Subject: LMM 26/11/2019 - *Australia's Gateway Cities* Report Launch

MOTION

That City of Newcastle:

1. Notes that on Monday, 25 November 2019, City of Newcastle joined with City of Wollongong, City of Geelong, the Committee for Geelong, and the Minister for Population, Cities and Urban Infrastructure, the Hon. Alan Tudge MP to launch the *Australia's Gateway Cities: Gateways to Growth* report at Parliament House in Canberra;
2. Thanks our City of Newcastle staff for their collaborative approach to producing this report with our partners, including, City of Wollongong, the Committee for Geelong, City of Geelong, Deakin University, the University of Newcastle and the University of Wollongong;
3. Notes the significant recommendations of the report, including;
    a. The further development of the shared interests between City of Newcastle, City of Wollongong and City of Geelong, as Australia's Gateway Cities;
    b. Infrastructure development with Federal Government support to develop more accessible and sustainable transport connections for both passengers and freight;
    c. Fostering Innovation and economic growth and diversification through fiscal rebalancing to unlock the latent potential of Australia's Gateway Cities;
    d. Supporting strong and skilled workforces through integrated planning to identify future and emerging workforce skills, particularly for transitioning economies.
4. Commends these recommendations to the NSW Government, and the Commonwealth Government, and sends a copy of the report the Prime Minister, the Hon. Scott Morrison MP, Premier of NSW, the Hon. Gladys Berejiklian MP, Deputy Premier and Minister for Regional NSW, Industry and Trade, the Hon. John Barilaro MP, and Minister for Planning and Public Spaces, the Hon. Rob Stokes MP.

BACKGROUND:

In 2018, following Expressions of Interest from the Committee of Geelong, City of Newcastle supported a resolution of Council to support a partnership with the Committee for Geelong, the City of Geelong, and the City of Wollongong to develop a proposed National Second City Policy Framework and research report to address the long term underinvestment in Australia's so-called 'second cities'.

Following this resolution, City of Newcastle staff have collaborated with the Committee of Geelong, the City of Geelong, the City of Wollongong, Deakin University, the University of Newcastle and the University of Wollongong to produce the report *Australia's Gateway Cities: Gateways to Growth.*

Australia's Gateway Cities: Gateways to growth

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.

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.

Media Release: Australia's Gateway Cities set to ease population pressures – New Report

Increased population growth in the 'Gateway Cities' of Geelong, Wollongong and Newcastle will help ease population pressures facing Sydney and Melbourne as stated in a new report released today.

Published by the Committee for Geelong in partnership with the City of Newcastle, Wollongong City Council and the City of Greater Geelong, the 'Australia's Gateway Cities' report was

launched today at Parliament House by Federal Minister for Population, Cities and Urban Infrastructure, The Hon. Alan Tudge MP.

Deakin University led the research team with support from the University of Newcastle and University of Wollongong that developed criteria to help define 'Gateway Cities' including the size, scale and sufficiently diverse economic base capable of maximising returns on investment. The term 'Gateway Cities' has been recommended as a result of the research.

According to Committee for Geelong CEO Jennifer Cromarty, the criteria does not represent a claim to exclusivity as the only 'Gateway Cities' in Australia, rather it starts the conversation about the role of large cities to ease congestion challenges in Melbourne and Sydney.

"Australia's Gateway Cities report highlights the shared and unique characteristics and strategic assets of the cities of Wollongong, Newcastle and Geelong. However, the report is not prescriptive in terms of these cities in isolation of a national approach to infrastructure investment or broader population policy. This report seeks to demonstrate certain assets and advantages of 'Gateway Cities' that can be deployed to maximise national economic growth, regional resilience and job creation for Australia's long-term settlement strategy," Ms Cromarty said.

The Report includes modelling to identify factors that show how 'Gateway Cities' can offer greater impact and benefits for investment, such as: Market Interconnectivity, Economic Pull and Retention, Economic Resilience and Transformative Capacity, Demonstrated Long Term Regional and National Economic Integration and Strength of the Revenue Base. The Australia's Gateways to Growth report is available to download from the Committee for Geelong's website.

Lord Mayor of Wollongong City Council – Gordon Bradbery AM says, "Australia's Gateway Cities: Gateways to Growth report is a significant start to mitigate our population pressures in Melbourne and Sydney and to create a model to enliven the regions."

Mayor of the City of Greater Geelong Cr Stephanie Asher says, "this report follows on from a strong history of research by the Committee for Geelong regarding the role of large regional cities as a key contributor to our national economy and population growth plans.

Lord Mayor of City of Newcastle Cr Nuatali Nelmes says, "we now look forward to working together as foundation members of the Gateway Cities Alliance and having a collaborative and collective approach to progress next steps. Australia's Gateway Cities occupy a significant place within the economy. However, they have been underestimated in terms of public policy."

PREVIOUS RELATED DECISIONS

LMM   24/07/2018 – NATIONAL SECOND CITY POLICY FRAMEWORK DEVELOPMENT
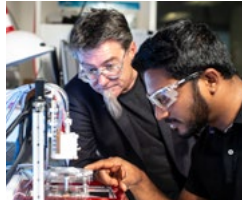
ATTACHMENTS:

- *Australia's Gateway Cities* report
- LMM – 24/07/2018 – NATIONAL SECOND CITY POLICY FRAMEWORK DEVELOPMENT
- Memo to Councillors – Gateway Cities - Invitation
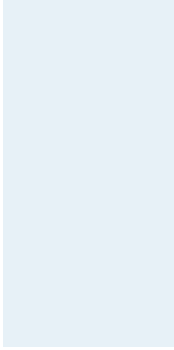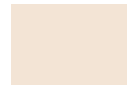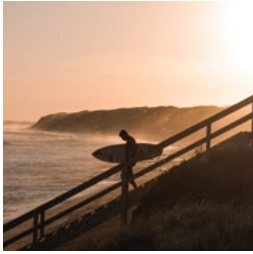
Australia's Gateway Cities:

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

DISCLAIMER

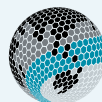The estimates provided in this report represent the research team's best efforts
to provide a comprehensive and reliable overview of the economic and social
contribution of Gateway Cities, based on the data and resources available. Estimates
and subsequent views or opinions expressed in this document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

Contents

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.

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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
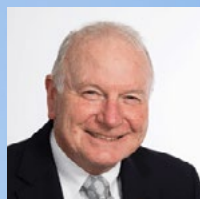
Cr Gordon Bradbery AM

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 Williamtown 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 STEMM 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.

"
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 G21 councils total 324,067)

After 1851 Geelong benefited from the discovery of rich goldfields less that 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 Waurn 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,

> " 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 -

> " 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/

> " 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.

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 Williamtown, 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 a 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.

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.

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.

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 Waurn 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

Geelong

Newcastle

Wollongong

0   10   20 km

Legend

SA2 3 Cities Pop/km

1 - 500
500 - 1000
1000 - 1500
1500 - 2000
2000 - 2500
2500 - 2951
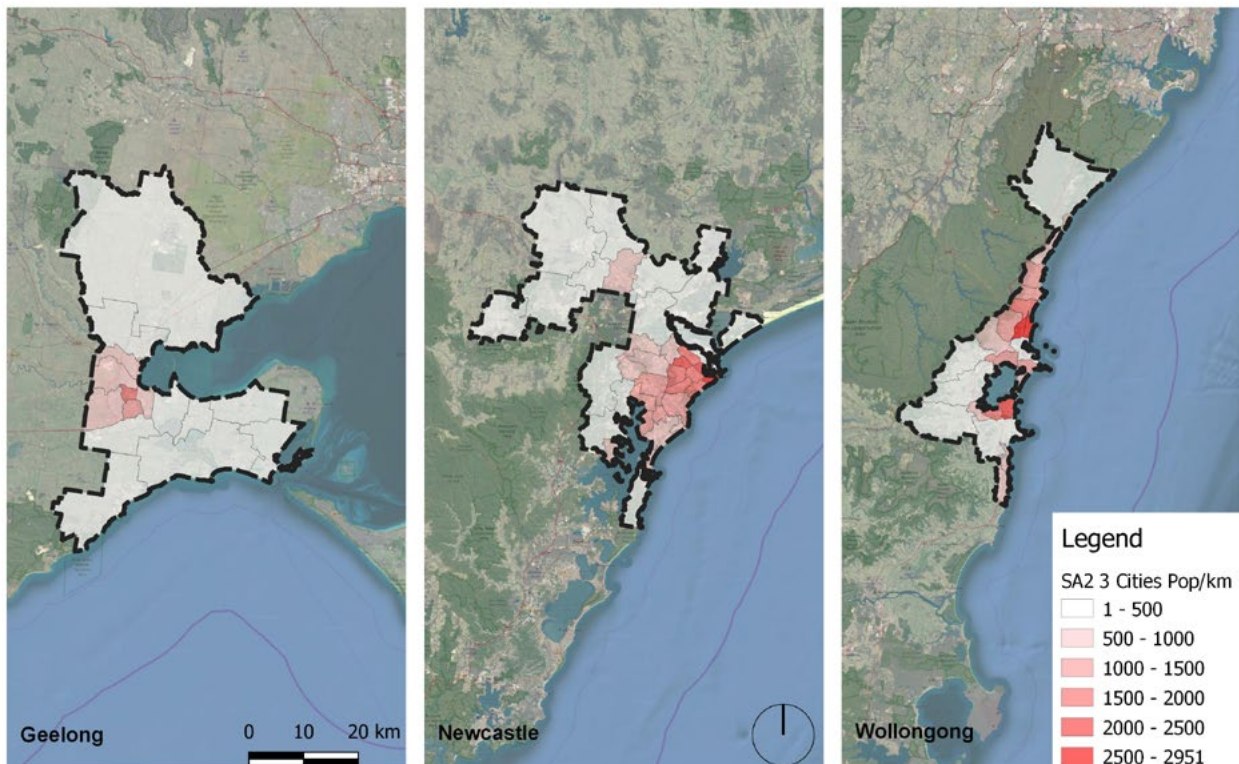
The following pages catalogue some of the built, financial, human, social and natural characteristics of Wollongong, Geelong and Newcastle. These demonstrate that the Gateway Cities are unique places of work, education, culture, recreation and leisure.

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.
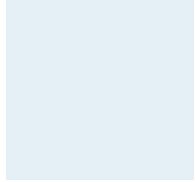
Newcastle

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 Williamtown defence base is the maintenance facility for the advanced Joint Strike Fighters (F-35) operated by countries in the Asia Pacific region. The Williamtown 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.
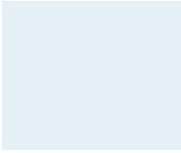
HUMAN

- 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.
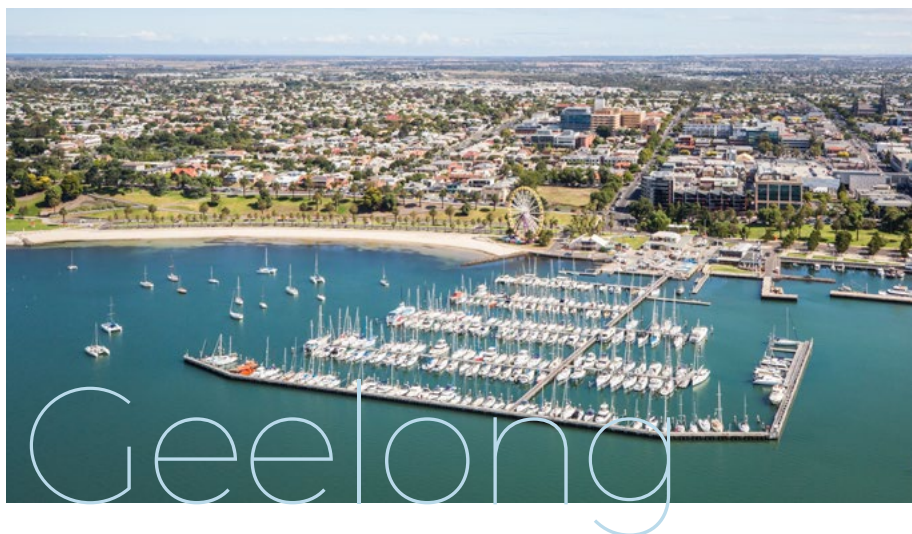
Geelong

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.
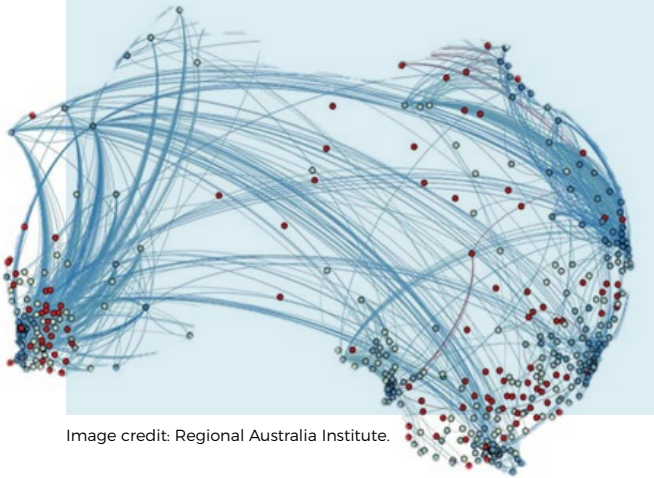
Image credit: Regional Australia Institute.

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
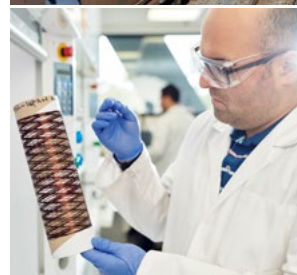Collaboration and prioritisation strategy

SECOND STEP
Housing, services and infrastructure

THIRD STEP
Mobility and access options

FOURTH STEP
Project priorities

OUTCOMES

FEDERAL ROLE	STATE ROLE	CITY ROLE
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.	Establish a central pathway for communication for cities to facilitate whole-of-government consideration.	Establish a coordinated communication and consultation approach for identification of key priorities for each city.
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.	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.	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.
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.	Establish or revise a set of transport standards, facility design, robust parks and public realm standards, and environment management.	Increase multimodal travel options so that future travel requirements increase the public realm connection and increase 'liveability'.
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.	Liaise with all levels of government and stakeholders on their list of priorities and budget.	Identify priority projects which benefit the national economy and local community. The public consultation will be important in identifying and clarifying priorities.
· 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.	· 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.	· 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.

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.

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.

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/

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

ENTER

DISCLAIMER

Contents

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.

• 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.

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.

#	City/Town	Population		#	City/Town	Population
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				
Rockhmptn		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 cities[1] 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.

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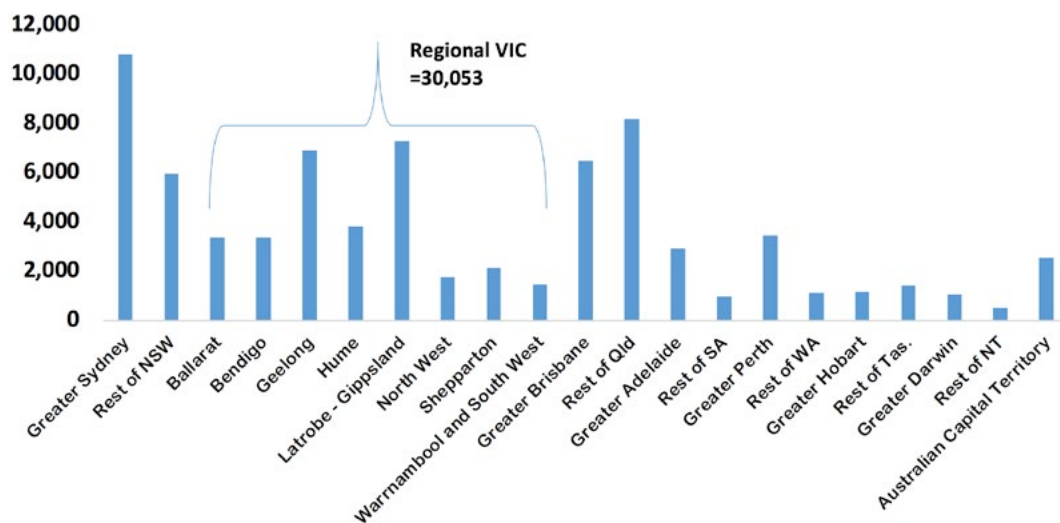
1.   Dean Smith (2018), 'Population Debate About More than Just Migrant Numbers', Australian Financial Review (AFR): https://www.afr.com/news/economy/population-debate-about-more-than-just-migrant-numbers-20180801-h13elt 'FacCheck: Is Australia's population the 'highest-growing in the world?', https://theconversation.com/factcheck-is-australias-population-the-highest-growing-in-the-world-96523

2.   Australian Government (2018), *'Shaping A Nation – population growth and immigration over time'*, The Treasury, Department of Home Affairs, Commonwealth of Australia.

Figure 3 Where do Greater Sydney's Out-Migrants Relocate? (2016-17)

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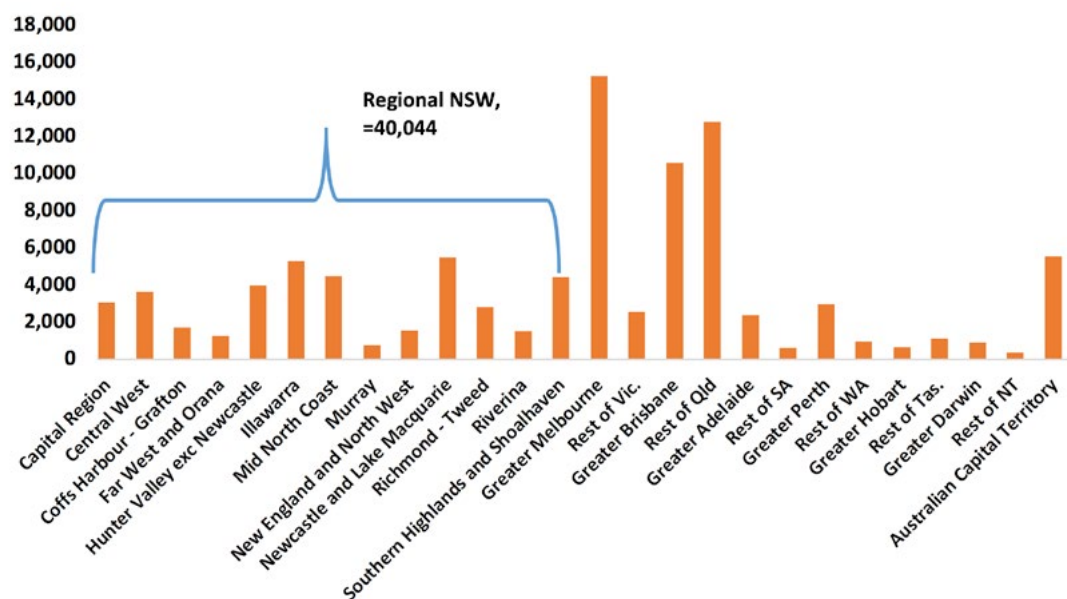
Interestingly, in Sydney, much of the internal net outward migration appears to be occurring in the family-formation (households with children aged 0-14 years) age groups of 25-44 years, as well the older 45-64 year olds. A figure of approximately 40 per cent of Greater Sydney's net loss occurs from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

References

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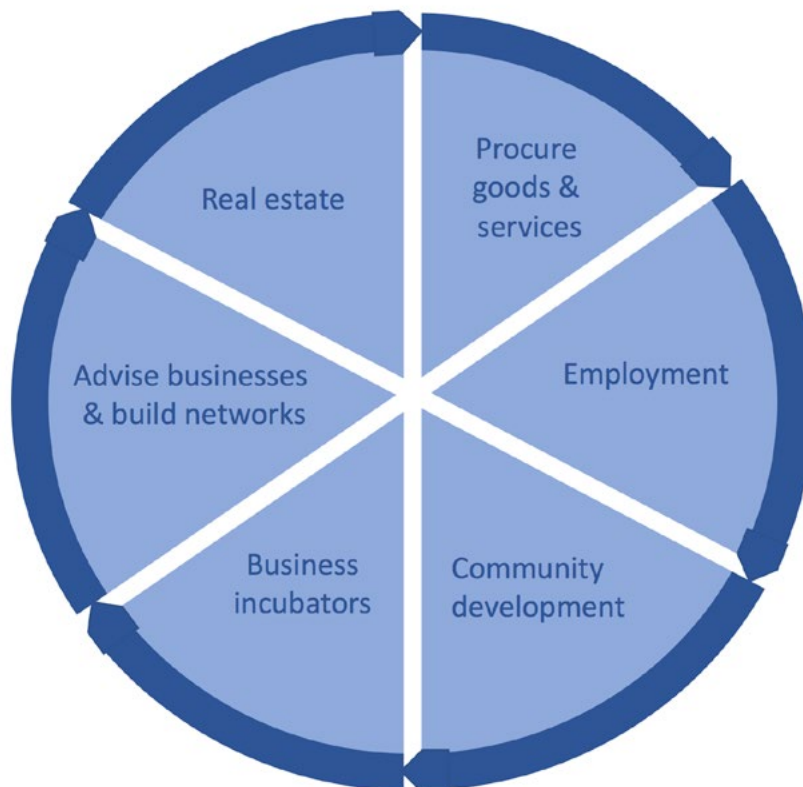
Kleiman et al. (2015:3) argue that universities, medical centres and hospitals are obvious partners for local leadership because,

> *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 Waurn 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.

