gold rushes of the 1850s. However this secondary status was regained from the 1930s when Geelong, by then dubbed “The Pivot” of the Western District wool growing area, was boosted by manufacturing. Those same industries became a brake on the city as economic restructuring from the 1970s saw the closure of its car and truck making, aluminium smelting and textile plants (Johnson 1992). Struggling to restore its economy and overturn its “Sleepy Hollow” image, this city of 233,000 has long been overshadowed by the capital of Melbourne, with its current population of 5 million, twenty times larger (ABS 2018).

Melbourne, too, industrialised from the 1920s but emerged from the 1970s restructuring as a major finance and business-services centre. However, increasingly it is a city beset by high property prices, strained infrastructure and diseconomies of scale. Within its commuting zone, Geelong has benefited or “borrowed size” (Burger et. al. 2015), most obviously seen in the levels of migration from and commuting to the metropolis. This proximity and the growing diseconomies of scale within Melbourne are stimulating political interventions to foster outmigration, primarily to peri-urban areas and to regional centres within 150 kilometres, including to Geelong. As Geelong grows strongly as a consequence, it also seeks to exert some control over its integration into a Melbourne-centred urban region.

This paper will consider the various policy frameworks within which Geelong as a Second City has successfully transitioned from being overshadowed to being integrated into a broader urban region while maintaining a separate identity. The account will highlight the unique elements in the city’s leadership, governance and particular relationship with Melbourne to explain the recent success and now acceptance of coming second.

Geelong from 1980 to 2018

In the 1970s and 80s, with the dismantling of Australia’s tariff wall, manufacturing decline bedevilled Geelong as well as the metropolis. The response in Melbourne and Geelong was comparable, as each city established unelected planning authorities, regenerated their waterfronts and central business districts, borrowing heavily from international models (Brownhill 1990; Dovey 2005; Harvey 1989).

From 1977 the Geelong Regional Commission was charged with making the city and its region more attractive. In the 1980s this Authority and the city council embraced the international trend for waterfront renewal, creating the “City by the Bay” as a vehicle to renovate the industrial port area and attract business investment, tourists and migrants to the city. The image has undergone a number of refinements since then and new agendas – from “Steampacket Place” to an arts and cultural city in the 1990s and “Waterfront Geelong” in 2000 (City by the Bay 1987; CoGG 2000). This occurred at the same time as Melbourne embarked on a major renewal project on its riverside – creating Southbank – and again in the later 1990s and early 2000s, established Docklands (Dovey 2005). The metropolis also created the business-heavy Committee for Melbourne and a year long major events calendar. Here then was the postmodern city of spectacle agenda being pursued by both the metropolis and, at a lesser scale, by the Second City (Hannigan 1998).

A bid for a Guggenheim Museum in Geelong in the early 2000s formed part of this agenda, but its failure (see Johnson 2009) was something of a turning point. Local lobby groups moved from attempting to snare the iconic investment to a more broadly based agenda, driven by the eight “Pillar Groups” of a broad regional stakeholder group - G21 - and the business sponsored Committee for Geelong. Kilpatrick (2013) singles out G2, the Committee for Geelong - and the Geelong Football Club - as key organisations that have facilitated understanding and agreement across the region of common goals. Each has a bank of prioritised projects and the ear of State and Federal governments to successfully attract large projects, all the more potent at election time as a result of the four State and two Federal marginal seats in the area.

In addition there is a large regional council – the City of Greater Geelong (CoGG). In 2004 and again in 2017 the council reaffirmed the city as “creative”, and lobbied State and Federal governments successfully for a major convention centre as well as a revamped cultural precinct. CoGG joined G21 in seeking to create a “dynamic city to attract the creative class” (after Florida 2002 and 2005). This agenda was to be anchored by Deakin University – its expansion into a medical school and its research into high end metal and textile production – along with Federal, State and industry funds to boost existing industry, encourage business relocation and support commuting. Thus in 2006 the Transport Accident Commission with 850 workers was moved from Melbourne to Geelong as was WorkCover, with a further 600 employees

in 2018. After further lobbying, the Federally funded National Disability Insurance Agency was established in Geelong in 2017, along with an office of the Australian Bureau of Statistics. All of these relocations and expansions support the growth of employment in health, public administration, insurance and higher education. As a result, the massive loss of jobs associated with the closure of the Ford and Alcoa plants has not led to significant levels of unemployment or a protracted property downturn. On the contrary, this regional centre as at 2018 is booming!

Fitzpatrick argues that Geelong is proof that government investment in “lagging” regions can pay off, as long as this funding is targeted to projects aligned with a regionally developed and shared vision and a plan based on strengths, hard evidence and research (Kilpatrick 2013. See also McKinsey and Co. 1994; Daley and Lacey 2011). But the success of these campaigns is also tied to the changing economic and political relationships between the metropolis and the Second City.

In Melbourne, CBD revitalisation, tourism and waterfront renewal, along with moves towards becoming a regional finance and bio tech centre, meant that its growth began to accelerate from the early-2000s. Geelong was to benefit in a very different way from “borrowing size”, this time as a result of the diseconomies experienced by the metropolis. Pressure on metropolitan infrastructure joined with the political volatility of Geelong to readily support improvements in the railway and freeway links between the two cities, making Geelong an increasingly viable commuter centre, with 17% of its workforce going daily to the metropolis for employment in 2016, up from 10% in 2001 (Burger et.al. 2015; Correia and Denham 2017; Evans 2015; Terio 2010).

Such investments in Geelong arose as much from the politics and economics of the metropolis as from regional pressure. Thus in 2002 as Melbourne struggled with its booming population, its Melbourne 2030 plan envisaged a “Network of Regional Cities” as one way this pressure could be eased. Direct state investment was directed into a further upgrade of the regional rail line and the freeway connection between Melbourne and Geelong. In 2008, Melbourne @ 5 million re-emphasised the challenge of meeting the city’s growth. The costs of meeting this growth – as well as regional lobbying and politics – led to the relocation of 1,000 State public servants from the metropolis not only to Geelong but also to Ballarat and Bendigo. Plan Melbourne in 2014 explicitly includes an objective to redirect population growth from Melbourne to regional areas. Further, a ministerial Advisory Committee Report in 2015 recommended that Geelong be formally recognised as the state’s Second City. Significantly, in 2001 the Committee for Geelong too had embraced this idea for Geelong. Geelong as a Second City is now adopted by both the State government and the Committee for Geelong. The Committee is also now arguing that Geelong can “win from second” via “Smart Specialisation” along with concerted marketing of the economic, cultural and social assets of the region (Correia and Denham 2017; Beer and Clower 2009).

Theorising and explaining the second city

What then does the above reveal about regional cities in the Australian context? The first point is that cities being first or second or anywhere within an urban hierarchy is not solely the result of economic mechanisms. The pattern may be underpinned by economics, but it also has a great deal to do with politics, image, culture, perceptions of distance and marketing, as infrastructure investment and the location of State and Federal public servants demonstrates for Geelong.

Secondly, the urban pattern of Australia does not and has never conformed to that observed and theorised for Europe with its equal distribution of neatly ranked towns and cities (Anderson 2012). Rather, the pattern since the early 20th century – 1921 in the case of Victoria – has been of the capital city accommodating more than 50% of the state’s population, a pattern of primacy which is increasing, despite the diseconomies of scale that have now set in. Thus Melbourne in 2018 has 76.9% of Victoria’s population and is expected to have over 80% in the next 10 years (Wright 2018). This is best conceptualised as a metropolitan region across which there are cities of very different sizes, performing complementary functions related to their sizes as second or third order cities (Brenner and Schmidt 2014; Cardoso and Meijers 2010).

Undoubtedly, Geelong is a Second City – with 233,400 people, it is more than double the size of the third and fourth cities of Ballarat (101,600) and Bendigo (95,600) (ABS 2018). Each of these cities are now dominating their respective hinterlands, drawing population from even smaller centres to them. They are all, however, overshadowed by the metropolitan leviathan of Melbourne. This is not only in terms of population, but also in terms of economic structure and engagements with the global economy. Thus if a key driver of urban status and growth is the presence of producer services, information technology, knowledge workers and command and control functions for multi-national corporations – as observed by World city theorists (such as Friedmann 1986; Sassen 1994; Scott 2001; Taylor 2004) – then only Melbourne and Sydney measure up (Connell 2000; Searle 1996), with these elements providing a further round of economic locational advantages (O’Connor et. al. 1998).

The distinction between first and second order cities therefore relates not only to size but their global status and economic structure (Cardoso and Meijers 2010).