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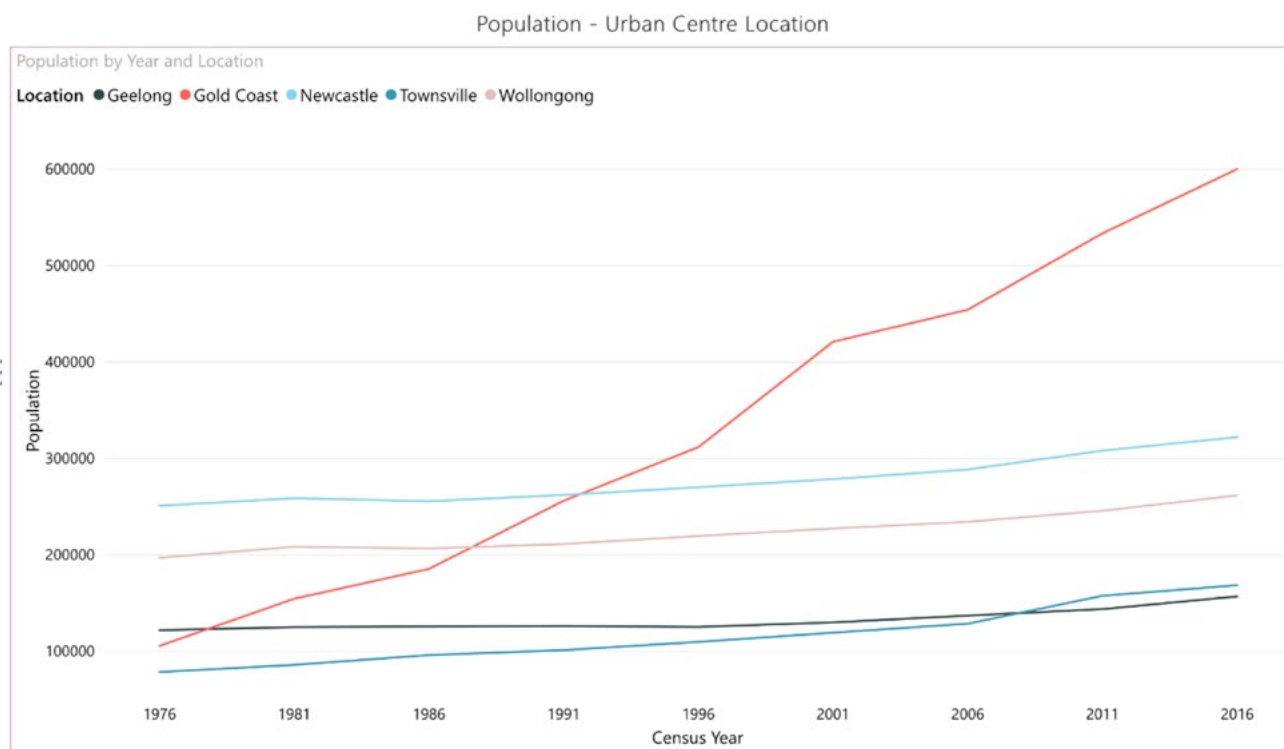
The Gold Coast has created an international image as an appealing holiday destination and a place to retire to. It now features burgeoning suburbs and a light rail system.

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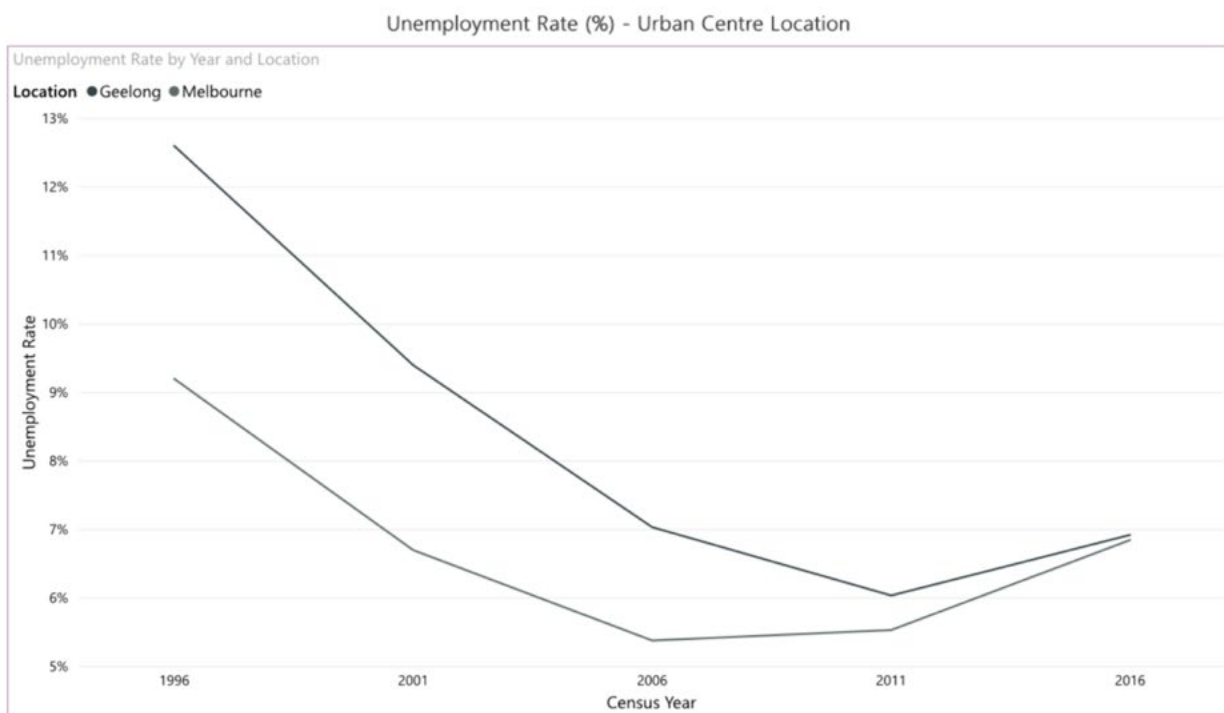
The unemployment rates in Newcastle and Wollongong still trail that of Sydney by one percentage point. That gap has closed from five percentage points in 1996.

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

Industry Sector (%) of Total Labour - Urban Centre Location
Industry Sector: Professional-Scientific-Technical Services
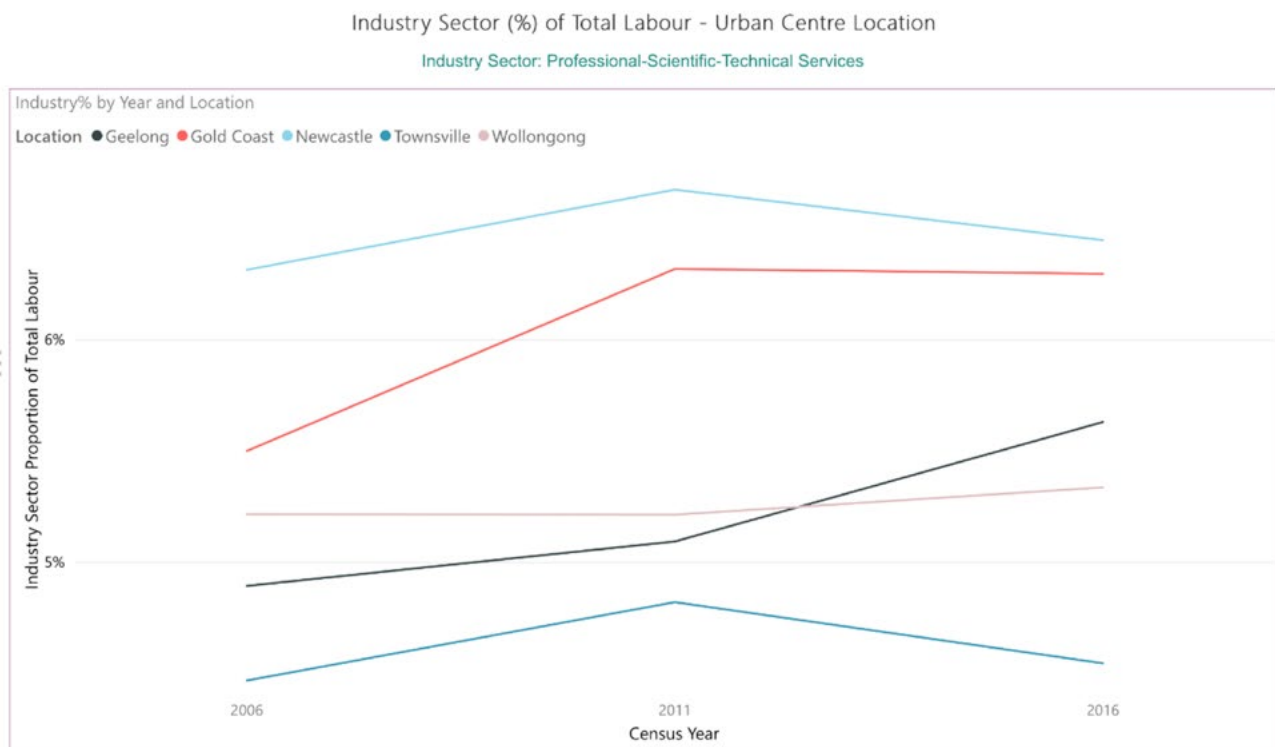
Real estate innovation and entrepreneurship

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]

Louise Johnson, Deakin University

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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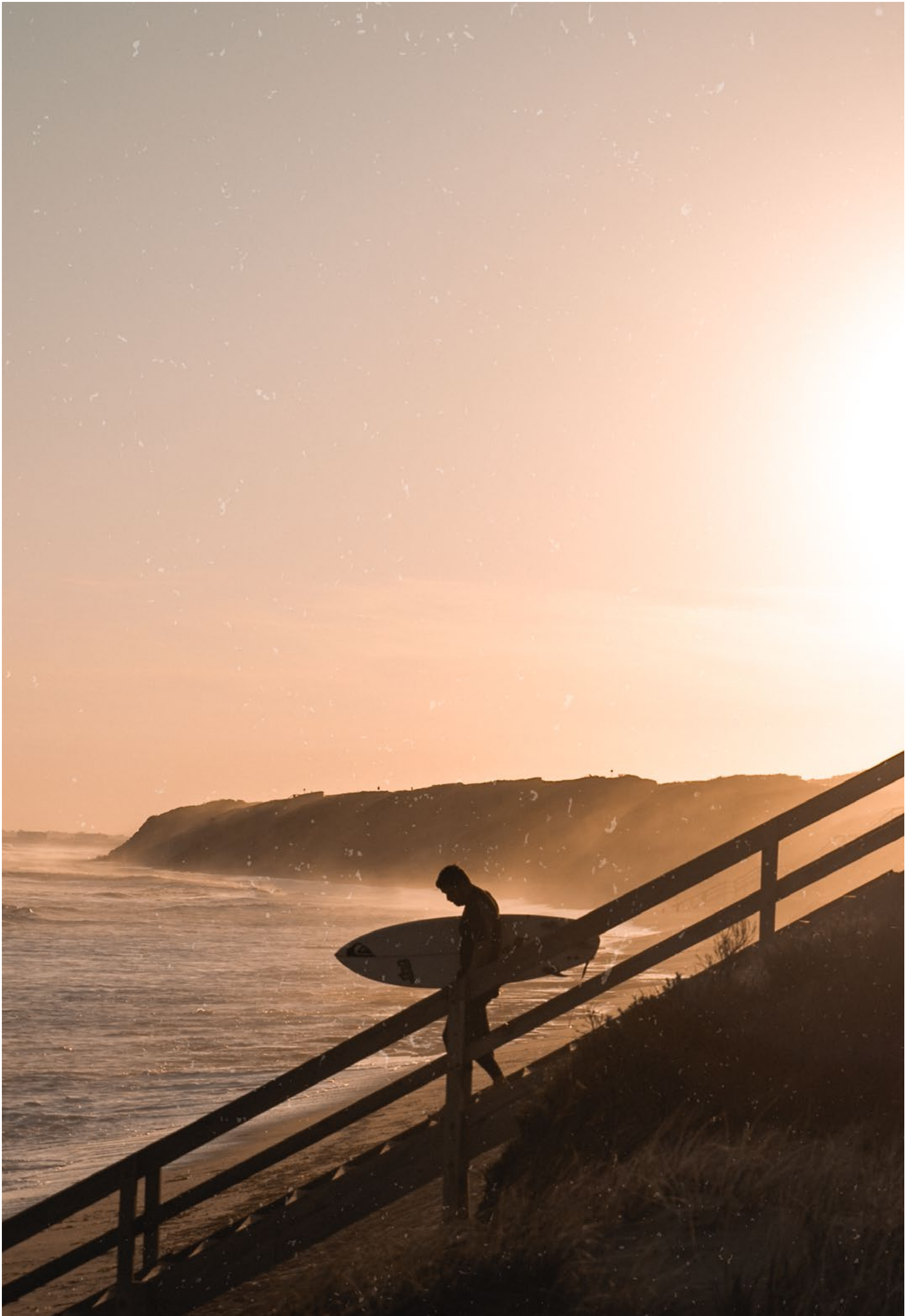
Australia's Gateway Cities:
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ITEM-13   **LMM 24/07/18 - NATIONAL SECOND CITY POLICY FRAMEWORK DEVELOPMENT**

MOTION

That Newcastle City Council:

1   Notes that the Committee for Geelong is calling for Expressions of Interest – Scope Development from National Second Cities, to assist in the development of a proposed National Second City Policy Framework;
2   Re-affirms the City of Newcastle's status as a Second City of New South Wales;
3   Notes that following the City of Newcastle Second Cities Roundtable a delegation from Newcastle, including from the University of Newcastle, Hunter Research Foundation Centre, Port of Newcastle and Newcastle based Commonwealth Bank representatives are currently in Geelong for the launch of the national call for a Second Cities policy.
4   Supports a partnership with the Committee of Geelong in the development of a proposed National Second City Policy Framework with a $25,000 contribution towards the research report, noting the collaboration includes the City of Wollongong who has resolved to support the development of a proposed National Second City Policy Framework and will make a financial contribution to this project;
5   Supports, in principle, a partnership with the University of Newcastle to deliver the Second Cities Symposium being planned for 3-5 October 2018, in the City of Newcastle **(Attachment B)**.

BACKGROUND

On 7 June 2018, the City of Newcastle hosted a Second Cities Roundtable where the Committee for Geelong briefed Newcastle City Council, and key partners on the creation of a Committee for Greater Newcastle, and the development of a proposed National Second City Policy.

The Committee for Geelong's international research report about tier two cities, *Winning from Second: What Geelong Can Learn from International Second Cities* (Attachment 1) draws on the experiences of comparable cities in Europe and the United States of America to guide the transformation of the Geelong economy. While focusing on Geelong, the project underscores the need for greater policy and planning attention to be given to second cities in Australia, as international experience provides examples of significant economic and social development as a result.

As part of the briefing discussion on the day, the Committee for Geelong outlined their objectives to develop a proposed National Second City Policy Framework, which was unanimously endorsed by the participants in attendance.

Committee for Geelong Chief Executive Officer, Ms Rebecca Casson, has since written to Council seeking our support for the development of a proposed National Second City Policy Framework.

National Second City Policy

Long term underinvestment in second cities presents risks of national economic underperformance, and some countries are pro-actively developing explicit policies for their second cities.

It is therefore important that Australia considers a second city policy approach and begins to lead the way in this arena. A strong national second city policy for Australia's largest city economies (outside of the major cities in each State) will be beneficial to Australia's overall economic and social performance. National and state policy agendas must be complimented by whole-of-government policies that formally acknowledge and support the development of Australia's second cities.

It is evident that Governments can no longer efficiently prepare for the future by relying on historical approaches to urban planning and city development. Australia is growing and there will be more second cities in the coming years. Cities such as Geelong, Wollongong and Newcastle are among the first and most appropriate city-regions to base a proposed National Second City Policy Framework on, which can then be adopted across all tiers of government.
With the Victorian Government formally recognising Geelong as Victoria's second city in its revised Plan Melbourne, and work undertaken by other States in this area (such as NSW – Parramatta, and QLD –Sunshine Coast/Gold Coast) the stage has been set for a fundamental rethink on the importance of second cities throughout Australia.

Because of the similarities between the cities of Geelong, Wollongong and Newcastle, a positive working relationship has been forged between those Councils over several years. This collaboration has provided opportunities for information sharing, networking and policy development. Following the completion of the *Winning from Second: What Geelong Can Learn from International Second Cities (Wf2)* research*,* there is an opportunity to reignite the relationship between these three cities through the development of a Memorandum of Understanding/term sheet to guide future opportunities for collaboration.

Co-funding research and development of a proposed National Second City Policy Framework cements this arrangement, and the Committee for Geelong will help to support this process.

University of Newcastle Second Cities Symposium

The University of Newcastle's Hunter Research Foundation Centre, with partners AECOM and Hunter Water Corporation, are currently preparing to host a Second Cities Symposium at NewSpace in October 2018.

The Symposium aims to further the development and build awareness of the need for a Second Cities policy by drawing on domestic and international expertise.

Alongside external sponsorship and grant funding, the University of Newcastle have requested in-kind and financial support from Council to support the Symposium.

ATTACHMENTS

Attachment A: *Winning from Second: What Geelong Can Learn from International Second Cities.*

Attachment B: University of Newcastle Hunter Research Foundation Centre, Sponsorship Proposal, Second City Symposium, October 2018.

Winning from Second

What Geelong can learn from International Second Cities

Global Compact Cities Programme

RMIT UNIVERSITY | Centre for Urban Research

COMMITTEE FOR GEELONG

Images on front cover from top to bottom:
Pittsburgh, Ohio, USA.
Geelong, Victoria, Australia.
Sheffield, England.

Winning from Second

What Geelong can learn from International Second Cities

Global Compact
Cities Programme

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Acknowledgements

Geelong is Victoria's second city and proudly so. But second does not mean second rung or second place; it means Geelong enjoys all of the benefits of being within arm's reach of Melbourne but free from the constraints of big city living. It means being grounded by Geelong's own rich legacies, yet experiencing the freedom that comes from being surrounded by open space and open water. More than that, it is about having the unbridled ability to think clearly and create a life with wellness at its core.

The Committee for Geelong's research on second cities draws on insights from the significant change and economic transformation of cities comparable to Geelong. This research provides Geelong with substantial guidance to further drive the vision and strategic plan for our city's future.

The Committee for Geelong values the support for our research on second cities, and we are particularly grateful for the assistance from our colleagues in the international cities we visited. We thank the Second City research team for their vital input, and specifically thank the United Nations Global Compact — Cities Programme and RMIT's Centre for Urban Research for their work on this project. Finally, we thank all our Second City research partners for their support and contribution, and we especially acknowledge the Commonwealth Bank as the Lead Research Partner on our Second City Research project.

Dan Simmonds
Chairperson,
Committee for Geelong

Rebecca Casson
Chief Executive Officer,
Committee for Geelong

With special thanks to

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Executive Summary

Introduction

Winning From Second: What Geelong Can Learn From International Second Cities draws on the experiences of comparable cities in Europe and the United States of America to guide the transformation of the Geelong economy. While focusing on Geelong, the project underscores the need for greater policy and planning attention to be given to second cities in Australia, as international experience provides examples of significant economic and social development as a result.

This report presents the findings and recommendations from the Committee for Geelong's 2016 international study tour of second cities. The purpose of the project is to draw on insights from the economic transformation of cities comparable to Geelong, and to provide recommendations for Geelong's social and economic development. The project insights focus on governance frameworks, vision and strategy implementation, economic development approach and how the diverse economic needs have been addressed within communities. This report has three sections: a review of second city research and literature and an overview of the development of Geelong; the study tour findings; and finally recommendations resulting from the project.

This report reviewing the literature on second cities, was prepared by the UN Global Compact - Cities Programme and RMIT's Centre for Urban Research. The research elements of the study tour were undertaken in accordance with RMIT University's regulations in relation to the ethical conduct of research as approved by the College of Design and Social Context Human Research Ethics Committee.

In Australia, the Federal Government has infrequently developed policies or initiatives directly aimed at the development of the country's second cities. The Federal Government has occasionally provided funding for projects in second cities, such as the Regional Development Australia Fund and the City Deals proposed in the 2016 *Smart Cities Plan*, but these included second cities within a regional frame rather than concentrating on the issues and opportunities that they offer. In Victoria, the State Government's *Plan Melbourne* included directions to "rebalance the growth" (2014, p. 152) between the capital and regional areas. The Ministerial Advisory Committee reviewing *Plan Melbourne* has recommended that Geelong be officially designated the State's second city and lists important infrastructure projects to promote economic growth. While Geelong has benefited from the relocation of government agencies, Worksafe, the TAC and NDIA, it can be argued that in the past regional development policies have not resulted in significant economic transformation.

The investigation into how comparable international cities have developed into growing, successful cities following the decline of core industrial sectors comes at an important juncture for Geelong. The cities included in the study tour have seen large major companies leave their cities, but have transformed their economies through co-ordinated and long-term strategies for industry development. The report provides insights into the experiences of comparable cities that it is hoped will assist Geelong to develop a program of short- to medium- term actions to facilitate a similarly successful transformation in Geelong.

Purpose of the Research Project

The central question guiding this research report is:

How have selected exemplar second cities pursued their economic and social viability following economic change?

To address this question the Committee for Geelong undertook an international study tour, of cities of similar size, infrastructure and economic history, across the United States of America and Europe. The selection of cities was based

on recommendations from an earlier report, as well as a review of the terminology associated with important, but not primary cities within national settlement hierarchies. The following cities were included on the international study tour:

- Eindhoven, Netherlands;

- Dundee, Scotland;

- Cleveland, Pittsburgh and Richmond, United States of America

- Bristol, Liverpool and Sheffield, England.

The Committee for Geelong study tour was accompanied by research assistance from the UN Global Compact - Cities Programme. Research interviews with representatives from Local Government and economic development agencies were conducted in each of the cities, with topics including governance, collaboration, leadership, vision and strategy, approach to economic development, social and economic needs of the community, and the role of education and innovation.

The research elements of the study tour were undertaken in accordance with RMIT University's regulations in relation to the ethical conduct of research as approved by the College of Design and Social Context Human Research Ethics Committee.

Summary of Findings

Even though the paths to economic transformation of cities included in this report were different, many aspects of successful economic transformations were repeatedly raised across the interviews with city respondents. These recurring themes offer insights into how Geelong can enhance its social and economic viability by drawing on the recommendations offered in this report.

A consistent finding was the importance of a unified approach to the development of the city, both strategically and organisationally. Dundee has benefited from having a strategic vision embraced by the public and private sector, while Pittsburgh's Allegheny Conference on Community Development has provided a unified development body for the city since 1944. Eindhoven's Brainport is also a notable example, which brings together government, industry and knowledge institutions to foster development in the city and its surrounding region. Unity and co-operation in economic development seems particularly important given the time required to achieve transformation. This experience is exemplified by the long process since the 1970s that has resulted in Pittsburgh's recognition as a leading green economy.

The economic viability of the study cities has been enhanced through the support and nurturing of new and innovative businesses. Links between industry development, education and research has been central to the resurgence of Eindhoven, as mentioned above. Support for SMEs was highlighted as an important consideration in fostered economic development, with Eindhoven, Richmond and Sheffield particularly noting the importance of scaling up existing businesses.

Spatial strategies have also been important elements of success for the cities in this report. Cleveland has developed a strong Health Tech Corridor based on shared industry, hospital and university specialisations. An important aspect of the Cleveland Health Tech Corridor is that it has flourished through specialisation in knowledge clusters in cardiac care, cancer research and general healthcare, which differentiate Cleveland from other cities and medical clusters. Importantly, Cleveland has identified this as an important economic driver within the city and invested in the Health Tech Corridor to make sure the city captures the new businesses that are being created in the sector. Other second cities have also developed industry specialisations, which have contributed significantly to the transformation of their economies, such as Dundee's strong biomedical science sector, alongside its burgeoning niche in electronic games development.