Table 1 City of Greater Geelong Industry sector of Employment, 2006 and 2016*(Profile id.com.au/geelong Accessed 27.12.2018)*

Economic Sector	2016 (%)		2006 (%)	
	Geelong	Melbourne	Geelong	Melbourne
Manufacturing	7.5	7.7	14.3	12.9
Construction	9.8	8.2	8.8	7.4
Retail trade	11.8	10.1	13.7	11.3
Accommodation and Food	7.3	6.5	6.4	5.6
Financial and Insurance Services	2.8	4.5	2.4	4.7
Professional, Scientific and Technical Services	5.5	9.0	4.8	8.2
Administration and Support	3.0	3.6	3.1	3.5
Public Administration and Safety	6.2	5.0	5.6	5.0
Education and Training	9.8	8.6	8.6	7.6
Health Care and Social Assistance	15.3	12.0	11.8	10.0
Arts and Recreation Services	1.7	2.1	1.4	1.7

Despite the spectacular and celebrated examples of new boutique and high tech industries emerging in Geelong – such as Carbon Nexus and Carbon Revolution on the Deakin University campus – the economic structure of the Second City remains very different to that of the metropolis. As Table 1 indicates, the two cities have divergent employment structures, with Melbourne far stronger in those sectors associated with Global City status – producer services, finance, professional, technical and scientific services. Geelong's much celebrated IT and new manufacturing activities remain relatively insignificant in its overall economic structure. Rather, it is health, education, construction and retail which dominate its employment structure as this Second City extends its command over an enlarging hinterland.

Thus over the five years from 2011 to 2016, close to 5,000 people per year migrated into Geelong, with the previous 15 years (from 2001-2016) seeing only 3,000 per annum. Of 4,000 people who moved into Geelong from 2011-2016, over half were from various parts of Melbourne but, significantly, a quarter were from the hinterland areas of Surf Coast and Colac-Otway and another quarter from the regional cities of Ballarat, Bendigo and Shepparton (Profile.id.com.au/geelong/migration-by-age-by-location 2018). What is occurring then are the diseconomies of Melbourne pushing metropolitan residents to consider Geelong as an alternative. These people are, in turn, both gaining employment in the expanding service sectors and commuting back to the primate city. This connectivity is fundamental to the incorporation of the Second City into the urban region of Melbourne. This is not a localised development but one shared with regional centres in New South Wales such as Newcastle and Wollongong along with the Gold Coast and Sunshine Coast near Brisbane in Queensland and Warneroo and Mandurah adjacent to Perth (McGuirk and Argent 2011).

In addition, though, it is also a Second City that is serving an expanding hinterland – as it draws population from the third order cities of Ballarat and Bendigo – offering high level education, social and health services to more and more people. It is these demands as well as the inflowing population that are supporting the growth of these employment sectors.

However, it is not only about proximity and connectivity to the major centre. For Geelong it is a boom built on

separateness and an autonomous identity, one promoted successfully by local lobby groups and their embrace of wider development agendas that work – waterfront renewal, CBD revitalisation, creative city attractiveness, tourism and quality transport, and health and education infrastructure. The attractiveness of this regional centre is also based on its history. For Geelong is a regional centre proud of its identity and fiercely loyal to the only non-metropolitan Australian Rules football team (Button 2016). Further, the planning and lobbying authorities’ – CoGG, G21 and Committee for Geelong – long term embrace of the creative city agenda is producing a provincial city that increasingly has a cultural heart that does indeed attract the ‘creative class’ and many more besides. Thus from 1996-2001 27,359 people moved into the G21 region, 37% of whom were from Melbourne, 24% from the rest of Australia and 19% from other parts of Victoria (Macro Plan 2005).

Many commute back to the metropolis – 15,000 per day on the freeway and another 7,000 on the regularly improved rail service, 17% of the city’s workforce. This aspect is the most tangible evidence of the agglomeration shadow effect (Burger et.al 2015). So too is the relocation of industries. But such relocations and regular upgrades to connective infrastructure have emerged from consistent and effective lobbying – helped by the presence of a number of politically volatile electorates. And in these lobbying efforts, the united voices, an agreed list of major project priorities as well as the strong sense of local identity based on the history, location and particular sociology of the city, have been key.

These elements together have allowed Geelong to move from being Sleepy Hollow, a rust bucket city of industrial decline, to being a dynamic Second City. As Cardoso and Meyers (2017) observe: metropolitan integration entails functional, institutional and symbolic dimensions with potential to improve Second City disadvantage. The advantages include exploiting agglomeration benefits – in this case commuting, being an attractive residential and holiday destination – efficiently deploying shared metropolitan resources – such as health and education – and acquiring political and institutional influence over higher-level policy making – seen readily in the mutually beneficial embrace of the Second City agenda by both Melbourne and Geelong and the relocation of state agencies. This Second City then is now integrating into an expanding urban region, but on its own terms.