Second cities have also prospered by providing distinct identities relative to major cities. When deciding on Dundee as the home of the Victoria and Albert (V&A) Museum, the museum board realised that the museum would be more visible if it was located in a second city, rather than Glasgow or Edinburgh. As well as increased visibility, second cities are often less congested, have lower real estate costs and appealing environments and quality of life. Clearly articulating the advantages that second cities such as Geelong offer can assist them to successfully compete for business and residents.

Many second cities, such as Dundee, Cleveland, and Pittsburgh have sought to coordinate urban spatial development with economic development. One part of this includes efforts to become attractive places to live by improving environment and amenity, and developing arts and culture. Liverpool, Richmond, Pittsburgh and Dundee have all invested in redeveloping their waterfronts, to create attractive spaces for their residents. As mentioned above, Dundee is to be the location of the first remote site of the V&A Museum, which will be an important attractor of tourists as well as reflecting the strong creative industries sector in the city. Pittsburgh has developed a strong arts and culture sector, particularly for a city of its size, and Richmond offers a highly regarded food scene, art community and

outdoor recreation. There is also a recurring emphasis on creating vibrant city centres as an attractor of new residents and businesses, particularly millennials. A second dimension of special development includes specified economic development precincts, such as the Cleveland Health Corridor.

The eight cities included in this investigation have all successfully transformed their economies in recent decades. These factors in their success indicate how Geelong can emulate their experience, not through replicating their specific mix of industry sectors or economic development initiatives, but by establishing coordinated governance, environment and policy settings to foster economic and social vitality within the specific context of Geelong.

Recommendations

The overarching recommendation of this report is for Geelong to engage with the development of a second city policy with the Victorian and Federal Governments, as well as continue to take advantage of policies and development opportunities within existing policies. The supporting recommendations draw on the key findings from the Committee for Geelong's international study tour discussed above, such as *A co-ordinated approach to economic development and planning* and *Start-ups, innovation, entrepreneurs and scale ups*.

A table summarising the recommendations follows.

No.	Title		Description	Timeframe
			Overarching Recommendation	
	Second City Policy		Take advantage of government policies for regional and city development. Contribute to advocacy for second city policy development with State and Federal Governments.	Ongoing
			Supporting Recommendations	
1	Industry mapping and opportunity identification		Undertake a detailed analysis of the Geelong economy to identify opportunities for development based on the Smart Specialisation model. This will inform the development of a vision for the transformed city.	Short term/ Medium term
2	A co-ordinated approach to economic development and planning		Work towards establishing a "One Geelong" organisation with a unified vision and set of strategic priorities for Geelong. This will be more efficient in providing united advocacy and greater outcomes for the city.	Short term/ Medium term
3	Branding of Geelong		Develop a new brand for Geelong to drive business and residential attraction	Short term/ Medium term
	a)	Be clear on why Government and industry should invest in Geelong	Identify the key motivations for private and public sector investment In Geelong, particularly in comparison to Melbourne and regional cities.	Medium term
	b)	Lifestyle and amenity	Promote the lifestyle and amenity on offer in Geelong to attract new residents. Continue investing in central Geelong as an entertainment, arts, culture, leisure, sport, dining and retail precinct.	Ongoing
4	Start-ups, innovation, entrepreneurs and scale ups		Attract and foster new businesses and ventures in Geelong. Make sure that innovation is widely adopted to increase city productivity and competitiveness. Encourage existing organisations to scale up by providing support	Ongoing

Table 1: Summary of recommendations

Introduction

Geelong is Victoria's second city. It is the second largest city in the state in terms of population. Geelong is positioned at an important moment in its historical development as a second city within Victoria and Australia. Recent economic change has demonstrated the need for a future strategic direction in the city that enables businesses and the community to transform the city's economic, environmental and social prospects. Efforts to shape this future direction can benefit from a sound understanding of the city's current conditions and context and from the experiences of other second cities that have undergone similar adjustments and transformations. As a second city Geelong is unique but not alone.

This report presents the findings and recommendations from the Committee for Geelong's 2016 international study tour of second cities. The purpose of the project is to draw on insights from the economic transformation of cities comparable to Geelong, and to provide recommendations for Geelong's social and economic development. The project insights focus on governance frameworks, vision and strategy implementation, economic development approach and how the diverse economic needs have been addressed within communities. This report has three sections: a review of second city research and literature and an overview of the development of Geelong; the study tour findings; and finally recommendations resulting from the project.

The Committee for Geelong commissioned Deakin University to undertake Phase 1 of this project. That phase included a review of literature relating to second cities as well as identifying the cities to be included in a Committee for Geelong study tour. Those recommendations were based on the successful transitions from economies based on manufacturing; similar infrastructure as Geelong such as ports, universities and airports; population; and, local leadership. This process resulted in interviews with representatives from the following cities on the study tour undertaken by the Committee for Geelong:

- Eindhoven, Netherlands;

- Dundee, Scotland;

- Cleveland, Pittsburgh and Richmond, United States of America;

- Bristol, Liverpool and Sheffield, England.

For phase 2 of the project, the Committee for Geelong commissioned the UN Global Compact - Cities Programme, which supported the study tour and prepared this report. RMIT University's Centre for Urban Research has contributed to the theoretical background and recommendations based on the outcomes of the study tour.

The Committee for Geelong's study tour and investigation into second cities occurs at an important juncture. There has been much attention given to the decline of automotive manufacturing in Geelong, which was integral to the city's growth in the 20th century. Less attention has been dedicated to the rise of new enterprises and clusters of activity that represent new directions for the city's economy. This is highlighted by new organisations linking research and industry, the increasing number of public sector social insurance agencies locating in central Geelong, as well as the continuing investment in the city's infrastructure.

Many second cities across the globe have experienced similar transitions to Geelong, as globalized supply chains, tariff reductions and deregulation, and cheap offshore labour have led to declining manufacturing sectors in developed economies. There has been a particular focus on the development of second cities within the European Union to address spatial disadvantage and divergent economic fortunes outside of the major cities.

Although there are similarities between Geelong and these international examples, it is important to recognise important differences. Geelong is in close proximity to Melbourne, a city with 20 times the population, but near no other sizeable cities indicating the importance of this relationship. The proximity to Melbourne may also have contributed to another distinguishing feature of Geelong, that it has not experienced the population declines associated

with the economic transitions of heavily industrialised cities such as Cleveland and Pittsburgh. The ready access to the state capital in conjunction with the environment, amenity and affordable housing in Geelong has ensured that the city's population has continued to grow over recent decades. In contrast, cities like Sheffield and Liverpool are set amidst a number of similarly sized and larger cities, while Eindhoven takes advantage of its proximity to Amsterdam, Antwerp, Brussels and Dusseldorf. Also of note, the European cities are situated within countries with two tiers of government, while the City of Greater Geelong is in the third tier of the Australian system.

The recommendations presented in this report provides Geelong with the guidance on transforming the city's economy and draw on the important factors in the reinvigoration of comparable cities in Europe and the USA, while to reflecting the unique circumstances of Geelong. The overarching recommendation is to advocate for a second city policy, planning and investment with Federal and State Governments. The supporting recommendations of *Industry mapping and opportunity identification* and *A co-ordinated approach to economic development and planning* have been integral to the successful transformation of the second cities studied in this project and are therefore suggested priorities for Geelong. Other recommendations build on the outcomes of these initiatives and provide the basis for continuing the development of Geelong as an attractive place to live and invest.

Committee For Geelong

Founded in 2001, the Committee for Geelong is a non-profit, independent, politically unaligned, membership based organisation that exists to actively advocate for a better future for Geelong. The Committee is governed by a Board and Chairperson, with oversight from a representative group of members known as the Strategy and Policy Committee. The Chief Executive Officer is responsible for leading its operation, research, strategic relationship development, advocacy and implementation of initiatives. Committee members include local, national and international organisations and individuals, who set aside commercial gain, sectoral interests and personal perspectives to come together to be a united voice on the issues facing Geelong. The Committee focuses on medium to long-term initiatives that support its vision for "providing strategic leadership and influence to leverage the economic potential of the region to make Geelong a world-class place". Its key initiatives are to:

• Advocate for economic prosperity and innovation outcomes for Geelong

• Actively support development of the region's infrastructure and capacity

• Demonstrate community leadership and advocacy on key issues

The Committee has a history of achieving results for Geelong by actively looking at ways to solve problems and confront challenges. Its success enables the Committee to influence policy and often means its opinion sought by key decision makers. In addition to the *Second City research* project, the Committee has developed a range of policy and research work. For example, the *Transforming Geelong* initiative provides a report on they city's economic progress, highlighting continuing investments and population growth. The *Geelong on Track* freight and passenger rail strategy seeks to receive Government commitment to improved infrastructure links to the region. The *Geelong Port-City 2050* outlines the opportunities available to derive economic growth in Geelong through development of the port precinct. Finally, the *Vision2* project provided the Geelong community and stakeholders an opportunity to imagine the city's future, building on the successful waterfront redevelopment of the early 2000s. This project is now being implemented by the City of Greater Geelong and the Victorian State Government.

Research Approach

The central question addressed by this research project is:

How have selected exemplar second cities secured their economic and social viability following economic change?

Factors considered in answering this question include governance, collaboration, leadership, vision and strategy, approach to economic development, social and economic needs of the community, and the role of education and innovation. Rather than identifying industry sectors that may be successfully developed in Geelong, the primary objective of the project is to determine the structures, roles and responsibilities of organisations in order to foster growth in these cities.

Interviews with stakeholders in European and American second cities were employed as the primary research method in developing this report. The interviews were conducted as part of a study tour undertaken by the Committee for Geelong in 2016, which visited Dundee, Eindhoven, Cleveland, Richmond, Pittsburgh, Bristol, Liverpool and Sheffield. These cities were selected for their similar mix of infrastructure (i.e. ports, airports and universities), similar population size, strong local leadership and development policies, and for their experience in undergoing economic transformations following declines in manufacturing.

For the set of questions that have informed the interviews please refer to Appendix A.

Second Cities

Definitions

In the initial phase of this project, Deakin University prepared a summary of terms used to describe cities such as Geelong in settlement hierarchies, which is reproduced on the following pages. The underlying thread that makes definitions worth forming and second cities important is that they represent a significant proportion of the world's people, economy and activities.

There is not a single, agreed definition of what constitutes a second city; however, a population of between 50,000 and 1 million recurs in the research and is widely used as the first step in identifying second cities (Naylor 2015; Torné 2014). Other criteria relates to the role of cities in national hierarchies and the functions contained within them. For example, based on Parkinson et al. (2012) and Evans (2015) influence-based criteria, cities which provide important contributions to the nation's economy and society are considered as second-tier.

In Australia, 'regional cities' has been traditionally been the term used to designate the non-capitals, however 'regional capitals' is becoming more frequent, with the recent Senate inquiry into the *Future role and contribution of regional capitals to Australia* and the advocacy group Regional Capitals Australia providing examples. A recent Australian Senate enquiry noted that "the absence of a definition of regional capitals illustrates, in part, the failure of Australian governments to develop a nationally co-ordinated response to developing regional capitals and second cities" (Transport & References Committee 2015, p. 22).

In the absence of an agreed terminology, this report uses the term 'Second Cities' which is used for Geelong in the review of *Plan Melbourne* (Ministerial Advisory Committee 2015, p. 89). It is less cumbersome than some of the other definitions and gives a strong indication of the focus of the report. Second City may however be seen as a placeholder until clearer definitions are formed. The review included in the following pages indicates the need for further research into non-capital cities, particularly those that are important within their broader contexts, such as Geelong.

Name	Positives	Negatives	Additional Comments
Second Tier City	This is the term most commonly used in the academic, government and business literature in Europe, the UK and Asia. The fact that this term is so widely recognised and used means that information coming out of the project will be well understood by various audiences.	Both of these terms may have connotations of being "second best". The terms may need some explanation for those not familiar with the literature.	According to the ESPON Programme definition, second tier cities "contain major concentrations of economic activity, substantial wealth creation potential, human capital and creativity. They contain higher order services and offer firms better local access than if they were all concentrated in the capital. Second tier cities can achieve many of the agglomeration effects of capitals, if they have the right infrastructure, facilities, capacity and powers. And they can lift the economic performance of their regions and reduce inter-regional inequalities, promoting territorial and social cohesion' (ESPON Programme, 2012 p. 3)

Name	Positives	Negatives	Additional Comments
Second City	The term is being used in the Plan Melbourne report for 2015 to describe the role of Geelong in the State Government's planning process. The term was used as far back as 1976 in the UK.	(same as above)	DELWP identify plans for Geelong as follows: "Designate Geelong as Victoria's second city and prioritise game changing land use strategies such as those for Avalon Airport, the Port of Geelong, improved arterial road connections and high quality health, tertiary education and research infrastructure that positions the G21 region for accelerated growth and as a centre of employment and higher order service provision for Melbourne's west" (Department of Environment, Land, Water and Planning, 2015 p. 117)
Non Capital City	The term is clear and easy to understand.	The term does not appear in the academic, government or business literature in relation to the intent of this definition; that is, with regard to the most prominent of the regional cities. The term could be used to identify any city within the State other than the capital city.	The closest term found was "capital city satellites", which is defined by the Grattan Institute as a regional city within 150 km of a capital city (Daley, J. & Lancy, A. 2011, p. 11)
Core City	This is a term used in the City Deals negotiated by the UK Government with cities such as Sheffield. The term implies the central importance of large regional cities such as Geelong.	The term may be somewhat confusing for some. A "core city" could be either a capital city or any size regional city which provides core services, relies on core industries, or sits at the heart of a region.	New Zealand's Ministry of Business, Innovation and Employment identifies core cities as having connectedness, knowledge resources, both diversity and specialisation, a robust business environment, image and identity, a meaningful built environment, and both natural and built amenity (Ministry of Business, Innovation and Employment, 2012).
Regional Capital City	The term clearly indicates the premier nature of large regional cities such as Geelong.	This term only appears in the academic literature for very small countries such as Ethiopia, or in older journal articles. The term may be confusing for some people.	According to Regional Capitals Australia, "Australia's regional capitals are cities that form a functional role. They provide jobs, act as major trade access points, health care, education, government services and general amenities to their immediate population, and to outlying towns and rural communities. Regional capitals are not defined statistically, but by the role they play in their wider region. This is the hub and spoke model of regional development" (The Agenda Group, 2015, p. 8).
Regional Innovation City	The term is clear and easy to understand. The term indicates the vibrant nature of the regional city which has the capacity to grow and adapt. The term "innovation cities" is well recognised in the UK, Asia and Europe. The term accords with the Prime Minister, Malcolm Turnbull's agenda on the role that "smart" cities will play in the innovation economy. The term "innovation cities" has also been recognised and measured through the Innovation Cities Index, created by 2thinknow, a Melbourne based company.	By focusing solely on innovation, the term does not include other factors which make a premier regional city unique, such as robust infrastructure, extensive and interconnected transport networks, proximity to the state's capital city, and strong economic and social capital.	2thinknow define the Innovation Cities Index as "the world's leading index classification and top ranking of cities potential as innovation economies. There are 500 cities in the 2015 Index. Our analysis is different and enlightening as it defines based on their potential for creation, implementation and communication of ideas in their urban economies" (see http://www.innovation-cities.com/).

Name	Positives	Negatives	Additional Comments
Supporting City		The term is not recognised in the academic, government or business literature. The term may be taken to imply that the function of the regional city is simply to support the capital city, without indicating the importance of the regional city in its own right. There may be some confusion about the term "supporting". Supporting what?	
Capital Support City	Both terms are short and easy to remember	The term is not recognised in the academic, government or business literature. The term may be taken to imply that the function of the regional city is simply to support the capital city, without indicating the importance of the regional city in its own right. Alternatively, in some instances, it may be considered that the term relates to the financial status of the regional city.	The closest term found was "capital city satellites", which is defined by the Grattan Institute as a regional city within 150 km of a capital city (Daley, J. & Lancy, A. 2011, p. 11)
Key City		The term is not recognised in the academic, government or business literature. The term will require explanation. The term does not necessarily indicate the nuances of a large regional city with the necessary economic, transport and social infrastructure which makes it relevant to Geelong. Smaller cities or towns can be "key" for a variety of reasons other than being a premier regional city.	
Regiopolis	This term is used in a number of places, eg. Belarus, Malaysia and, to a small extent, in Australia.	The term is not widely used or known, and is cumbersome to articulate. The term is likely to need some explanation.	The term 'regiopolis' is described as "port cities of between 150,000 to 300,000 in population that are major industrial or single-industry-dominated centres that also serve a major regional service centre role aided by the physical distance from their respective capital city. They are usually located outside but close to capital cities but increasingly provide driving forces for development in their regions. Regiopolis usually have smaller scaled centres with a high functional importance for their hinterland. This group of cities is also characterized by good infrastructure, a high economic importance and hosts a University" (Elkadi, H. 2014, p. 1)

Table 2: Summary of terminology. Reproduced from Gray and Walker (2016, p.17-18)

Second Cities in Urban and Regional Theory

Interest in the planning and development of second or intermediary cities within national urban hierarchies is growing and it is estimated that 50% of the world's population live in such cities (Naylor 2015). Second cities provide a gateway for the development of outlying regions, as well as opportunities for development away from congested capital cities (Torné 2014). Due to their social and economic importance, there is growing argument for greater emphasis on policy making related to second cities. Contemporary regional development research and practice indicate that specialisation supported by innovation is integral to increasing the productivity and growth of second cities.

Second cities are linked to agglomeration economies. Agglomeration economies are typified by "the decline in average cost as more production occurs within a specified geographical area" (Anas, Arnott & Small 1998, p. 1427). These economies are fundamental to discussions regarding the economies of cities. Agglomeration economies are either *localisation* economies, where multiple firms within related industries co-locate to mutual advantage, such as via shared information networks, or *urbanisation* economies, which apply across industry sectors and represent the benefits of locating within a city, such as access to shared infrastructure. Localisation and urbanisation economies provide an understanding of why cities grow: benefits to firms in many cases increase with the size of the city. Cities excel at transferring ideas, which makes knowledge spillovers an important factor in increasing innovation adoption and improving productivity in both types of agglomeration economies. As agglomerations get larger, however, there are diseconomies associated with city size that act as a brake on growth, such as pollution, congestion and higher land competition (Dicken, P, Lloyd, P. 1990). In this context second cities may provide a vehicle to what the Victorian State Government refers to as "rebalancing the growth" between metropolitan and regional areas, as "successful second-tier cities could reduce the pressure on the land, property, environmental resources, transport, and infrastructure of capital cities by stemming migration of jobs and investment from their respective regions to the capital" (Department of Transport Planning and Local Infrastructure 2014; Evans 2015, p. 164).

Agglomeration economies, as measured by industry specialisation and trade within a city, have been linked to its population size (Henderson (1974, p. 60):

City sizes vary because cities of different types specialise in the production of different traded goods, exported by cities to other cities or economies. If these goods involve different degrees of scale economies, cities will be of different sizes because they can support different levels of commuting and congestion costs.

Specialisation within an industry sector is seen as a result of localisation benefits, where firms within an industry are likely to be more profitable in a specific location and will hence outbid firms who do not receive these benefits.

There is ongoing debate as to whether the development of cities is best served by industry specialisation or diversification (see Beer & Clower 2009, p. 371 for an overview). Specialisation is related to the increased competitiveness of a city or region's economy due to its particular capabilities in particular sectors or product categories. In contrast, diversification refers to the breadth of a city's economic sectoral bias. Diversification is believed to reduce exposure to volatile sectoral markets, leading to greater resilience in the face of economic shocks (ibid.). Specialisation however introduces the risk of institutional sclerosis or lock-in, where "ideologies and laws are so tightly constructed, and when the power of certain lobby groups are so embedded in decision-making, that entrepreneurial dynamism does not get a chance to foster new growth" (Boschma & Lambooy 1999). The consolidation and over-specialisation of industry has been used to explain the decline of Detroit in the last half of the 20th century, as "the intellectually fertile world of independent urban entrepreneurs had been replaced by a few big companies that had everything to lose and little to gain from radical experimentation" (Glaeser 2011). The benefits of specialisation compared to diversification may have a temporal aspect, as shorter time frames may not include the downturns in business cycles that will have greater effect in specialised economies than diverse ones (Combes 2000).

The European Commission has utilised both innovation and specialisation to drive regional growth across the continent in an initiative referred to as RIS3 (Research And Innovation Strategies For Smart Specialisation). The underlying rationale is that the alignment of industry and research should produce stronger regions:

… by concentrating knowledge resources and linking them to a limited number of priority economic activities, countries and regions can become - and remain - competitive in the global economy. This type of specialisation allows regions to take advantage of scale, scope and spillovers in knowledge production and use, which are important drivers of productivity (European Commission 2012, p. 11).

Smart Specialisation focuses on developing and repurposing existing strengths and advantages within regions, and calls for regional differentiation (ibid). Innovation, defined as the adoption and implementation of invention, and the closely related entrepreneurship, are integral to regional productivity growth and the ongoing vitality of industry clusters (Ahn 2002). This relationship has been observed in Europe, where "innovation is highly related to the strong performance of second tier cities" (Parkinson et al. 2012, p. 23). The combination of specialisation, differentiation and innovation are seen as significant drivers of productivity for second cities, while the prospects of higher productivity within an industry sector will drive business location choices.

An important consideration for second cities is their location in relation to major and capital cities. Many regional cities developed manufacturing industries based on their proximity to higher order services and central control in major and capital cities, while offering cheaper land for large factories, sometimes near key transport links such as ports (Polèse 2010, p. 56). Proximity to

major cities provides "direct benefits from easy access to their larger neighbour, specifically to high-order services and scale-sensitive institutions and infrastructures: i.e. research labs, specialised institutions of learning, airports, etc." (Polèse & Shearmur 2006, p. 365). Changing locations of production during product lifecycles is also evident, with research, development and prototyping more likely to occur in major cities, and production in regional cities when products are in a mature form (Glaeser 2011; Henderson 1997; Jacobs, J 1969; Polèse & Shearmur 2006). While this represents a model of the spatial arrangement of production in manufacturing economies and the role of second cities, much of the western world has transitioned away from manufacturing and Fordist modes of production, and second cities need to redefine their role in national economies (Dicken, P 2011, p. 100).

In Australia, a strong determinant of regional population growth is being located within 150 kilometres of the largest cities, again indicating the importance of proximity (Daley & Lancy 2011). This can be seen as evidence of *borrowed size*, which refers to "a small city or metropolitan area exhibiting some of the characteristics of a larger city if it is near other population concentrations" (Alonso 1973, p. 200). The borrowed size concept refers to two distinct processes: borrowed performance, where population growth and income in the smaller city reflect what is observed within the larger city; and borrowed function, where the smaller city is home to a larger array of organisations than would be expected were it more remote (Cardoso & Meijers 2016). Improved transport, telecommunications and workplace flexibility has increased these borrowed size effects, providing greater opportunities for people to live and work in regional areas while still accessing metropolitan employment markets, entertainment and services (Banister 2005; Lyons 2014; Mokhtarian 2002).

In their review of the economic performance of regional cities within Australia, Beer and Clower (2009, p. 383) noted that while proximity did offer borrowed size benefits such as access to larger markets, it may also result in activities being attracted away from the regional city into the larger metropolis, reducing the range of functions within the regional centre. This is referred to as an *agglomeration shadow*, based on core-periphery models in economic geography, where the activities within the larger city crowd out the development of industries in smaller, nearby areas. Only at larger distances from the larger city where transport and labour costs become more substantial factors is there sufficient market potential to support additional iterations of first city functions (Fujita, Krugman & Venables 2001; Krugman 1998). The *agglomeration shadow* concept is closely related to the regional settlement hierarchies of Christaller and Weber, where higher order functions only occur in central places, while lower order places offer a reduced range of basic requirements (Cardoso & Meijers 2016).

Recent research suggests that amenity and lifestyle factors are becoming the most significant determinant of population growth, particularly amongst creative and knowledge workers. As higher wages and education

levels "increase demand for urban amenities like museums, restaurants and concerts", a city's success becomes more dependent on its status as a place of consumption (Glaeser, Kolko & Saiz 2001, p. 1297). Correlations between population and temperate climates within the US have been established and used to explain the movement of people and industry from its northern states to the warmer south (Glaeser 2011). Clark's *The City as an Entertainment Machine* (2003) puts forward that consumption and entertainments drive city growth, rather than being an outcome of growth. The work of Florida (Florida 2004) has been influential in the urban economic literature and suggests that in order to attract the high value knowledge and creative workers, a city must have three T's — talent, tolerance and technology — and foster spaces that suit the development of innovative milieus such as galleries, restaurants and performance spaces. While deterministic amenity-led growth theories have been widely criticised (Peck 2005; Storper & Scott 2009), it is broadly recognised that strategies that aim to make cities attractive places for consumption are an important complement to wider economic development plans.

The European Commission has identified the importance of second city development by reducing regional economic disparities through initiatives such as RIS3 and smart specialisation. Smart specialisation is based on the idea that second cities need to complement the economies of capital cities, rather than compete with them, as this is unproductive for the entire region (European Commission 2014; Parkinson et al. 2012). The challenge for second cities is identifying industry sectors that are under-represented in the region and in which they possess advantages given their resources, infrastructure and knowledge base. It is this alignment of strengths and opportunities that is at the core of contemporary second city development initiatives. While research indicates that diversification provides a more stable and sustainable economy in the longer term, specialisation may be a path to short-term growth. As amenity and lifestyle have become increasingly important factors in migration decisions, second cities can also foster development and borrowed size effects through differentiating themselves as places to live.

Regional Cities Policy In Australia

This section provides an overview of Federal and State Government policies and plans that promote growth in regional cities, particularly as they relate to Geelong. With the exception of investment in road and rail links between Geelong and Melbourne and the Regional Development Australia funding for recreation and an infectious disease research facility in Geelong, there have been few direct benefits for the city from these policies. It is important to note that the Victorian State Government's metropolitan planning strategies have recurrently emphasised the value of regional growth, highlighting the opportunities for Geelong to become a further destination for population growth projections anticipated for Melbourne.

Regional city policies in Australia are analogous to policies such as the European Union's focus on second tier cities and smart specialisation to address regional economic divergence (European Commission 2014; Parkinson et al. 2012). The intent is to address the economic disparity between the major cities, which are thriving in this era of globalisation, and other regions within their jurisdictions.

Federal Government

The concentration of population in major Australian cities has been a concern since the 19th century (McManus 2005). Although this is evident in Melbourne post the mid-century gold rush years, during which "economists thought that such a centralising of the people in a capital city was quite without precedent and utterly unhealthy" (Blainey 2013, p. 79), some argue that centralisation is more efficient and has provided Australia with globally competitive cities (Collits 2004). Since World War II, the Federal Government has sporadically attempted to address this concentration and promote the development of regional cities, yet the primacy of the state capitals still increased over this period (Forster 1999).

The Federal Government's first foray into regional development was during the 1940s, when the Chifley Government instituted the Federal Department of Post-War Reconstruction. The department divided Australia into regions, with many led by regional development committees. Inventories of physical, social and economic resources were prepared to identify under-used regions with development potential. The 1949 Menzies Government ended the experiment of Federal intervention in regional development after few plans were completed and limited intervention occurred (Kelly, AH, Dollery & Grant 2009). The next major Federal regional initiative came from the Whitlam Government, which established the Department of Urban and Regional Development in 1972 and proposed the development of new cities to "[drain] people from the swollen wens of Sydney and Melbourne to less crowded growth centres which the Government would deliberately create distant from both capitals" (Reid 1976, p. 185). These growth centres, including Albury-Wodonga, Bathurst and Orange, Macarthur and Monarto, were to be developed from scratch to the southeast of Adelaide, and formed a significant part of the department's work (Dodson, J 2013; Orchard 1999). The vision was to relocate Government departments as a facilitator of further investment and development of these regional cities, with funding in place for defence staff to relocate to Albury-Wodonga at the time of the Whitlam Government's dismissal in 1975. As well as defunding the decentralisation programs designed to stimulate regional development, the fiscal austerity of the incoming 1975 Fraser Government led to the disbandment of the Department of Urban and Regional Development and an exit of the Federal Government from this arena (McManus 2005, p. 43). Neo-liberalism became political orthodoxy during the 1980s, with increased competition and reduced government intervention in spatial economies seen as the recipe for efficient resource allocation. This unwillingness to intervene and influence spatial economies is seen as a major reason for the absence of Federal Government initiatives in regional development throughout the 1980s and 1990s (Tonts & Haslam-McKenzie 2005).

The hung parliament resulting from the 2010 federal election presented three independent members of the lower house from regional seats the opportunity to negotiate with both major parties. The three independents, Tony Windsor, Rob Oakeshott and Bob Katter secured an agreement with the Labor Party that included a section entitled *Commitment to Regional Australia* and resulted in new funds for regional development, policy centres and various committees and sections within the public service (Brett 2011, pp. 5,6). Shortly after the election, the Minister for Regional Development outlined a number of funding initiatives and an expanded role for Regional Development Australia (Crean 2010), which funded projects recommended by the committees between 2011 and 2013, including sporting facilities and an emerging and infectious disease research centre in Geelong.

With the ascent of Malcolm Turnbull to the prime ministership in 2015, a new ministry for Cities and the Built Environment was established. The announcement indicated that regional cities were an important focus for the portfolio, noting:

We often overlook the fact that liveable cities, efficient, productive cities, the environment of cities, are economic assets. You know, making sure that Australia is a wonderful place to live in, that our cities and indeed our regional centres are wonderful places to live, is an absolutely key priority of every level of Government (Turnbull 2015).

The Department of Prime Minister and Cabinet launched the *Smart Cities Plan* in 2016, which includes City Deals as the primary funding mechanism. Although lacking in detail, City Deals are to be collaborations between the three tiers of government, industry and communities to "develop collective plans for growth and commit to the actions, investments, reforms and governance needed to implement them" (Department of the Prime Minister and Cabinet 2016, p. 21). The content of these schemes is yet to be provided in detail.

Victorian State Government and Melbourne Strategic Plans

The Victorian State Government has addressed the growing concentration of employment and population in Melbourne through the inclusion of regional development strategies within strategic plans for Melbourne and regional Victoria.

Melbourne 2030, from 2002, included "A Network of Regional Cities" as one of its nine directions (Department of Infrastructure, p. 3). This strategy recognises the relationship at the core of this research project, forecasting, "As settlements in this broad region become increasingly interdependent, there will be a far wider choice of places in which to live, set up business and find a job…. It will help share the benefits of growth across the State" (Department of Infrastructure 2002, p. 35). The plan's initiative 3.1 calls for the "growth of regional cities and key towns on regional transport corridors as part of a networked cities model" (Department of Infrastructure 2002, p. 30). However, this inclusion in the strategy may be due more to politics than planning, as the Kennett

Government's loss in the 1999 Victorian State Election has been attributed in part to ignoring rural and regional areas (Department of the Parliamentary Library 2010). Following initial praise for the plan, criticisms mounted due to more detailed examination of the directions as well as the failure to implement or adhere to significant initiatives (Birrell et al. 2005; Mees 2003, 2011).

Following *Melbourne 2030*, the Bracks and Brumby Governments developed the Victorian Transport Plan. This plan included the Regional Rail Link, which officially opened in June 2015; it is intended to provide amongst other benefits "more reliable and more frequent connections to central Melbourne to get Geelong, Ballarat and Bendigo line users to and from the city for work, study, business and recreation" (Public Transport Victoria 2015). In the past decade, improvements have also been made to the freeway network connecting Melbourne and Geelong, including the Geelong Bypass and upgrades to both the east and west sections of the Princes Freeway. Although the improved access to metropolitan workplaces provided by the road and rail enhancements have been beneficial for regional communities, this focus may have led to the failure to develop or implement initiatives related to the integration of Melbourne and regional cities (Dodson, J, et al. 2014; Whitzman 2015).

By 2008, significant population growth prompted the State Government to review the *Melbourne 2030* strategy, resulting in *Melbourne @ 5 million*, subtitled "Melbourne 2030: a planning update" (Department of Planning and Community Development 2008). The *Melbourne @ 5 million* document notes that the "area within about 100 km of Melbourne has strong ties to Melbourne's economy — for people working in Melbourne, for businesses with markets in Melbourne, and in support for local tourism and other economic activities brought to the area by the population of Melbourne" (ibid, p. 31); it is also noted that this connection creates development pressure on communities within this area. *Melbourne @ 5 million* proposed the development of criteria to guide planning for communities within 100kms of Melbourne (ibid, p. 31), echoing *Melbourne 2030* in its intent but also lack of action on planning for regional settlements.

During this period, the relocation of a total of 1,000 public service jobs to Ballarat, Bendigo and Geelong occurred as part of a regional growth strategy (Regional Development Victoria 2010, p. 13). More recently, the Napthine Government's support for locating the National Disability Insurance Agency Headquarters in Geelong and the unfulfilled election promise to relocate VicRoads to Ballarat are further examples of using the public service to redistribute economic activity to regional sites, similar to the Whitlam Government's proposal to relocate public sector departments to Albury-Wodonga (Orchard 1999; Public Accounts and Estimates Committee 2014). The risk associated with the relocation of public sector departments to regional cities in Australia is that they may be overturned with changes of government, as shown by the Whitlam and Napthine examples.

Plan Melbourne is the most recent metropolitan strategy; it was released by the State Government in May 2014 but is being "refreshed" by the Labor State Government elected in 2014. The final report of the Minister's Advisory Committee indicates that changes to *A State of Cities*, the most relevant chapter to this study, will be minimal (Ministerial Advisory Committee 2015; Wynne 2015). With Victoria's population projected to grow from 5.7 million in 2013 to 10 million by 2051, the core objective of *A State of Cities* is to redirect population growth from Melbourne to regional areas, particularly those within commuting distance of Melbourne (Department of Transport Planning and Local Infrastructure 2014, p. 156). The growth of regional cities facilitated by improved transport connections to Melbourne and markets further afield is a central policy (Department of Transport Planning and Local Infrastructure 2014, p. 163).

The Ministerial Advisory Committee's (2015) report on the update of *Plan Melbourne* recommends that Geelong be formally recognised as the State's second city and that proposals for accelerated growth of the city be included in the plan. Its recommendations include to "prioritise game changing land use strategies such as those for Avalon Airport, the Port of Geelong, improved arterial road connections and high quality health, tertiary education and research infrastructure that positions the G21 region for accelerated growth and as a centre of employment and higher order service provision for Melbourne's west" (2015, p. 91). These recommendations were further endorsed in the Plan Melbourne Refresh Discussion Paper and specifically through recommendation 75 to "designate Geelong as Victoria's second city" (Plan Melbourne Refresh Discussion Paper, October 2015, p.117).

At the time of writing, *Plan Melbourne Refresh* has not been released by the State Government, so it is unclear how much of this intent will be included in wider Government policy or what support will be provided for implementation around this designation.

The 2013 *G21 Regional Growth Plan*, which covers Geelong and the surrounding region (Greater Geelong, Surf Coast, Golden Plains, Colac Otway and Queenscliffe), was developed to coincide with *Plan Melbourne* and reflects the state's land use planning framework to ensure consistency between the plans (G21 Geelong Region Alliance 2013).

Regional growth plans have now been prepared, providing a co-ordinated set of plans in the State for the first time, finally fulfilling Government directions first included in every metropolitan strategic plan since 1996's *Living Suburbs*. The *G21 Regional Growth Plan* includes 5 directions (ibid, p.15):

- Protect and enhance our environment
- Create sustainable settlements
- Strengthen our communities
- Refocus our economy
- Make it happen.

In 2016, the Victorian Government released *Connecting Regional Victoria: Victoria's Regional Network Development Plan*, which includes a long-term vision for commuter services between Melbourne and Geelong, Bendigo, Ballarat, Seymour and Traralgon.

Metropolitan strategic plans for Melbourne have continually promoted regional growth as mitigation for urban expansion and transport network congestion, but only recently became part of the strategic policy framework in the state with the release of the regional growth plans. This has been the most significant change to the co-ordination of metropolitan and regional planning in this period, providing the opportunity to consider issues relevant to this study, such as infrastructure, locations suitable for population growth and employment and industry development.

Overall therefore the history of regional policy at the Federal or State level has been episodic and characterised by wavering commitments to interventions or investments to spur a greater share of regional economic activity within major non-capital cities. Within Victoria however over the past two decades a greater interest in the role of regional cities has developed within the context of Melbourne's rapid population growth. This has placed the role of second cities such as Geelong more clearly within a spatial economic development frame though as yet the degree of policy direction and resource commitment to actively spur further growth within such cities has remained ambivalent. The Federal and State policy legacy suggests that cities that expect superior governments to be stimulators of economic development are likely to be disappointed. From this historical standpoint, while regional policy can assist to support the development of second cities, it could be argued that it is unlikely to be the main motive force in their future growth. Nevertheless, given the social and economic importance of second cities, there is an opportunity for greater emphasis on policy making related to them, and particularly in Australia.

Geelong Waterfront meets central and urban Geelong.

Geelong

This section situates Geelong and its economic activity within the wider metro-regional, Victorian and national context.

Geelong is the second largest city in the State of Victoria, located 70km southwest of Melbourne, the state's capital and largest city. Geelong is located on Corio Bay, an inlet of Port Phillip Bay and forms the northern gateway to one of Australia's major tourism regions, the Victorian Surf Coast and Great Ocean Road. The City of Greater Geelong has an estimated population of more than 230,000 in 2016 and is expected to grow to nearly 300,000 by 2031 (Department of Environment Land Water and Planning 2015). This projected population increase comes at an important time for Geelong, as the city looks to redefine itself during a period of economic transformation away from the manufacturing sector that was integral to its development through the 20th century.

Geelong has been an important port in Victoria since its establishment in 1838, when livestock from Tasmania disembarked there before heading inland to rapidly expanding farming activity in the recently founded colony of Victoria. Until the 1850s, Geelong was the second largest settlement in Victoria, but was overtaken by Ballarat and Bendigo as miners flocked to the gold rush during the early years of that decade, with many early miners disembarking at the city's port. By the 1860s, the city was an important transport hub, known as The Pivot, due to its connections to Melbourne, the Ballarat gold fields and the western Victorian grazing areas via port, road and rail. Geelong was also a centre for the sheep and wool industries, with wool stores and tallow and felt factories in the town, ensuring it "smelt of wool and tallow" (Blainey 2013, p. 38).

"Geelong is special. Geelong is unique. Where Geelong goes, so goes our state."

--The Hon. Daniel Andrews MP, Victorian Premier

It was not until the 1930s that Geelong regained its position as Victoria's second largest settlement. The population of the city grew rapidly in the 20th century, from 11,368 in 1921 to more than 120,000 by 1971 (Australian Bureau of Statistics 1921, 1971). When compared to other regional cities in Victoria, this population growth was remarkable: by the 1960s, it was more than double the population size of Ballarat and Bendigo after achieving parity only three decades earlier (Blainey 2013, pp. 179, 212). This mid-20th Century growth of Geelong was primarily linked to the development of a strong industrial sector, including textiles, clothing and footwear as well as major manufacturing firms such as Pilkington's glass, International Harvester agricultural machinery, and most significantly, the Ford Motor Company, which commenced production in the city in 1925 (Blainey 2013). The relationship between Geelong and Ford is symbolised by the car company beginning its ongoing support of the Geelong Football Team in 1925, one of the longest sporting sponsorship arrangements in the world. During this period, the Australian Government increased trade protections in order to support domestic manufacturing, which were particularly important in developing the local car industry from the late-1940s (Haigh 2013).

By 1971, more than 17,000 of the Geelong's residents were working in manufacturing, with many more employed in allied industries, such as warehousing, transport and professional services (Australian Bureau of Statistics 1971; Connolly & Lewis 2010). However, this marked the peak of manufacturing employment in both Geelong and Australia as a whole; global economic restructuring from the mid-1970s onwards saw the beginning of a steady removal of tariffs and trade protections that had previously fostered the growth of Australian manufacturing in the post-war period. The economic restructuring promoted by the Hawke and Keating governments in the 1980s and 1990s contributed to further decline in Australian manufacturing activity as the Australian dollar was floated internationally and domestic production was exposed to global competition (Beer 2012; Beer & Clower 2009; O'Neill & McGuirk 2002). Geelong also suffered considerable economic distress due to the collapse of local financial institutions in 1990; the Farrow Group and Pyramid Building Society forced the Victorian State Government to compensate depositors via a 3c per litre state fuel levy (Davis 2004, p. 242).

These local economic stresses, plus a recession nationally, left Geelong with comparatively high unemployment in the early 1990s. In a response to a 1994 Federal Government White Paper on regional development, Johnson and Wright (1994, p. 123) noted that "Geelong's labour market has been particularly affected by the Federal Government's policy of a *level playing field*. As a consequence, the degree of 'employment adjustment', to use one report's delicate turn of phrase, has been especially acute in the region". Major waves of job losses over the previous two decades in Geelong were listed, including the loss of the textile, clothing and footwear industry from the city, the closure of International Harvester in the early 1980s, and some 1,500 jobs lost at Ford in the early 1990s. These were accompanied by losses in associated component suppliers; and the State Government also reduced local employment by approximately 1,000 jobs (Johnson and Wright, p.124).
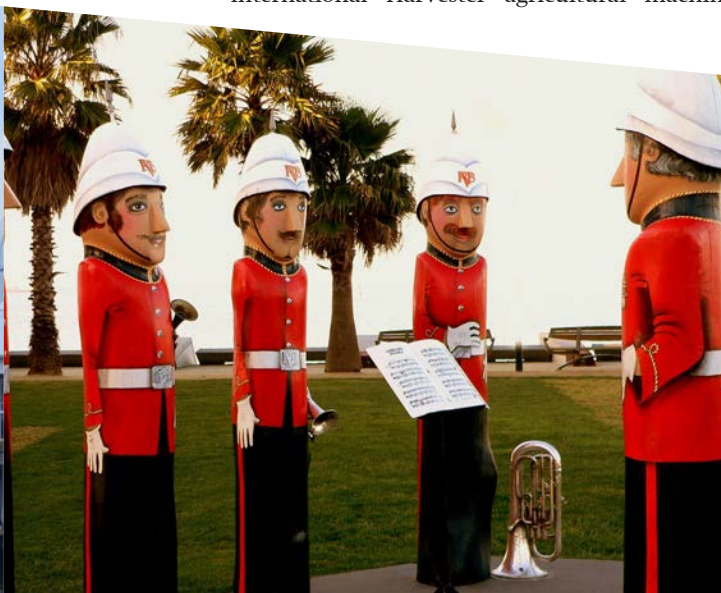
The impact of free trade and market deregulation affected industrial cities like Geelong across the developed world, with cities across the US and Europe facing similar global conditions and experiencing comparable adjustment stresses during this period (Dicken, P 2011). Despite this low ebb in the city's economic history, the 2011 census highlights that the city has grown considerably since its 1970s manufacturing peak, with a 42% larger population and a 67% larger workforce than in 1971.

Table 2: Geelong employment summary: 1971 and 2011

	Population	Workforce	Manufacturing Employment
1971	122,087	47,421	17,537
2011	173,450	79,092	9,406
%Growth	+42%	+67%	-46%

Source: (Australian Bureau of Statistics 1971, 2011a)

As shown in Figure 1, the transition from manufacturing is evident in the detailed Geelong workforce data from the 2011 Census. While the city maintains a slightly higher percentage of manufacturing workers compared to the state of Victoria overall, or in comparison to greater Melbourne[1], the population service sectors of *Health Care and Social Assistance, Education and Training* and *Retail Trade*, as well as *Construction*, are now the city's main employment sources. Employment in *Construction* is a reflection of the strong population growth in the city and surrounding Surf Coast region, with major housing estate developments at Armstrong Creek and along the Geelong Ring Road.

In comparison to Melbourne, Geelong has an underrepresentation of workers in the industry sectors that are regarded as the major contributors to global trade in knowledge industries and services: *Information, Media and Telecommunications, Financial and Insurance Services* and *Professional, Scientific and Technical Services* (Figure 1). However, more detailed analysis highlights Geelong's position as the state's second city and provider of higher order services to regional Victoria. Using location quotients to reveal differences in employment within Geelong and Melbourne compared to the state of Victoria overall shows that knowledge industries appear under-represented in the former (Figure 2).