Note

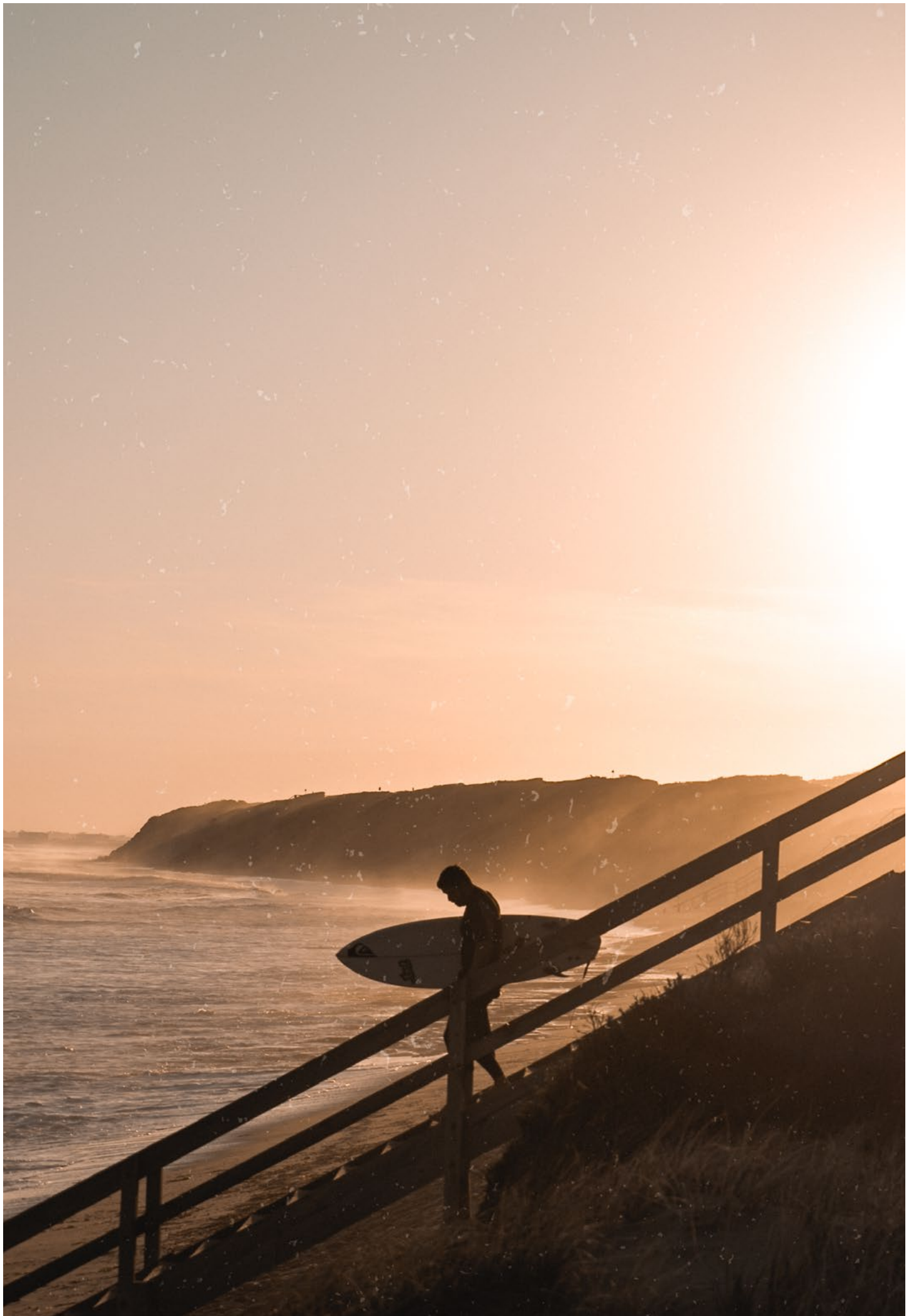
1. This is a truncated version of a book chapter: Johnson, L.C. (2020) “From ‘Sleepy Hollow’ to ‘Winning from second’: Identity, autonomy and borrowed size in an Australian regional second city”, in M. Pedras (ed.) *Regional Second Cities* Bristol: Policy Press (in Press), pp.1-20.

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Australia's Gateway Cities: **GATEWAYS TO GROWTH**

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