In some respects, this may be the result of improved transport links between Geelong and Melbourne. The Princes Freeway, which connects the two cities, was upgraded throughout the 1960s and 1970s while the Westgate Bridge opened in 1978, providing direct access into the CBD of Melbourne (Lay 2003). The Princes Freeway now has four lanes in both directions, although significant congestion occurs during morning and
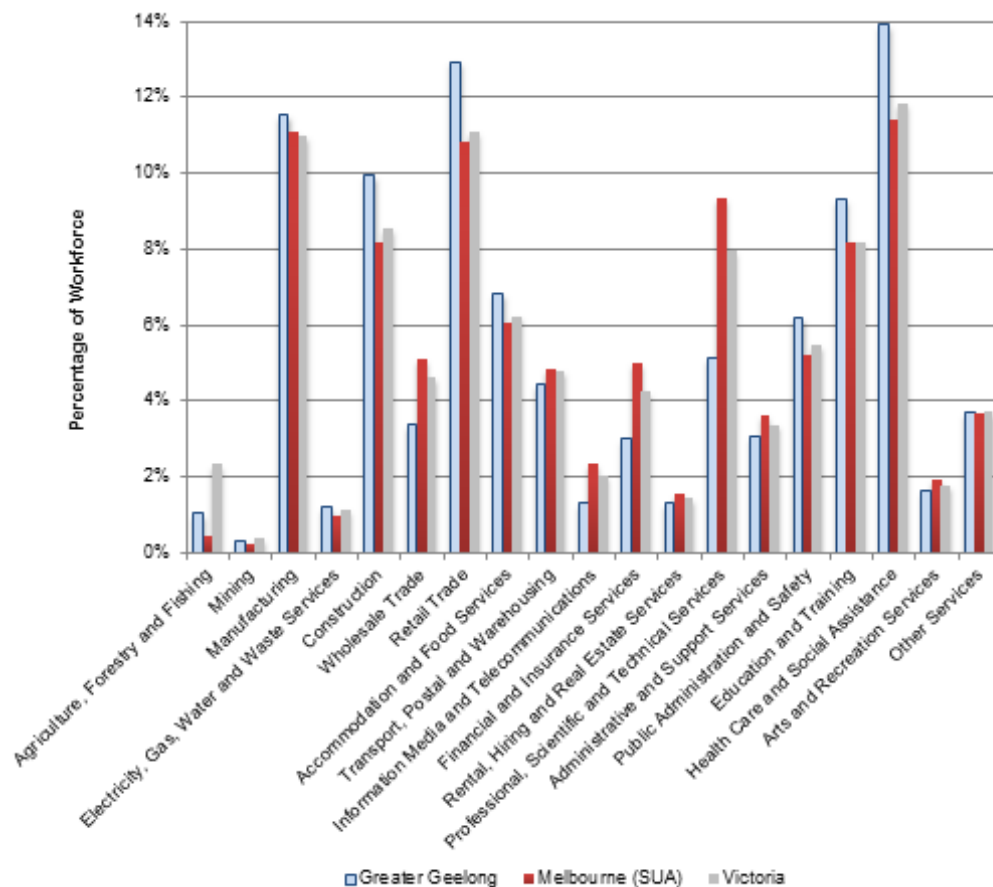
Figure 1: Geelong workforce 2011(ABS 2011, place of residence)
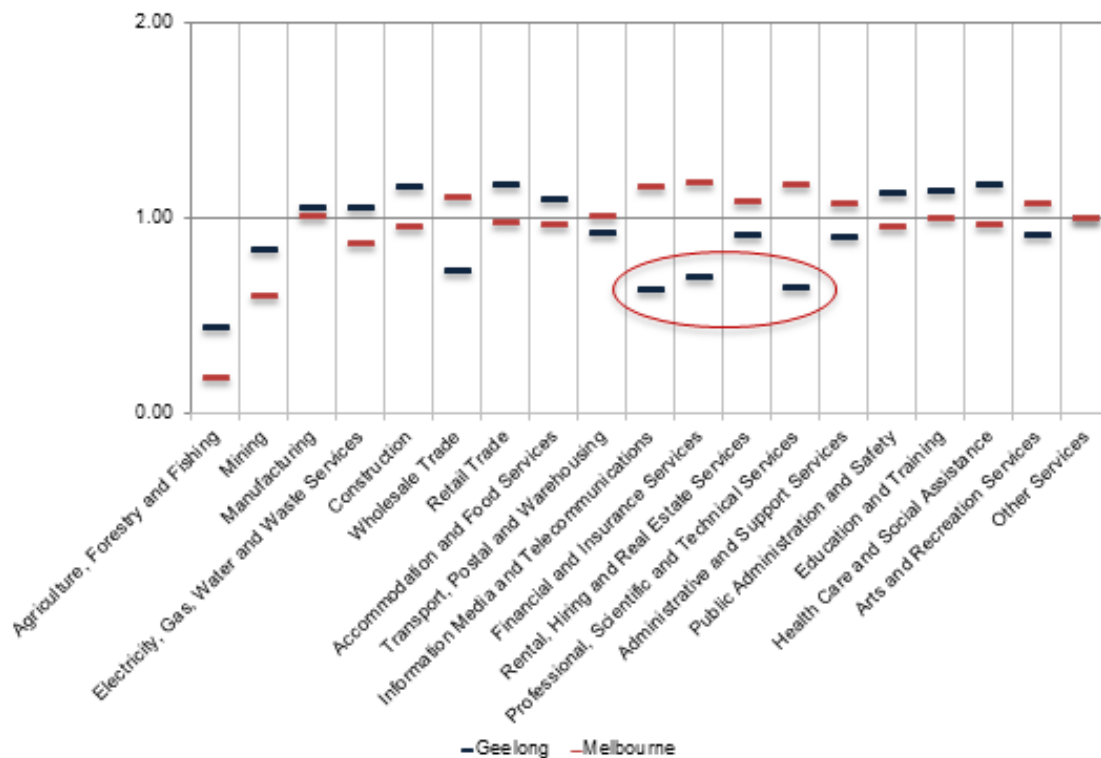
Figure 2: Location Quotients: Victoria, 2011 (ABS, 2011)

evening peak periods due to the population growth and new suburbs to Melbourne's southwest; however, the opening of the Geelong Ring Road, completed in 2013, sought to improve travel times to Melbourne for areas to the south and west of Geelong. The inter-city rail service has also been upgraded, with new stations and the Regional Rail Link providing lines separate to suburban services. Improved city connections have led Geelong to become a place with easy access to Melbourne, with more than 12,000 of the city's residents found in the 2011 Census data to be working in Melbourne (Australian Bureau of Statistics 2011b, 2011c). This is equivalent to approximately 15 per cent of the city's active workforce and provides a greater share of employment than any single industry sector. Avalon Airport, approximately 20kms north of Geelong, was developed into a terminal for regular domestic flights, which also helped connect the city. In 2016, the Minister for Infrastructure announced that Avalon would be reclassified as a regional airport, which enables the introduction of international flights to the airport and benefits for Geelong's tourism industry (Chester 2016).

As Victoria's 'second' city, Geelong may not compare with Melbourne in some important industry sectors, but it has many strengths in the context of regional Victoria. With Melbourne excluded from the location quotient calculations, *Financial and Insurance Services* has a location quotient of 1.41, indicating that workers in this sector are considerably more prevalent than in the rest of the state. The *Information, Media and Telecommunications*, and *Professional, Scientific and Technical Services* sectors are also more prevalent than

in the remainder of Victoria, as shown in Figure 3. This analysis demonstrates that, although Geelong is not as intensely linked to the global financial and professional sectors as Melbourne, it is nonetheless supplying an important share of such higher order professional services, retail, health and entertainment to the southwest of Victoria.

Recent public investments in Geelong highlight its role as the state's second city and demonstrate the gradual transformation in the structure of its economy. In 2001, the redevelopment of the Geelong waterfront was completed, which reconnected the business and shopping areas with water and has provided new recreation and business opportunities in the city centre. Deakin University has created an education precinct centred on its Waterfront Campus and occupying heritage listed wool stores. The University has also established partnerships to house the Carbon Nexus, a carbon fibre research facility at its Waurn Ponds campus to the south of Geelong. A steady stream of public sector agencies are also locating in the city: the Transport Accident Commission (TAC) was relocated to Geelong by the Victorian State Government in 2009, and will be followed in 2016 by WorkSafe, the state's occupation health and safety authority (Scott, R 2015). The Federal Government also announced in 2013 that the new National Disability Insurance Agency (NDIA) head office would be located in Geelong, providing 300 jobs in the city. This is in addition to State Government funding of the fourth stage of Simonds Stadium redevelopment; with the final stage being advocated for by the new Kardinia Park Stadium Trust and Geelong Football Club. The city's redeveloped cultural precinct is

also progressing, with the landmark Geelong Library and Heritage Centre opening in 2015 and plans in place for work on the nearby performing arts centre and gallery. The State Government and City of Greater Geelong have a joint focus on the revitalisation of Central Geelong, with much of this work being overseen by the State Government's Geelong Authority. While large residential developments are extending to the south and west of the city, additional accommodation is still required for Geelong's projected population growth.

Geelong has avoided economic decline experienced by comparable 20th century industrial cities that have been dependent on major manufacturing sectors, such as Detroit and the so-called 'rust belt' cities of the United States. Geelong has continued to grow over the past decades, even as industries typically considered central to its historical economy and identity have declined or have prepared to close. The city's proximity to Melbourne, position on Port Phillip Bay and position as the eastern gateway to the high-amenity coastal regions to its south provide considerable geographical advantage while its ongoing transition away from a dependence on manufacturing provides a solid foundation for continued growth into the future.
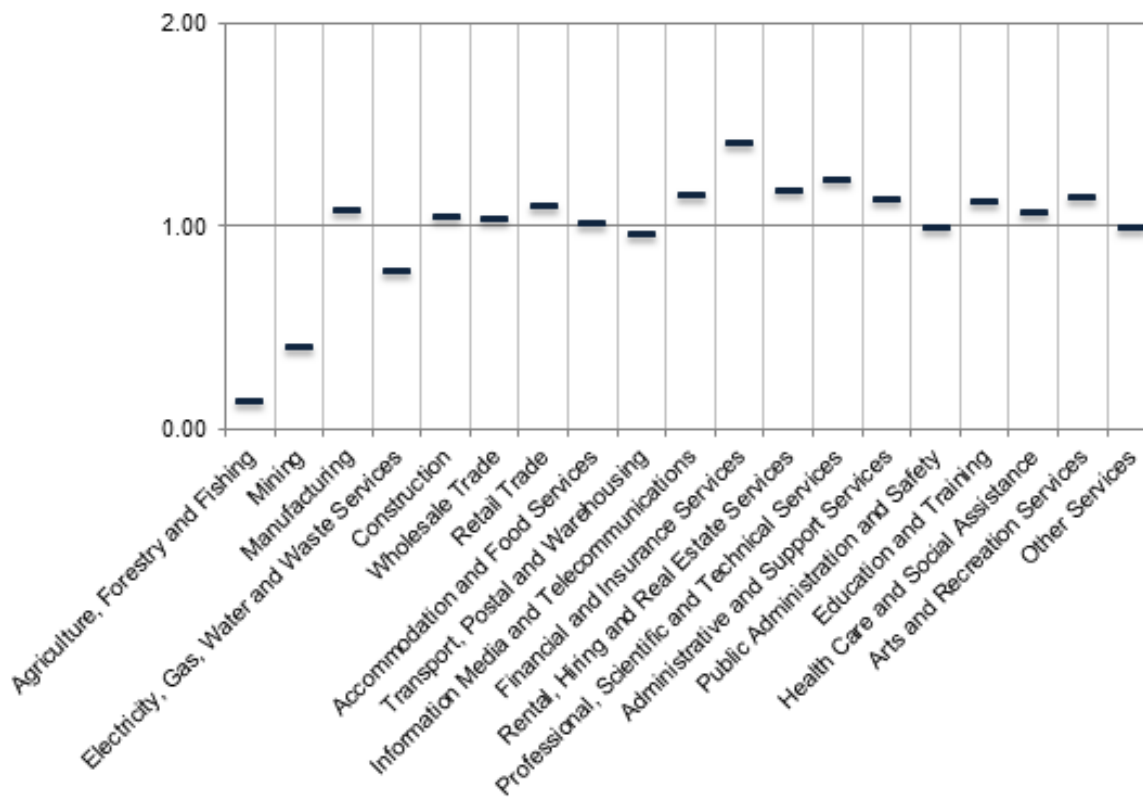
Figure 3: Geelong Location Quotients: Regional Victoria, 2011 (ABS, 2011)

1.   Melbourne data is based on the Significant Urban Area census geography

Royal Geelong Yacht Club, Geelong Waterfront

International Study Tour

Introduction

The Committee for Geelong commissioned Deakin University to undertake Phase 1 of this project. Phase 1 included a review of literature relating to second cities and identified cities for inclusion in a Committee for Geelong study tour that could capture learnings that may be applied to an Australian context.

Deakin University's Centre for Regional and Rural Futures selected cities based on the findings of an extensive literature review of second cities and mid-size cities in the United Kingdom, Europe and the United States of America (Gray & Walker 2016). The final list of study tour cities was based on cities with: a successful transitions from economies based on manufacturing; similar infrastructure as Geelong such as ports, universities and airports; population; and, active local leadership (see Appendix B). The following cities were included on the international study tour:

- Dundee, Scotland;

- Eindhoven, Netherlands;

- Cleveland, Pittsburgh and Richmond, United States of America

- Bristol, Liverpool and Sheffield in England.

These cities have transformed their economies following manufacturing declines, and are important contributors to their respective countries' economies.

Although Liverpool was not initially included in Deakin University's Centre for Regional and Rural Futures list of cities for an international study tour, the opportunity to visit the city was taken due to some comparabilities with Geelong in that Liverpool is a significant port city in the UK that has worked to redirect businesses and economic development and is undergoing an important regeneration program. The addition of Liverpool to the study tour also provided the opportunity to interview academics from Liverpool John Moore University that have undertaken influential research on second cities in Europe and in the UK.

Interviews were undertaken with respondents that included representatives from Local Government, economic development agencies, universities and other private sector and community partners. Interviews were conducted in each of the cities on a semi-structured basis with topics including governance, collaboration, leadership, vision and strategy, approach to economic development, social and economic needs of the community, and the role of education and innovation. Interviews were undertaken during visits to the cities between July and October of 2016. Interview material was used to illuminate the key case studies topics of: governance; transformation strategies; and partnerships.

The research elements of the study tour were undertaken in accordance with RMIT University's regulations in relation to the ethical conduct of research as approved by the College of Design and Social Context Human Research Ethics Committee.
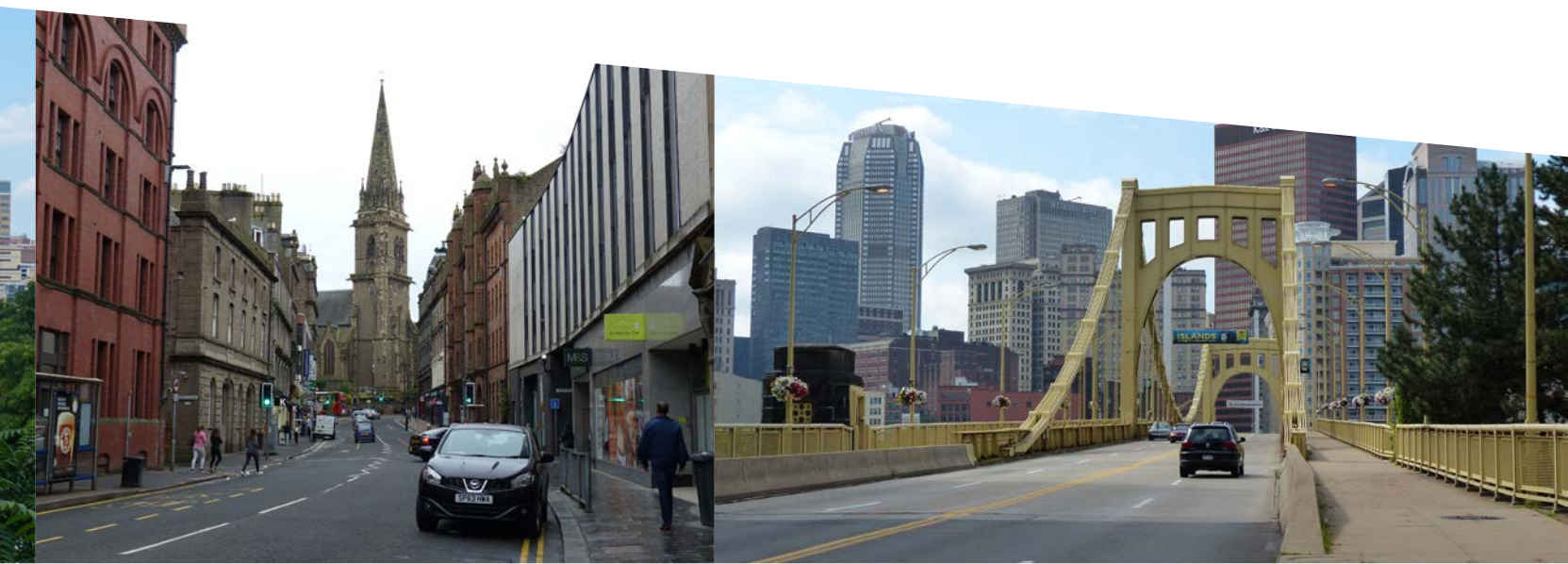
Dundee West Church, viewed from Perth Road garden.

Dundee

Rationale for the visit

Dundee is a city of 148,000 people (Dundee Partnership 2014), located to the north of Edinburgh, on the eastern coast of Scotland. It is a typical post-industrial city that went through strong social and economic changes. Dundee grew as an industrial city built around textile mills and shipbuilding, but during the final decades of the 20th century suffered from continuous economic decline (Di Domenico & Di Domenico 2007). Whilst Dundee is not Scotland's second city, its strategic importance has resulted in it being described as Scotland's fourth city (Peel & Lloyd 2008), Dundee reinvented itself as an international recognised education, research and design centre. Formal recognition as a UNESCO City of Design will continue to elevate Dundee's global reputation as a centre of creativity and cultural industries (Wade 2014), while attracting investment and people to a city that aims to be recognised as Scotland's leader of culture-led regeneration (Dundee Partnership 2014).

Context

Although there are some similarities among cities in Scotland, there are distinctive differences. The two largest cities, Edinburgh and Glasgow, are joined by an urban sprawl across the centre of Scotland, and Dundee and Aberdeen act as two discrete regions with large hinterland. Historically, all the focus in Scotland is in the central belt. Edinburgh as the capital city is the cultural centre being well established within the financial sector.

In comparison to other Scottish cities, Dundee is more similar to Glasgow than Aberdeen, particularly in terms of economic structure and history, as Glasgow is built on the tobacco and shipbuilding industries, which were also some of the earlier drivers of Dundee, while Aberdeen is particularly driven by the oil industry. With most of its industry sitting in the belt around the city, Edinburgh is a financial centre rather than an industrial city, and therefore has not been direct competition for Dundee. Dundee's strengths lie in particular growth sectors which the city is now trying to capitalise on to maximise impact.

The Scottish Cities Alliance, a mechanism through which cities in Scotland work more collaboratively to have a stronger voice within the government and to articulate cities' strengths and opportunities (Scottish Cities Alliance n.d.), has given Dundee the possibility to market in more locations to reach global investors that would otherwise be difficult to attain.

Wullie the Menace by Lee O'Brien. The sculpture was part of Dundee's public art event the Oor Wullies Bucket Trail.

Dundee's port, currently managed by Forth Ports, was pivotal for driving industry development. The industrialisation period was extended by the two World Wars but ended with a crash in the 1950s. In the late 1950s through to the 1960s, American multinationals invested in Dundee; by the 1980s to 1990s, however, most of these companies had closed (Di Domenico & Di Domenico 2007). In the post-industrial phase, city leaders believed that Dundee had become a University city, given the fact that it had two universities: Dundee University and Abertay University.

The current economic drivers in Dundee reflect major sectors in Scotland, namely tourism, food and alcohol. Whisky is Scotland's main export, followed by gin then seafood, which mainly consisted of high quality shellfish and salmon. While the city of Dundee itself is not focused on food and alcohol, they make up a large sector in the surrounding hinterland, trading mainly seed potatoes and soft fruit. According to a representative of Forth Ports Limited, Dundee port is the largest agricultural port on the east coast of Scotland. Due to European Union agriculture policies, the port works mainly with secondary processes, importing and exporting agripods and has several green facilities such as green management facilities, green drying facilities and green labs.

Presently, the key sectors in Dundee are life sciences, creative industries, with a particular focus on the video game industry, and the broader technology and engineering industry. According to the University of Dundee, 60 per cent of the local economy is dependent on life sciences. The university has been focused on working in the areas of health and life sciences, renewable energy and design as they consider these to be the University's key strength areas that are also post-industrial critical areas for the economic development of the city with strict connectivity to the national state of affairs.

Governance

There are 32 local authorities in Scotland, each governed by a council constituted of councillors directly elected by the residents of the council ward. In Dundee, the councillors of Dundee City Council elect the Lord Provost, who is the Convenor for the city council, chair of the council meetings and representative of the council in ceremonial and civic occasions. As other city councils in Scotland, Dundee City Council operates independently of central government and is responsible for making corporate decisions and for providing a range of public services. According to a City Council representative, the ability for local councils to raise money on their own and invest in infrastructure has often been a driver of the economy.

The Scottish Government undertook a review of Scottish cities in the late 1990s and concluded that cities were the future engines of the national economy (Scottish Executive 2002) and needed to be prioritised in terms of investment. A Dundee growth fund was established to support this program. The Dundee City Council received funding resources and decided to focus on one single transformation project, the Waterfront Project. Dundee City Council officials stated that while a master plan for the Waterfront area was already being developed with a great deal of consultation, prior to receiving the funding, they did not have the resources to implement it.

Before defining the vision for the city, it is essential to fully understand and respect the city's heritage and the history of its development and growth, including its past failures. The city had a history of improvements, some more successful than others. The initial vision for Dundee was to ensure the new agenda was continuous

Overview of Dundee's city centre.

with existing vision and plans, whilst incorporating enhancing variation. This approach has since evolved with a focus on partnerships and how to maximise assets, with much work done around incremental changes over radical changes.

> "Vision is very important. But before vision, what we found really important in this city was we fully understood and respected where the city had come from."
>
> --Mike Galloway, Director of City Development, Dundee City Council

Scottish Enterprise

Almost 25 years ago, Scotland's main economic development agency Scottish Enterprise was established in Dundee. The Scottish Enterprise agency works with partners in the public and private sectors to deliver significant benefits for the Scottish economy. Its work in Dundee focused on projects relevant to the city. In Scottish Enterprise's first years, Dundee still had a two-tiered local government, and so it interacted with both city council and regional council until the change to single-tier governance in the late 1990s. According to a representative of Scottish Enterprise, before the shift, the two councils could hold different political ideologies and different interests; this change helped to better facilitate Scottish Enterprise's working relationship with the council over the coming years.

In Scotland, economic development is mostly based on inward investment, which is the main source of financial leverage for regional assistance often provided by the Scottish Enterprise. The government's economic development approach has had an important role in driving the economy of the city, with almost three quarters of £1 billion spent in Dundee to deliver the Dundee Waterfront Development, the Victoria and Albert (V&A)

The Caird Hall concert auditorium, located at City Square.

Museum and education investments. Representatives of Dundee City Council stated that the objective of these projects is to achieve Best Value; this refers not to the highest price but best value overall. The monetary value is only one element of a project, other criteria should also be taken into consideration, such as benefits to the local community benefits or the interrelation between a project and other strategies. It is the City Council representatives' belief that as long as they are able to demonstrate to their auditors that they have achieved best value, they will not be challenged.

Dundee Partnership

The Scottish Government set out the statutory framework for community planning and currently there are 32 Community Planning Partnerships, one for each local authority area. In establishing a community planning partnership with the Scottish Government, the local government is required to outline a single outcome agreement which defines their shared ambitions and how the partnership and the local objectives will contribute to national outcomes. The Dundee Partnership was established in 1991 and comprises the City Council, the public sector, third sector[1] and private sector. A broad connection between national and local outcomes allows the Partnership a degree of discretion in the allocation of resources that come from national government. The Outcome Agreement details the local outcomes and how these outcomes should inform the various plans, strategies and spending programs carried within the public sector partners.

Dundee's Partnership vision is to create jobs, improve quality of life and foster social inclusion; these key areas have sustained the partnership. In the earlier stages of the Dundee Partnership, much work was done to address physical problems, such as transforming abandoned buildings into shared workspaces, art studios and housing, often in conjunction with social housing providers and the private sector.

TAYplan

TAYplan is the strategic planning authority in Dundee, a partnership of the four councils comprising the Tay Cities region. It is responsible for preparing the Strategic Development Plan for the region in accordance with the Scottish Government's policy structure for cities as outlined in its national planning framework. The Scottish Government Strategic Development Plan (2012) is the basis for local authorities to prepare their own development plans. Dundee's planning department sits under one portfolio that encompasses economic development, property and roads. According to City Council officials, this allowed the dissolving of bureaucratic silos and enabled new ideas and joint working processes that would not otherwise have been possible. TAYplan's staffing, accommodation and research is funded equally by each of the regional partners. The organisation focuses solely on strategic planning and does not undertake lobbying or advocacy or initiate projects. Paying identical amounts ensures that the issue of proportional funding does not arise, and mission creep is minimised.

City Transformation

The vision for the city has translated into the Waterfront Project, which became a catalyst for change in Dundee and was reinforced with the development of the V&A Museum. Together with the physical transformation that these two projects carry, the education, creative and life sciences industries have become the focal drivers for the city's development.

To a large extent, the city has been defined by its role within the region as a cultural hub. Although the city representatives are proud of what the city has achieved, they believe that they have to work in a broader geography to achieve Dundee's economic goals and social vision.

Given its greater housing affordability and surplus office space, Dundee has the potential to take on residential and employment 'overspill' from Edinburgh. According to TAYplan representatives, there are plans to reduce the journey time between Dundee and Edinburgh to under an hour in order to improve the efficiency of the commute and attract more people to live in Dundee and work in Edinburgh or vice versa. This endeavour is grounded in the evidence of relocation already seen of service support type work from software companies moving from Edinburgh to Dundee.

Social and Employment Challenges

The decline in manufacturing has had significant impact in Dundee. Poverty and unemployment rates are high, with about a third of the city's population living in "the worst 15% of the Scottish index of deprivation''. City government leaders spoke of the continuing challenges related to the lack of a middle class, the legacy of semi-skilled jobs and of generational unemployment. They believe it is essential to ensure that the change they are trying to achieve positively impacts the third generation of unemployed.

Ideally the entire city should be connected through the regeneration project, disputing the perception of a city divided into two parts wherein one is involved in the regeneration and the other is feeling excluded due to a lack of understanding of their role within it. For both representatives of the University of Dundee and of the Chamber of Commerce of Dundee and Angus, it is expected that the V&A museum will overcome this hurdle and help create long overdue job opportunities. Nevertheless, there are concerns that the jobs created will still be lower paying jobs within the hospitality, tourism and health care sectors. While labour supply should meet demand to stimulate the economy, it is also essential to ensure social justice and fairness in terms of job quality and value.

Another challenge noted by the University of Dundee representatives is that most investment goes to the bigger cities like Edinburgh and Glasgow, even in areas where a second city like Dundee has proven to be more successful. Such is the case of the bioscience industry: the University was considered to be the best in the UK, but the majority of research funds were viewed as directed to Edinburgh. For Dundee and other second cities to prosper, this thinking needs to be reversed and Scotland should not arbitrarily reinforce the long-standing differences in research support between universities in its major cities.

Change and Development Process

Transition of industry skills has been difficult for Dundee, given its history in manufacturing. People still argue that they need more assembly plants and semi-skilled manufacturing job opportunities, often asking for shipping manufacturing to be restored. The original investment strategy was to attract similar types of organisations to the existing industry base, including some manufacturing investments. In the last 25 years, the economy of the city has transformed however. According to a representative of Scottish Enterprise, 20 years ago, unemployment was around 25 per cent, now it is about 3 to 4 per cent. However, there has been a generational

Dundee's Football Club Dens Park Stadium.

change; the new jobs created are different to the jobs that were lost. The key challenge now is how the next generation can get skills for the jobs that exist now.

Dundee's academic strength has enabled the growth of a knowledge-based economy in the areas of life sciences, medical research and creative industries, particularly taking advantage of the city's strong legacy in the computer gaming industry. A strong sense of culture has also developed in Dundee from the factory floor and women singing together over time transformed into a strong performing arts base, often supported by the universities. Many skilled workers at the macro strategy level have received an education through universities and colleges to understand how to link specific skills to companies.

As one of the city's biggest employers, the universities created numerous advantages for people to study, work and live in Dundee, changing the socio-economic dynamics of the city. The University of Dundee in particular, played an important role in the international recognition of the city. The University's prestige within the life sciences meant that high profile individuals in key influencing positions were identified, often via the universities' alumni list, and asked to promote the city as unofficial marketeers and ambassadors. This marketing work developed by Scottish Enterprise and the universities within the life sciences field led to the development of the GlobalScot, a network of business leaders, executives and entrepreneurs in key industries that have a connection to Scotland. GlobalScot approaches these individuals through universities to understand if they are keen to share their experience of Scotland and harness new businesses opportunities. Scottish Enterprise maintains an ongoing relationship with both Scots and foreign individuals through GlobalScot, providing them with updated information about main sectors and companies.

Partners and Community

Partnerships are strong in Dundee. As many interviewees noted, its city size is advantageous in allowing key players to engage and operate together. The city has had formal partnerships over the years that shaped the process and outcomes of collaborative work; these have included the City Council, Scottish Enterprise, the Universities, further education colleges, and the private sector often through the Chamber of Commerce. Some partnerships are project specific, such as the Dundee Waterfront Partnership, a specific joint venture financed by Scottish Enterprise and the Council, with participation of the private sector through the development of various sites.

Universities

The University of Dundee has been a driver for cultural and economic transformation. Currently ranked as the number one university in the UK for biomedical sciences, the University tries to work across disciplines that can drive the University forward and make an impact in the real world. According to University representatives, the University turns over £240 million per year which translates into an overall economic impact of £750 million a year in a region of 250,000 people. It also makes great economic impact, generating £7 for every £1 they receive from the Scottish Government. The University of Dundee has been reported as being among the most successful in widening access for people from deprived backgrounds. In order to participate more closely in the evolution process of the city and to support local actors, the University of Dundee is a member of the Dundee Partnership, a member of the Chamber of Commerce and is on the original advisory board for Scottish Enterprise.

Culturally, the University has been central to the Waterfront Development discussions alongside the City Council and other businesses, and has had a crucial role in bringing the V&A Museum to Dundee. Representatives report that the University played an important role in fighting scepticism and supporting the feasibility of the V&A Museum project. Specially, the University used a "One Dundee" approach and headed a steering group to lead the efforts of all entities involved, and through organising a conference, "V&A at Dundee: Making it happen", incentivised community participation. The design competition and associated exhibition invited the population to vote on their favourite building design. Around 15,000 people visited the exhibition and participated in voting.

Abertay University is the newer and smaller university and concentrates more efforts on teaching than on research. Abertay has an important strength in its internationally well-regarded electronic games and digital activities courses. Abertay University and the University of Dundee sit comfortably alongside each other, and little competition exists. They often work in partnership on projects such as the V&A Museum, and together with Creative Dundee, they are guiding the agenda in driving social regeneration through culture and creativity. Having two Universities in Dundee provides choice locally, nationally and internationally, particularly in areas of specialisation, which is beneficial to the city.

"They said it could not happen (the V&A Museum) because that kind of thing did not happened in Dundee (...) But we were determined to make it happen."

- Sir Peter Downes, University of Dundee Principal and Vice-Chancellor

Creative Dundee

Like many new enterprises in Dundee, Creative Dundee grew from a grassroots movement. Founded in 2008, Creative Dundee is now at the heart of the city's developments. Creative Dundee is a social enterprise with strong expertise in community engagement that connects talents from the digital and the arts sectors. It is involved in organising and running cultural events and working on partnerships projects with the City Council, Scottish Enterprise and the V&A Museum. The Vision Building, where Creative Dundee is located, provides a space for creators to work outside regular hours. It is

considered the melting pot between the tech and the arts, where community workshop's like Dundee MakerSpace are based. Its success and sustainability of projects can be attributed to the fact that the initiative is not tied to one single person or entity.

In 2013, when the city decided to bid to become a UK city of culture, Creative Dundee developed the We Dundee project. It was a crowd-sourcing platform that allowed people to identify what they loved about the city and reimagine the city for the future. The project generated over 4,000 responses. This marketing campaign created opportunities for people to come together and enabled the involvement of inhabitants in the strategic design for the city. Although Dundee did not win the bid, ideas were incorporated into its cultural strategy, which then led the city to receive the title of City of Design by UNESCO in 2014.

Private Sector

According to the Chamber of Commerce of Dundee and Angus, some private companies have taken the initiative to stimulate change and help with the development process. Michelin, for example, have engaged with a local high school with students with behavioural difficulties and low academic scores and from a particularly disadvantaged area, and developed a reading paired program involving students and current employees. In addition to this work and career guidance, Michelin uses part of its profits to support businesses established in surrounding areas to employ more people.

Key Learnings

- Dundee has managed to move forward as a post-industrial city, via small-scale initiatives and through a strong focus on partnerships. It has recently attained national recognition, first by the Scottish government and then by UK's government, as a small compact city that works through partnerships and is also effective in working at the community level, to enable change to happen quickly.

- As a result of the strategic leadership shown by Dundee University, together with the collective support from the council and city leaders, the internationally renowned Victoria & Albert Museum (V&A) will locate its first facility outside of London.

- Having more than one University in Dundee provides local, national and international choice, particularly in areas of specialisation, which is beneficial to the city.

For consideration

Culture and heritage is an opportunity Geelong to consider.

- A museum can have greater visibility by settling in a non-capital city. This was a decisive factor for the board of the V&A Museum when they realised that the museum could have far more impact in Dundee than in Glasgow or Edinburgh. Nonetheless, the V&A Museum sits within a wider flourishing environment that denotes Dundee's commitment to arts and culture. The city has created strategies to support the development of cultural activities, such as visual arts, music and dance, which has culminated with Dundee being recognised as a UNESCO City of Design.

- The strong heritage of organised labour from the mills in Dundee translated into a strong sense of community organisation and the understanding of the city's history has been the base for a deep-rooted vision that has driven the city's partnership along the years.

Partnership and collaboration is important.

- The strategic vision for Dundee was embraced by all sectors involved and has not been challenged by political leaders and this has been crucial for its implementation.

- The private sector can play an important role in social inclusion and employment

1.	According to the UK's National Audit Office, 'Third sector organisations' is a term used to describe the range of organisations that are neither public sector nor private sector. It includes voluntary and community organisations (both registered charities and other organisations such as associations, self-help groups and community groups), social enterprises, mutuals and co-operatives. — https://www.nao.org.uk/

Street art at DC Thomson building façade.

Area 51 Skate park at Strijp-S, Eindhoven.

Eindhoven

Rationale for the visit

Eindhoven is a Dutch city located in the southern province of North Brabant, close to Germany and Belgium (Fernández-Maldonado & Romein 2009). With a population of more than 225,000 in an area of 88,84 km2, Eindhoven is the fifth-largest municipality of the Netherlands (This is Eindhoven 2016). Eindhoven's heritage is intertwined with the working-class movement and industrialisation (Russo & van der Borg 2010); it is often referred to as the Philips company town due to the major role that the company had on its development. In the 1990s, the city suffered severely due to the economic and social losses caused by the decline of industry, mainly the outsourcing of Philips manufacturing activity to other countries and the bankruptcy of the DAF automobile factory (Lummina 2014). After a period heavily marked by unemployment, the Brainport Eindhoven Region has become one of the seven best cities and regions for business innovation in the world, winning the title of 'Smartest region in the world' from the Intelligent Community Forum in 2011 (Akhtar 2012).

Context

The city of Eindhoven is at the centre of a pioneering knowledge policy agenda named 'Brainport' initiative (Lummina 2014), in which high-tech, design and social innovation are combined within one region (Brainport Development 2015). The Brainport region comprises 21 municipalities, spread across an area of 1500 km² with 753,000 inhabitants that collaborate together in one economic development agenda. Eindhoven, together with municipalities Veldhoven, Best and Helmond, make up the most industrialised region in Netherlands and one of the top industrial and knowledge regions within Europe.

Although Eindhoven's relationship and 125km distance to the Netherlands' capital city of Amsterdam is an important feature of its economic geography, it sits within an extensive polycentric region of cities, including Brussels, Antwerp, Rotterdam, Maastricht, Cologne, Essen and Düsseldorf which influence its development. As it is directly connected with both Belgium and Germany, Eindhoven forms an important node in the road network of the Netherlands. Due to its proximity to other European countries, Eindhoven inhabitants are often found to be visiting Düsseldorf, Antwerp and Brussels more than Amsterdam; its geographical positioning makes it closer and with greater connectivity to the airport of Brussels, Düsseldorf and Maastricht rather than Amsterdam's Schiphol airport. This has also influenced the culture of the city and its people. With strong differences between the Netherland's North and South, many people in the region feel more connected to the South — particularly Belgium, for example — than the North.

During the Eindhoven interviews, it became clear that the people of the city generally do not compare Eindhoven to Amsterdam. While they acknowledge that Eindhoven is smaller, they do not think that it has any lesser status, only different. Although both cities have a large number of international workers, those in Amsterdam work mostly in banking and creative industries, particularly in media. The commute between Eindhoven and Amsterdam by train takes about one hour and twenty-five minutes. There are people living in Amsterdam that commute to Eindhoven for work and vice-versa, but this depends heavily on the type of community they are from. Nevertheless, it is cheaper to live in Eindhoven than in Amsterdam and many are attracted to its proximity to other European countries.

At a time when agriculture was the main industry, Eindhoven was quite poor due to the barren soil of the region. The late 19th century marked the origin of Eindhoven's industrial development, and in the first half of the 20th century, the city experienced a massive industrial growth. Pivotal for this industrial progress was Philips, the light bulb company often considered the main founding firm of the city that established there in 1891.

Philips

The influence of Philips in Eindhoven was far reaching. Not only did it build multi-storey buildings, many of which are still in use today, to keep up with the company's fast growth, it also built necessary infrastructure for its

workers and their families, such as residential buildings, primary and secondary schools, and recreational and sports facilities. Philips founded the technical University of Eindhoven, the Design Academy and owned the sports club PSV Eindhoven. Philips wanted to attract workers from other parts of the Netherlands and the rest of Europe and understood that it was vital to ensure leisure facilities and schools for the children of those that were coming to work.

The company owned a sizeable proportion of the city's buildings and at one point employed around half of the city's inhabitants. Having such a strong and important company in the region established a particular way of working within Eindhoven. This heritage now translates into a similar way of working across companies and a greater understanding between people.

Governance

The Dutch government gave the title of 'Brainport' to the Eindhoven region in 2004 (Fernández-Maldonado & Romein 2009). Initially, the national government invested highly in what were then considered to be the two port regions of Netherlands: the Seaport region where the city of Rotterdam is located, and the Airport region of Amsterdam. Presently, alongside the Seaport and Airport regions, Brainport has become one of Netherland's three economic development pillars.

The Netherlands has 12 provinces, divided into 300 municipalities. Some cooperation of municipalities exist within the provinces. In Eindhoven, 21 municipalities form the Metropolitan Region of Eindhoven, the Brainport region. In the governance structure of the region, the Metropolitan Region of Eindhoven sits one level above the city council, while Brainport Foundation, which head the region's economic development agency, sets the strategic economic agenda. Therefore, in terms of development strategy, the decisions made by each city council have to pass through the regional level, where decisions around infrastructure and urban planning are made in compliance with the overall Brainport strategy.

Representatives of the Eindhoven City Council view the governance and advocacy model as a success though it can also be quite complex and requires the involvement of everyone in the network to work. As noted by a representative from Brainport Development, this model's success is mainly due to the culture of cooperation specific to the Brainport region and the Dutch people's willingness to reach a consensus. All parties involved want to see their main goal realised, that is, a more flourishing economic region.

Eindhoven City Council

In the Netherlands, mayors are appointed by the central government and once seated they cannot be politically active. According to a City Council representative, prior to 2008, the law required the City Council to choose two candidates for a people's referendum for the appointment of the Mayor, and thus the current Mayor of Eindhoven was appointed. Nowadays, the city council

chooses 2 candidates and then the central government appoints the mayor. In the city of Eindhoven, there are 45 elected members on the city council. The members of the City Council then choose a city board of six members, which act as an executive. The Mayor is Chair to both City Council and the board.

The Mayor is appointed to a six-year term and the members of the city council and the city board are elected every four years. The 45 elected councillors are all members of political parties and they work across the city in a part-time role. City councillors' main role is financial planning and allocating money mainly for economic development or for social projects.

Eindhoven City Council invests in jobs and economic development, but their main activity is Brainport Development. The City Council's work is closely connected with Brainport Development, as the Mayor is also Chair of the Brainport Foundation and the money required for the strategic decisions of Brainport Development has to be contemplated within the city's financial plan.

Brainport Development

"If there is nothing, we can create everything"

- Naomie Verstraeten, Program Manager of Brainport International Programme, Brainport Development

Brainport Development is the regional development agency for the Brainport region. Headed by the Brainport Foundation, Brainport Development works under the triple helix model. The Chair of the board of Brainport Foundation is always the Mayor of Eindhoven, mainly because Eindhoven is the biggest city within the region. Other members of the board are from the sectors of industry, knowledge and research institutes and government, including the mayors of the other three large cities of the Brainport region.

Brainport Development works in five main domains or enablers: people, businesses, basics, technology and international. Annually, Brainport Development creates an economic development agenda and each program director for the five domains creates a plan accordingly. After analysis by the board, a joint five-year plan is developed by the CEO of the Brainport Development, which translates the overall strategic vision and defines a more detailed execution plan for each year.

Although all projects within the five domains are funded within the triple helix model, meaning they have to be co-funded by all partners, most of the basic funding in Brainport Development is public money. The municipalities within the Brainport region subsidise Brainport Development with about 2 million to 2.5 million euros per year. Not all municipalities contribute alike. The city of Eindhoven, the largest municipality within the region with about 25,000 inhabitants, contributes more but also receives the largest benefit. Veldhoven, Best and Helmond each contribute around 100,000 euros, and the other 17 municipalities together

contribute 0.5 million euros. Added with other funding from the European Union and the province of North Brabant, Brainport Development has about a 12-million-euros budget per year.

A representative of Brainport Development considers Brainport Development an extension engine of the public. Its distinction from the government is seen as an advantage by the Eindhoven City Council; it is agreed by all that a depoliticised structure like Brainport Development is the right model that will further the region's development. Brainport Development believes that should it be a part of government, bureaucracy issues would arise; accommodating the different ways businesses, academic research and government work and make decisions would slow down its operations.

As a representative of the University observed that Philips led the strategic economic development of the region in the past but now this is developed by Brainport Development. Brainport Development is responsible for the international branding of the region and for both Eindhoven City Council and University; aligning their meetings and visits is standard practice.

City Transformation

In the 1990s, Eindhoven had a severe crisis when Philips decided to outsource much of its production to China and move its headquarters to Amsterdam. During this period truck manufacturer DAF went bankrupt. Between 1991 and 1992, out of the 90,000 jobs in Eindhoven, 35,000 were lost. This was a huge economic shock for the city.

Subsequently, the Mayor, the Chair of the Chamber of Commerce and the Chair of the Technical University decided to take action together, and thus shaped the triple helix model. Together they drafted a stimulation program, started their own fund and approached the European Union for financial support. From then on, Eindhoven went from a region that produced light bulbs, radios, cars and beer to become a high-tech region. The biggest sector in Brainport region is high-tech systems and materials, particularly in nanotechnology and semiconductors. Another part of its high-tech expertise is the automotive industry, focused on smart and green technology. Megatronics, robotics, manufacturing through precision engineering and design are also strong sectors in the Brainport region.

When Philips moved their headquarters to Amsterdam Eindhoven bodies gained agreement that the company had to leave their Research and Development (R&D) in the city, ensuring that their physical laboratory and research plant stayed in Eindhoven. Although it was no longer a part of Philips, it was critical that this facility stayed in the city. It is now known as the high-tech campus of Eindhoven. Of the top seven R&D companies in the Netherlands, five are within the Brainport region, including some spin-off companies of Philips. For City Council representatives, the high-tech campus is their icon of research and development, and facilitating its growth is one of their main objectives.

According to Brainport Development figures from 2014, the amount of industrial exports in the region rose by 5 per cent. This shows significant growth, with 19% of Dutch R&D investment being originated in the region. The R&D sector is considered high-value, due to the impact it has on many people, from the researchers at a higher level, to the workers within a production factory.

The growth of the R&D ecosystem within the Brainport region has also influenced the development of Small and

Philips Stadium – PSV Eindhoven..

Medium Enterprises (SMEs). A quarter of the SMEs with whom Brainport Development works operate within the innovative sector and since large companies and SMEs work in close collaboration in the region, they often thrive together. Brainport Development supports SMEs in applying for European Union grants and in reaching national government for support.

Within the sector of R&D, ASML, based in Veldhoven, is one of the most relevant companies in the region. Specialising in precision engineering, it is the world's largest supplier of photolithography systems and makes 90 per cent of all chips in the world. ASML works closely with the supply chain and outsources many of the components necessary to their lithography machines, helping the suppliers to evolve at the same pace as the company. According to a representative at Brainport Development, ASML is bringing more money to the Netherlands than the whole port of Rotterdam. In addition, according to a representative of Brainport Development, most people who were unemployed have found new opportunity and employment numbers in Eindhoven has risen. However, it remained unclear whether jobs followed people, or people followed jobs.

"Working together with the triple helix partners, companies and education and knowledge institutions was the right answer that brought us a lot of economic growth"

- Guus Sluijter, Strategic Advisory, City of Eindhoven

Main Challenges

Eindhoven is in a very delicate game of becoming the third equal economic node relative to Amsterdam and Rotterdam within the Netherlands. However, it does not want to fight these two traditionally important areas because due to their a long and well-established lobby in the Dutch national government. While it has to compete with Amsterdam and Rotterdam when it comes to national economic policy, in the long-term, as a small city, Eindhoven also has to be careful not to lose the battles with the larger cities. For city representatives, ideally there should be an inclusive policy in which the port and the airport are part of the infrastructure that serves and supports the growth of the Brainport industrial region.

In order to be an attractive city, Eindhoven needs cultural or sports facilities and attractive cultural events. In comparison, Amsterdam receives much more funding for cultural infrastructure than Eindhoven. Eindhoven does hold some large events such as Glow and Dutch Design Week. Glow attracts almost 850,000 visitors, which is triple the city population, yet it only receives funding from the companies in the region, the city government and Brainport Development. Dutch Design Week usually historically received no national funding, but 2016 will be the first year that it receives financial support from the national government.

Partners And Community

Health, mobility and energy/sustainability are the new drivers for the economic region of Eindhoven. The main goal of Brainport Development Next Generation strategy is to develop not only Eindhoven's economy, but its social economy, that is, the quality of the society and the involvement of citizens in projects. In order to achieve this, Brainport is trying to move from its triple helix model to a multi-helix model. By ensuring that inhabitants have a role and a responsibility in the development of projects, Brainport believes that it can develop an improved sense of community and connectivity between different groups.

The Blob, located in Eindhoven's city centre.

Brainport Development has a key role in connecting all partners in the region. According to a representative at Brainport Development, the Dutch nature in looking for a solution is to always seek consensus. Their collaboration model is based on trust as the foundation for open innovation. Even though there may be differing opinions amongst the leadership, their objective of not maintaining the status quo, but to grow is jointly shared. This provides an opportunity to dare to do something different, with a specific focus on doing one or two things well. According to a representative from the City of Eindhoven, choosing the Brainport model de-politicised economic development in a severe crisis when emergency co-operation was required. As a result, Eindhoven has progressed farther using this model than others.

Technische Universiteit Eindhoven

Technische Universiteit Eindhoven (TU/e) is a technical University (TU meaning technical university), and partner to the technical universities TU Delft and TU Twente. The University was founded in 1956, after the Second World War, mainly to respond to the need of qualified personnel from companies like Philips and DAF, and the overall industry growth that was happening in Eindhoven.

According to the University representative, the University considers itself extremely lucky to be placed in Eindhoven. The University believes that most of its strengths are due to the companies based in the region and its proximity to them. This allows the University to attract companies to cooperate with its students. The University also collaborates with other TU universities, such as Utrecht University, and other universities within Europe, mainly in the field of high-tech systems and high-tech equipment.

Evoluon conference centre.

When the University realised that it should be more integrated within the larger ecosystem of the region rather than focusing only on research, it changed its strategy to concentrate on energy, health and smart mobility. By targeting societal problems and issues, the University grew. In the last 7 to 8 years, student numbers have doubled to just a little over 10,000.

Key Learnings

- Eindhoven is at the centre of a highly specialised and technological region; with 19 per cent of Dutch R&D originating from there, it is the second best contributor to the country's GDP.

- Brainport region's growth has been possible due to the strong collaboration enabled by the triple helix governance and planning model that brings together government, industry and knowledge institutions. Currently, the region is invested in working through a multi-helix model to ensure more involvement and ownership from the community.

For consideration

Collaboration and coordination between the different stakeholders can be critical for the economic development of Geelong.

- In the Brainport region, all 21 municipalities collaborate and cooperate based on mutual trust, overcoming differences by trying to achieve consensus and working toward a single overarching goal: the prosperity of the Brainport region.

- All key players in the region agree that the de-politicised model of Brainport Development and its role as coordinators of marketing and branding of the region enables Brainport to go further.

Playhouse Square – Cleveland Theatre District in downtown Cleveland

Cleveland

Rationale for the visit

Cleveland is part of the Cuyahoga County, located on the southern shore of Lake Erie. It is the second largest city after Columbus in the state of Ohio. After peaking in population to almost a million in the 1950s, Cleveland presently has less than 400,000 inhabitants. During the American Industrial Revolution, Cleveland benefited from being a major shipping and manufacturing centre, and its proximity to Pittsburgh and Detroit enabled the development of its steel and automotive industries (Marti 2011). Between 1950 and 1990, however, the city lost more than half of its jobs in manufacturing, the city's largest employment sector (Cleveland City Planning Commission 2007). Now, Cleveland is internationally recognised for its healthcare sector, producing knowledge and products primarily in the cardiac and cancer research areas. In recent years, Cleveland has been able to diversify its economy, experience growth and enable an increasing proportion of college-educated young adults living in the city's metro area (Piiparinen, Russell & Post 2016).

Context

Some of the interviewees see Ohio as a microcosm of America. As a representative at Global Cleveland described, Ohio contains in itself different stereotypes of the American urban fabric: inner-city African-American industrial neighbourhoods, affluent, white conservative Methodist suburbs, and agricultural Appalachian rural areas. Cleveland plays the role of a major urban area in Ohio, with very specific problems, which almost make the city seem like a separate state. This stark contrast is even more conspicuous when comparing Cleveland with the state capital Columbus, located a two-hour drive away. Being out of orbit from a major capital city tends to allow Cleveland to not perceive itself as a second city.

Cleveland is one of the oldest cities in the United States of America and in 1930 it was the 5th most populated city in the country. The city's economy was booming from its manufacturing and steel industry and there was ready employment regardless of education. Between 1950 and 1990, however, Cleveland lost more than half of its jobs in manufacturing and almost half of its population (Cleveland City Planning Commission 2007). When the 2008 financial and mortgage crisis hit the United States, the city was faced with more job losses in the manufacturing and automotive sector.

According to the Department of Economic Development, while the number of manufacturing jobs are at its lowest in the City's history, the gross regional product of the Cleveland region is now the highest it has ever been. The strengths of Cleveland's economy presently lie in health care, research, education, financial services and manufacturing. The city's main focus is now the Health Tech Corridor, which is also supported by Cleveland State University, Case Western Reserve University, the University Hospital and the Cleveland Clinic (Piiparinen, Russell & Post 2015). With globally recognised brands in the healthcare sector, the city is benefitting from these organisations' strategic focus in Research and Development (R&D), as well as the University hospitals' specialisations in engineering and biomedical engineering.

Governance

The city of Cleveland is one of 58 jurisdictions within the Cuyahoga County, which now has a county council with a county executive and a number of council members. According to a representative at the Department of City Planning, although this level of governance adds another layer of bureaucracy, it also leads to a closer and more intimate level of collaboration. Cleveland has a legislative City Council distributed geographically by wards and composed of 17 councillors representing 17 districts of around 25,000 inhabitants each. The City Council, including the Mayor, is elected every four years.

There was consensus among interviewees that the good governance of the city of Cleveland comes from its strong Mayor model. In Cleveland, the Mayor acts as CEO for the City Council and is responsible for directing public services, hiring the Police Chief and managing the

departments of Water and Port Control, among others. The current Mayor works with a team of 8,000 people and has been in office for three terms. It was agreed that the Mayor has become an important force and the leadership structure has been beneficial to the city. The Mayor's mantra of "whatever you did not do for one of the least of these, you did not do for me" was held up as an example of his leadership in relation to the growing kindness and humanity in Cleveland. Nevertheless, it was also pointed out that the current model of leadership could be detrimental if the wrong type of individual held the role.

City Planning Commission

The *Connecting Cleveland 2020 Citywide Plan* is the overall comprehensive plan that has been translating the strategic approach to the city's regeneration. Through this plan, the City Planning Commission aims to create a diverse community with greater access to employment, education, transport and competitive places. The city intends to maximise opportunities, take advantage of the post-2008 mortgage foreclosure crisis and find ways to revitalise newly available lands whilst building on its own assets to accelerate growth. Another objective of this regeneration process is to build connectivity between boroughs and neighbourhoods to guarantee environmental, economic and social sustainability within the city.

For its inhabitants to thrive, it is fundamental that all neighbourhoods in Cleveland should have safe, clean and aesthetically pleasant environments to live, work, play, shop, learn and worship. Nevertheless, asymmetries within different Cleveland neighbourhoods do exist when it comes to these essentials. As the representative at the City Planning Commission explained, the overarching goal for the city is to help change the value proposition towards the three key pillars that permeate society: equity, population health and sustainability.

Department Of Economic Development

During the recession, the Department of Economic Development of the City of Cleveland had a crucial role in ensuring that investment in the city would not cease. For about two years, it was able to grant loans to entrepreneurs that were considered reliable, but who could not get financial support from banks. This was made possible by the loans that the Department were able to receive from the Federal Government that it then allocated to specific projects. Due to the high risks of this process, three measures were developed to ensure its feasibility. Firstly, the developer had to set aside a debt reserve amount equivalent to one-year principal on the interest. Secondly, the funds were loaned at 0.6 or 0.7 per cent, higher than the 0.3 per cent interest the Department owed to the Federal Government. Lastly, a tool called tax increment financing was employed, where the developer would make a payment in lieu of taxes that could go towards the development project. A pool of debt reserve was created through this process.

City Transformation

Education and Medicine (Eds & Meds) and Research and Development (R&D) drives everything from basic research, applied research and innovation to employment. In the mid-20th Century, a lot of R&D was privately located; now,

GE Chandelier located in Cleveland's Playhouse Square.

75 per cent of basic and applied research in the United States is undertaken in universities and research hospitals. They are the key engines of economic development in the view of Cleveland observers. Cleveland and Pittsburgh have benefited from big industrialists like Rockefeller and Carnegie Mellon, both of whom invested in major hospitals and universities in the two cities early on.

Presently, healthcare is the new engine of growth in Cleveland. This is not limited to healthcare services but includes the cluster of R&D within the life sciences. The healthcare development sector in Cleveland is particularly pivotal. Since healthcare is now a huge component of the United States economy, Cleveland has been repositioned due to its knowledge clusters in cardiac care, cancer research and general healthcare. These specialties became the city's new export and Cleveland has attracted people to the city for the use of its services and to invest money to support its R&D.

> *"Turning the city around from being saturated with loss, letting that go through smart research, smart policy and through forward looking insights; and then preparing for the future."*
>
> *- Dr Richard Piiparinen, Director, Centre for Population Dynamics, Cleveland State University*

Amenities are a big part of luring global talent, and Cleveland is very well positioned in this regard. The city has the largest theatre district outside of New York, several museums, namely the Cleveland Museum of Art, and is also home to the Cleveland Orchestra and the Rock and Roll Hall of Fame. With the food and sports industries added to the mix, Cleveland is attracting many tourists and overcoming the status of being a 'fly-over' city.

Social and Employment Challenges

According to a representative at Cleveland State University, one of the biggest challenges for the city is responding to the changing and growing economy. The city's population is divided by education. While a third of metro Cleveland and 17 to 18 per cent of the inner-city's population have received a college education and are being prepared for the growing economy, the remaining population are a part of what is considered the shrinking economy. Opportunities in lower skilled jobs are eroding and it will no longer be possible for some to work in factories and send children to university. Due to the lower education rates in the city, overcoming this polarising system and disparity is a major struggle that is of considerable concern Cleveland. The non-participation of labour force and ongoing poverty will also bring associated issues such as high homicide rates and poor health outcomes.

The city is also divided geographically in terms of its core and the inner rings, or gap areas. The core is where the developed areas are positioned, alongside the high-tech industries and the majority white neighbourhoods where inhabitants have access to healthcare and are highly connected. The gap areas are predominately African-American neighbourhoods, with high infant mortally rates, high homicide numbers, lower levels
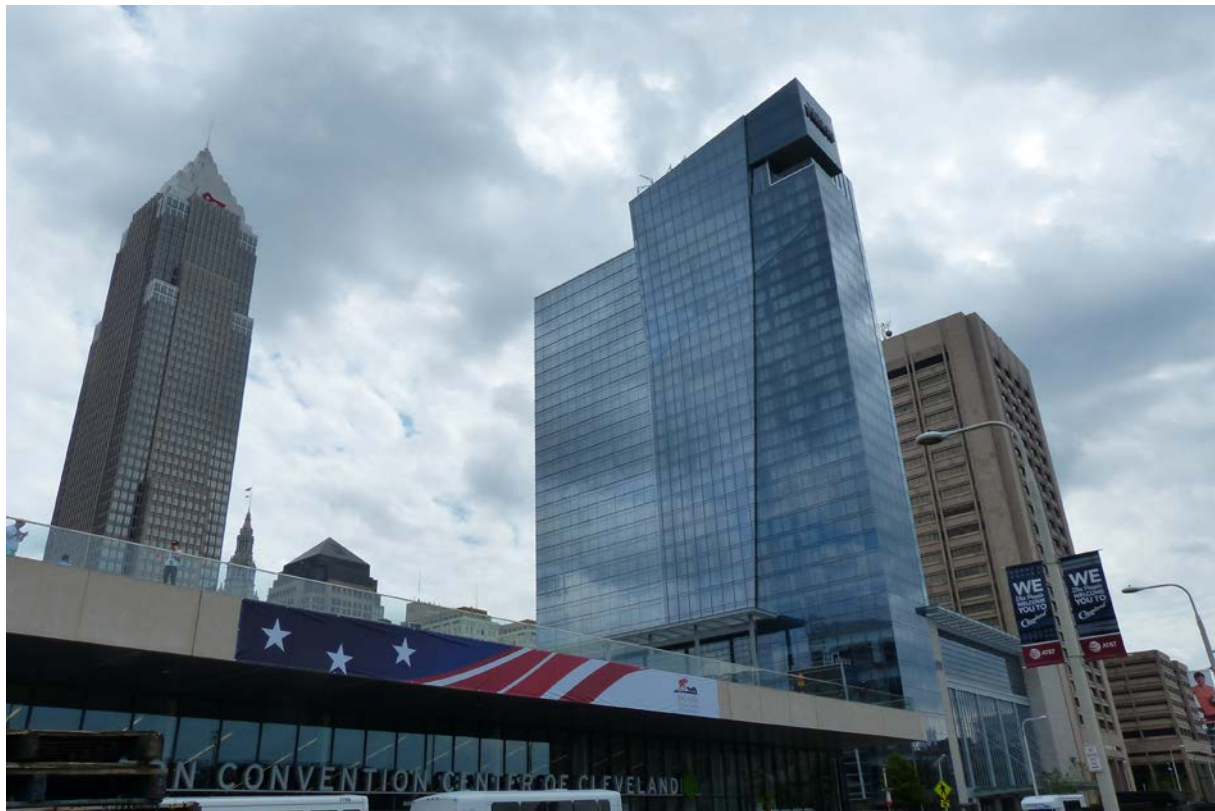
Cleveland Convention Centre.

of education and lesser healthcare access. There is now an appreciation that more attention has to be given to these neighbourhoods in order to minimise social inequality. The fact that many of these neighbourhoods are next to the global healthcare corridors can also be seen as an opportunity. Politically, however, leadership can sometimes be threatened by emerging economics and demographics. As some of the interviewees noted, it can be easier to control the votes by controlling the demographic, and so the status quo has been maintained.

In Cleveland, the neighbourhoods on the outskirts of the city centre are often characterised as being quite successful and civically engaged. The closer to the city's core, the more intense the poverty, and therefore less civic engagement, less voting participation and less empowered to affect change. There is a big challenge in developing an organising model to engage with people in a thoughtful way so that they truly feel valued. The Mayor's motto "the rising tide must lift all boats" reflects the notion that social justice is vital for a city to thrive.

So far, there is still a lot of discontentment in Cleveland because the main investments are all being carried out downtown. These investments are viewed as necessary, as Cleveland's Central Business District is not only a job node but also one of the most populated neighbourhoods in the country. During the financial crisis, however, many businesses moved from downtown to the suburbs and accessibility was found to be a huge problem for a large number of inner-city inhabitants who did not have their own mode of transport due to the lack of proper infrastructure and affordable transportation.

Although the healthcare industry has been crucial for the economic growth and the investment and development of particular areas of the city, the growth of this sector often seems to be outwardly focused. Even though there are still many people within Cleveland that do not have access to basic healthcare services and products, some companies' primary investment focus is on the international market.

Change and Development Process

According to a representative at the U.S. Department of Housing and Urban Development, as manufacturing was such an important aspect of the city's identity, it had to redefine itself post the crisis. Being a city extremely connected to sports, Cleveland had a rebirth through the construction of the baseball stadium in the 1990s, and the community, civic leaders, the philanthropic community and the city came together for the development of this project. This had not been done before and marked a new era of redevelopment in the city. From there, redevelopments within abandoned industrial areas of the city were initiated, and through tax credits provided by the State, people were incentivised to move in and restart businesses. As a representative at Global Cleveland explained, the real estate market crisis was terrible for the city but at the same time freed up many areas for new investments. This also allowed the revitalisation of some areas by implementing and constructing new businesses in areas with previously owned vacant lots. It was made clear by the representative at Global Cleveland that "if a community is going to thrive you can't just keep on doing

business as usual".

The Department of Economic Development saw a great economic opportunity in the Health Tech Corridor, the area between Downtown and the University circle. While the land around the University circle became the most expensive in the city with no vacant land available, and Downtown saw major conversions of its buildings with residences increasing by 75 per cent, yet the area between them was characterised by abandoned land, parking lots, brownfields and vacant buildings. As a response to many companies' stated motives for leaving the city, the area is now being reconverted to provide land and properties that will fit the companies' criteria. Overall, the Department of Economic Development has built or redeveloped 500,000 square feet in the Health Tech Corridor and is now in the process of building three more building and redeveloping a fourth. Part of the strategy is to ensure that the development captures the businesses that are spinning out of the organisations in the Health Tech Corridor, which have proven outstanding to diversify the city's economy. The city has invested around $87 million into this project, which has provided almost 3,000 new jobs.

To increase innovation and entrepreneurship in Cleveland and to capture new business, City Council has started investing in new areas not previously explored, such as a cluster of co-working spaces and maker-spaces. This new start-up innovation ecosystem is moving the city up in the rankings for start-ups and innovation places. Nonetheless, according to a representative from

"Every single day, working with companies and people to ensure that whether it is ten or twenty times that we fall down, we get back up and we continue working for success"

- Joe Cimperman, CEO, Global Cleveland

Cleveland State University, "even a solution creates the next problem."

Partners And Community

Foundations and philanthropic institutions are a corner stone of community development within the United States. The Cleveland Foundation is the nation's first and oldest community-found foundation and it plays a huge role in Cleveland. Its funding comes from 400 different families who have invested into the foundation throughout the years; investments have only been made within the Greater Cleveland community through specific programs, supporting non-profits and government initiatives. Cleveland now has a new breed of philanthropists, such as young local entrepreneurs from new beer producing businesses that have strong ties with the community, re-investing in their community and in the city.

Neighbourhoods that are now successful in Cleveland have failed many times before; the common denominator identified with their success is the community

development organisations funded by the Federal Government or the city that engage the community to feel a sense of ownership for their section of the city.

Partnerships between the public sector and philanthropic foundations have also been successful in penetrating poorer neighbourhoods and communities. "Jump Start's Core City" is a program developed between the Cleveland Foundation and the Department of Economic Development of the City of Cleveland, to provide guidance and opportunity to underprivileged people with good business ideas but no access to loans or money to implement their ideas.

Not-for-profits, like other partnerships at different levels that involve various stakeholders, have been critical to Cleveland's transformation. Vibrant NEO is a consortium of community stakeholders from 12 counties in the North East Ohio region coming together to work on, among other issues, improving transportation to increase access to jobs. Cleveland Leadership Centre is a not-for-profit which brings together the civic, education and corporate communities to encourage civic engagement and leadership. Bio Enterprise, an economic development non-profit organisation, offers business development and consulting services and facilitates networking between companies, mainly bio-enterprises, while marketing Cleveland as a destination for bio-medical development.

Cleveland Clinic

Cleveland Clinic has helped the city to redefine itself as a biomedical community. It is a world-renowned hospital with international facilities, and the largest employer in Cleveland besides the Federal Government. According to representatives at the Cleveland Clinic, to ensure that the surrounding 'environment' in the Health-Tech corridor is attractive, the Clinic is trying to capture retail into the area to support organic economic growth. Cleveland Clinic considers itself an anchor company for the city and believes that having people from the community work in the Clinic builds its credibility. The Cleveland Clinic also considers publicising the city as one of its responsibilities and does so by taking advantage of their large alumni network and establishing robust programs with economic development agencies such as Scottish Enterprise.

Universities

Cleveland has two Universities and both play different roles in economic and community development. Cleveland State University has almost 17,000 students and is more focused on local and regional students, while Case Western University has nearly 12,000 students and is more focused on high-end basic research, which helps to build Cleveland's reputation. Case Western also has more international programs with many students studying life sciences and engineering. As a representative at Cleveland

Kirsten Kilpatrick, Alison McLeod, Tracey Nichols, Director of Economic Development, City of Cleveland and Rebecca Casson meet in Cleveland to discuss economic development.

State University mentioned: "Case Western produces the ideas to birth companies, while Cleveland State trains workers for the new economy firms".

Key Learnings

- Healthcare is the new big export in the United States economy and Cleveland has redefined itself as a strong biomedical centre with globally recognised cardiac and healthcare clusters, focusing strongly on Education and Medicine.
- The support given to new entrepreneurships and start-ups and the investment made in co-working spaces and maker-spaces has led to an increased millennial population in the city centre, while the investments made in the Health-Tech Corridor have been decisive for IBM to stay in Cleveland.
- Links between government, knowledge and private sectors have been particularly important in driving economic development beyond traditional manufacturing.

For consideration

For Geelong to move forward strong leadership and unity to affect change can be vital.

- Interviewees in Cleveland stated that there is a need to end path-dependency and break the habit of letting the past define the city's future. Part of Cleveland's recent growth was possible because individuals and organisations worked together as a team, willingly took some risks to disrupt the "business as usual" praxis, so that the community could thrive.

Sports can bring the community together and boost the development of a city. Geelong should try to leverage its sporting culture.

- In Cleveland, all levels of community came together for the redevelopment of one sport facility, which marked the beginning of a new transformation era. Cleveland inhabitants consider themselves a sports city and that is part of their collective identity.

While the focus is strongly on Education and Medicine, Geelong's "Social Insurance" (SI) is a natural advantage that presents an opportunity for the future.

- Cleveland, and other cities, do not have the "Social Insurance" (SI) cluster that Geelong has. This SI cluster could partner with existing Education and Medicine (Eds & Meds) research clusters to form a unique EMSI cluster. There is further potential to expand Geelong's status as a global hub for social insurance with existing public and private insurers, leveraging the existing organisations that have established in Geelong.

Geelong could learn more from analysing the city of Hamilton in Ontario, Canada.

- According to a representative at Cleveland State University, Hamilton is a city in the orbit of Toronto that used to have a big steel economy but now, with the price pressure of Toronto it is becoming a bedroom community. While it is a great opportunity for the city, it is also dealing with the loss of identity.

FirstEnergy Stadium, Home of the Cleveland Browns.

Railroad Street at the Strip District, Pittsburgh.

Pittsburgh

Rationale for the visit

Pittsburgh sits at the convergence of two rivers, the Allegheny and the Monongahela, that create a third, the Ohio River in the Commonwealth of Pennsylvania. Part of the Allegheny County, Pittsburgh was initially a Native American settlement which became a trading post and later the stage for several battles, namely the French and Indian War (Tarr 2003). Coal industry started in the mid-1800s and the city developed quickly due to the growth of heavy industry along the riverbanks, which characterised the city for 150 years and earned it the title of "Smoky City" (Jacobs 2000). From 1950s onwards, Pittsburgh's population faced decline; there are currently 305,000 inhabitants in Pittsburgh, less than half than at its peak in the 1940s. Historically a city of industrialists and several inventors behind countless patents and companies, Pittsburgh nowadays has its educational and medical institutions as new economic pillars. Along with a rich cultural scene endorsed by philanthropic organisations, it is attracting leading technology companies like Google to settle in the city.

Context

In the Pennsylvania Commonwealth Constitution, Pittsburgh is called a city of the second class, while Philadelphia is a city of first class and Scranton, for example, is considered a second-class 2A. This hierarchy within the state gives Pittsburgh's Planning Department fewer rights to regulate than Philadelphia. Pittsburgh must obtain enabling legislation from the state while, in many numbers of ways, Philadelphia is able to move forward more independently. Nevertheless, by being a second class city, Pittsburgh is not required to have a comprehensive city plan like other municipalities, though it can choose to have such a plan.

Despite being defined as a second class city within the state, the fact that there are no large cities within a 4.5 hours driving distance gives Pittsburgh a role that other second cities may not have. Pittsburgh was once the fifth most populated city; its population peaked between the 1930s and 1940s to around 670,000, and then started to stagnate. The city's population decline was at the expense of the county's growth, mainly due to the 1950s Federal Highway Act that fostered the construction of several highways, which enabled people to live farther away from the urban core while still working in the city. Additionally, the establishment of the Federal home loan bank at the end of World War II made it easier for people to buy homes and relocate to outside the city's limits through the provision of mortgage financing for veterans.

Pittsburgh's economy was still highly dependent on heavy industry and steel at the beginning of the 1980s. When industry departed in the 1980s, Pittsburgh experienced the worst decade of population loss, with nearly 100,000 people leaving the city within a six year period. Historically, Pittsburgh had very low levels of immigration, only maintaining its population through natural growth; and the city did not have grow sufficiently rapidly to replace that lost population. City leaders recognised the issue and put several initiatives in place to attract people to Pittsburgh. Population loss has now ceased and more people are staying in Pittsburgh, resulting in a diverse mix of people from different incomes residing in the city limits and in some city pockets that are transforming at a very rapid pace. Besides trying to retain the population, the city is welcoming and encouraging young people to work in the industries that Pittsburgh is excelling in, such as medicine, research or robotics, and in the robust arts and cultural scene that has been engrained in the city.

Governance

Currently, the city of Pittsburgh has a population of approximately 300,000, the largest of all 130 municipalities that make up the Allegheny County, which has a total of 1.2 million inhabitants. The Pittsburgh region covers 10 counties, roughly 7,200 square miles and has a population of 2.6 million people.

Pittsburgh follows the strong mayoral model wherein the Mayor works as CEO of the city and is responsible for appointing city department personnel, a decision which must be approved by the City Council. The City Council is composed of nine members working on a district base. Both Mayor and City Council members are directly elected and although they share a law department, they work as separate branches of the city government. The implementation process often requires an agreement between the Mayor and the City Council as policies developed by the Mayor require supporting legislation approved by the City Council. The City Council is also in control of funding; the Council's approval must be sought for policies that require expenditure outside of the budget.

Representatives of not-for-profit organisations stated that currently Pittsburgh has great leadership at a city governance level, which has had an excellent impact in propelling the city. As they have the same political affiliations, the state and city governments now work together. Their shared desire to create a global city with a smart city brand is being bolstered by the governance structure.

Pittsburgh City Council

Pittsburgh's Department of City Planning has been working on developing a comprehensive plan for the city. As representatives of the Department explained, Pittsburgh does not have an impelling situation of extremely rapid growth, the document is more aspirational than a managing tool; its particular focus is on how the city can grow more efficiently while moving into a greener infrastructure model. It is a delicate time in the city's development, and the path chosen for the next five years is critical for the city to grow at a modest and sustainable pace.

Underpinning this plan are several instrumental actions that have been in place, such as the Resilience Plan being developed with the Rockefeller Foundation towards climate change adaptation and the EcoInnovation District plan that aims to provide sustainable development of infrastructure, while enhancing equitable land-use in the neighbourhoods of Uptown and West Oakland. The latter is a fine example of the collaboration model the Department of City Planning often employs to involve partners from governmental, corporate and non-profit sectors. Many mayoral initiatives are often developed through partnerships, such as the Envision Downtown program or the Heinz Endowments funded P4 project, which aimed to establish a new model of urban growth and development focused on the four key themes of People, Planet, Place and Performance. The comprehensive plan for Pittsburgh will also be informed by recommendations from the Affordable Housing Task Force and the Department's recently launched Complete Streets Policy, which focuses on city mobility and transportation.

Through the U.S. Department of Housing and Urban Development (HUD), the Federal Government provides funds for City Council projects that address local level issues that are relevant for the city's development.

HUD's Community Development Block Grant (CDBG) funds are used mainly for community development in predominantly low-income neighbourhoods. HUD also has a loan guarantee program named Section 108 that allows the city to use up to five times its annual allocated fund for CBDG to create projects that can stimulate economic development. The City Council utilised this loan scheme to stimulate growth on the city's south side and help the city develop infrastructure, stimulate development and work with private developers that were not able to support all costs. According to HUD representatives, the City of Pittsburgh receives almost $13 million annually, but due to the city's particular needs, the funding is not entirely devoted to economic development.

In the past 40 years, many developments in Pittsburgh were achieved with support from public financing. The Department of City Planning therefore considers the partnership with the Urban Redevelopment Authority has been critical in enabling the city's development.

Urban Redevelopment Authority

The Urban Redevelopment Authority (URA), one of the first Redevelopment Authorities in the United States, was incorporated in 1946. After almost a decade of population stagnation, it was part of Pittsburgh's recent renaissance. According to an URA representative, the URA was created by the state to work for the city of Pittsburgh but the organisation's staff are not considered to be city employees. URA has 90 staff and in 2014, it had a budget of $138 million. According to a URA representative, the city's contribution is usually around 3 per cent of its total funding.

The Mayor appoints the URA's Board of Directors, which includes five members. Historically, the Board Chair is the Mayor's Chief of Staff or Deputy Mayor, ensuring a direct connection with the city Mayor, and the rest of the Board is composed of a State representative, a city councillor, a union representative and a community representative. The URA was created separately to be shielded from political influences to ensure that long-term projects would not be affected by the 4-year election cycles (of the Mayor). URA's Board members have five-year terms.

URA is the economic development agency, committed to creating jobs, expanding the tax base and improving vitality of businesses and neighbourhoods through working on four key areas. The first key area is land recycling; the URA identifies strategic sites where major projects can be developed and manages land and building acquisition and sale. Future uses of the property or building are limited through a deed restriction; an anti-speculation tool is used to ensure that future use is compatible with community needs and generates the highest return on jobs or residence units. The second key is housing, providing financing for rental or sale, at market rate or for affordable housing. The URA manages larger scale projects and coordinates large federal grants. It also has special mortgage programs and special emergency home repair programs for low-income buyers or property owners. If no private sector or functioning community organisation is committed to developing

housing within a community, the URA can step in as a last resort. The third area of focus is business development; the URA recruits and identifies local opportunities to grow, while partnering with the Allegheny Conference to attract international businesses. The URA's fourth key area is economic development; stimulating the economy mainly through large-scale long-term projects and highly competitive funding sources, such as federal programs, private foundation programs or state programs.

According to a representative of the Allegheny Conference, the Pittsburgh city government uses the URA as a tool to implement its development vision. When the URA acquired The Point, where the Monongahela and the Allegheny rivers join to form the Ohio River, and regeneration began, it was a unique redevelopment, and later became a model for other cities. While a major focus of the URA was to attract new investment, they also have an emphasis on growing local business and encouraging them to 'scale-up'.

City Transformation

Historically, the leadership in Pittsburgh came from the corporate community. In 1945, Richard King Mellon, Henry Hillman, Mayor David Lawrence, and Robert Doherty the President of Carnegie Tech (later Carnegie Mellon) charted the course of Pittsburgh history. Through them the private sector, Republicans, Democrats and research institutions came together to set a strategy for Pittsburgh that became known as Pittsburgh's first Renaissance. Their first action was to lobby for three important pieces of legislation pivotal for Pittsburgh's transformation. First was the Clean Air Act, to start addressing the air quality; second was the Clean Water Act, to stop the industrial dumping into the waterways; and the third was the Urban Redevelopment Act.

During the same period, these four individuals created a membership-based private sector organisation, the Allegheny Conference on Community Development. This was the start of a public-private partnership that, together with academia, helps steer policy and advocates for initiatives. Today, this collaboration model still underpins most of the development initiatives carried out in Pittsburgh.

The Allegheny Conference

Traditionally, the Board of Directors of the Allegheny Conference on Community Development (Allegheny Conference) are the CEOs of the largest corporations, universities and philanthropic foundations in the region. The size of the Board has varied and now has 55 members. As stated by a representative of the Allegheny Conference, it is important that the members of the Board are the top-ranking officials of the companies they are representing.

The ten-county region is the focus of the Allegheny Conference, which operates through three divisions: advocacy with government through the Greater Pittsburgh Chamber of Commerce; economic development by helping companies expand and marketing the region nationally and globally through The Pittsburgh Regional Alliance; and research and development through the Pennsylvania Economy League of Greater Pittsburgh.

The Allegheny Conference is the result of a series of corporate mergers, in which companies are considered wholly one subsidiary, each with their own independent Board, particularly the Greater Pittsburgh Chamber of Commerce that has its own fiduciary Board. All companies report through the corporate structure of the Allegheny Conference. As stated by a representative of the Allegheny Conference, the merger is believed to be one of the real strengths the companies had over the last 25 years.
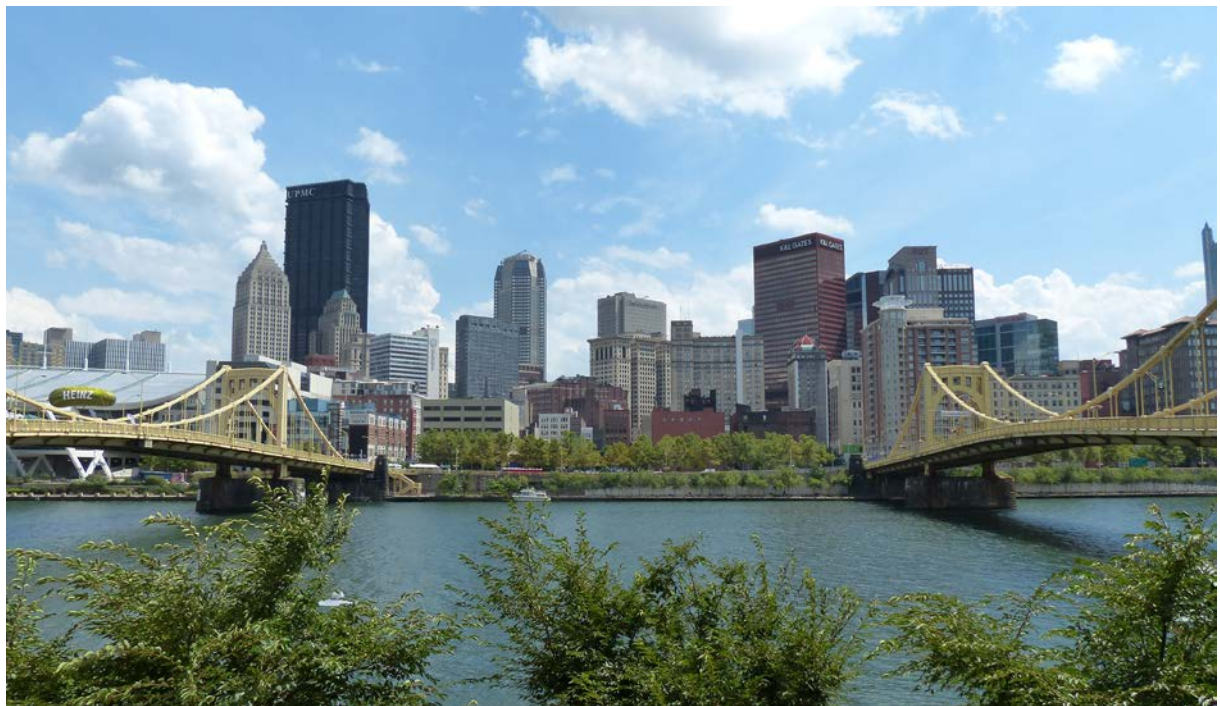
View of downtown Pittsburgh, Rachel Carson Bridge and Andy Warhol Bridge over the Allegheny River.

The Allegheny Conference's advocacy work is handled through a number of committees. The 250 to 270 paying members that do not sit on the Board form the Regional Investors Council. Regional investors (representatives for most companies) sit on a different number of subject-specific committees focused on building consensus around issues of interest and making recommendations to the Allegheny Conference Executive Committee, which is a 15-member sub-committee of the Conference Board and the steering committee for the entire organisation. The Chamber of Commerce works largely on shaping strategy and tactics for priorities endorsed by the Allegheny Conference Board; the Chamber can also make recommendations to the agenda.

In addition to the corporate Boards, the Allegheny Conference has three subject-matter committees: (1) economy and community, (2) infrastructure and (3) the workforce. An Allegheny Conference Board member leads subject-matter committees where there is company cross-representation, but not individual cross-representation.

The Allegheny Conference is funded by a combination of corporate organisational events and foundation funding, including some operational and project-specific funds. When the merger happened in the early 2000s, the Allegheny Conference had a $14 million budget per year and 80 staff, now it has a $8.5 million budget with about 50 full-time workers.

> "The 21st Century is going to be the century of the city"
>
> - Maxwell King, President and Chief Executive Officer, Pittsburgh Foundation

The City Council is not part of the Allegheny Conference, but they work as partners in a meaningful public-private collaboration. It is important to the Allegheny Conference to have a frank independent forum for discussion. The Allegheny Conference also collaborates with the Port Authority to carry out internal reforms and secure additional funding for transportation.

Change and Development Process

The corporate community led Pittsburgh's Renaissance periods. The first Renaissance period initiated post World War II focused heavily on environmental issues, particularly air and water quality and the physical environment. The second Renaissance, which started in the mid-1970s, was more focused on the revitalisation of city centre buildings and the changing economy (Muller 2006). The project-based urban regeneration initiated in the late 1990s, shortly nicknamed Renaissance III (Power, Plöger & Winkler 2010), has been led by the non-profits, primarily the universities, hospitals (Eds and Meds) and the foundations.

After the economic collapse in the late 1980s, Pittsburgh's unemployment was around 25 per cent for a number of years; one of the key ingredients in Pittsburgh's turnaround was culture. Pittsburgh's foundations, the Heinz Endowments, partnered with several other foundations to build the Cultural Trust, now considered one of the most important entities in the city. For over 20 years, the foundations invested in culture, which resulted in the rise of the Cultural District that replaced a part of the city that was run-down, characterised by homelessness and housed several decaying movie theatres. Part of this investment was the retrofitting of movie theatres, the Symphony Hall and the Benedum Centre for the Performing Arts, along with the creation of residences in some of the empty buildings for young people, particularly artists. In addition, cultural organisations also received funding.

As described by a representative at the Pittsburgh Foundation, this was a critical element of the city's rebirth. Compared to other mid-sized cities in the United States, Pittsburgh is now viewed as one of the most artistic and culturally rich, an extremely attractive factor for young people and new businesses. In recent years, Pittsburgh has been the destination for a number of artists moving from Brooklyn after being priced out from neighbourhoods like Soho or Chelsea in South Manhattan, New York. With the increased cost of living in Brooklyn, many artists are now drawn to Pittsburgh's art, culture, history, architecture, and rivers, as well as its cheaper cost of living. Pittsburgh is also known for its newly established, internationally recognised, institutions such as the Andy Warhol Museum, the Mattress Factory and City of Asylum.

The redevelopment of the city's waterfront was another key driver for Pittsburgh's reinvention. Pittsburgh has almost 58 km of waterfront within the city limits. Back in 1999, the riverbanks housed empty warehouses and the remnants of steel mills, with almost no access to the waterfront. As a first step, community members created the River Life Taskforce to plan the transformation of the waterfront from industrial to recreational. Presently, all three rivers have walkways and bike trails, restaurants and events held on bridges. The River Life Taskforce and the development of the waterfront were supported by both industry and the state, with the latter funding $30 million to help build the walkways and the Convention Centre. The Convention Centre and two stadiums located in the city centre are owned and operated by the Sports and Exhibition Authority, a municipal authority. Sport has been an economic driver for the city as well as the region. The city's three major sports teams are strongly connected to the city and serve as a marketing tool to attract people and companies to the city.

Economic and Social Challenges

According to the URA, over 100,000 people go to Pittsburgh for work while living in the surrounding counties. This creates taxation issues, as Pittsburgh does not extract wage taxes like other cities in the United States due to state limitations. Many cities have a 3 to 4 per cent wage tax, but in Pittsburgh, taxes can only be collected from city residents, which means the people living within city limits carry many of the infrastructure costs for a region of more than two million people. The city tries to increase its revenue by implementing one of the highest parking taxes in the country. Land tax is another revenue stream for the city; however, much of

the land is tax exempt, particularly for universities and the hospital. As these entities grow and acquire more land, these parcels are taken out of taxation. Currently, 40 per cent of land in the city is tax exempt, creating a strain on the city's finances.

Another concern in Pittsburgh is the very stagnant population. There are concerns that with low birth rates, limited international immigration and a generation of baby boomers[1] that will mostly retire in the next 10 years, there will not be enough people to fill jobs and maintain the current size of the economy. According to some interviewees, there will be a gap of around 80,000 manufacturing jobs over the next decade, signifying that the real challenge for the future is to find an extra 80,000 more workers to sustain Pittsburgh's economy. However, not all interviewees have reached this conclusion. Some believe that most of these jobs are outside the city limits and the city does not have a gap in filling the main skill sets within the city, that is medical, research, robotics and new technologies. For these interviewees, they see the challenge for Pittsburgh to be how to attract young professionals that are starting a family to stay in the city and not move to the suburbs in the surrounding counties.

Pittsburgh is trying to attract more people to the city by providing diverse housing opportunities within the city limits. However, affordable housing is becoming an issue in some Pittsburgh neighbourhoods. People with higher incomes are rapidly acquiring affordable houses and, should this lead to gentrification, it will be difficult for many people to remain in their neighbourhoods.

Partners And Community

Pittsburgh has been fortunate to have a number of charitable foundations, four of which have over a billion dollars each in funds, which have fuelled much of the city's growth. The foundations' work has ensured that the creative arts are engrained in the city. Early examples of philanthropy came from industrialists like Andrew Carnegie and his development of the library

system in Pittsburgh, and from the Heinz family whose predominant role in arts and culture still prevails through their foundation. Fortunately, the civic collaboration model initiated at the end of World War II has continued throughout time by public-private partnerships, historic educational institutions and community-led initiatives.

> *"Diversity and inclusion will drive the market place. In order for our economy to keep working, everyone (no matter the ethnicity) has to be employed, looked after and considered"*
>
> *- Dale McNutt, StartUptown*

Pittsburgh Downtown Partnership and Envision Downtown

Envision Downtown is an organisation initiated through the Mayor's Office and housed by the Pittsburgh Downtown Partnership, which is the Business Improvement District (BID) for the Central Business District, an area of 100 blocks with more than 4,000 businesses and 350 property owners within the Golden Triangle area of Pittsburgh. The businesses that choose to become members of the Pittsburgh Downtown Partnership pay fees to provide services that directly benefit the city's downtown, such as cleaning and safety, marketing, housing, and transportation initiatives. The BID also holds events and economic development activities, helping businesses locate downtown, providing consultation and working as intermediaries or facilitators between members and the government.

The Pittsburgh Downtown Partnership is funded by the BID which is in turn funded by its members. Certain projects can receive specific state or federal funding, depending on the project's characteristics, such as the state funded transportation section of BID, the Transport Management Agency. For some events, the Partnership receives funding and for other specific projects, foundations may grant funding.

The Point, Pittsburgh – through the eyes of Seneca leader Guyasuta and George Washington.

Envision Downtown has a 23-member advisory committee composed of people from the business community in Pittsburgh, the major institutions such as Carnegie Mellon University, the University of Pittsburgh and Point State Park, as well as people from specific advocacy groups interested in issues such as accessibility. The Mayor and CEO of Pittsburgh Downtown Partnership sit on the advisory committee, alongside other county representatives. Most of Envision Downtown's funding comes from foundations, with a small part from federal and state funding. Through working with Envision Downtown, it is possible to bypass the issues foundations have previously encountered when funding the City Council to develop plans, and projects can work more swiftly and efficiently.

As Pittsburgh competes with other mid-western cities for talent and business, Envision Downtown is able to analyse the liveability and mobility of the city to understand what younger working populations want to see in a city so that Pittsburgh can attract them. Envision Downtown studies different forms of mobility through its data research and collection department. It has been working on transit amenity improvements, such as upgrading bus stops, ameliorating sidewalks and developing a dynamic parking system. As the city has difficulties in sustaining retail downtown, Envision Downtown is also studying a new model of pop-up retail, co-working and co-selling spaces on vacant land, to bring more local retailers, who have been successful online, to the city centre.

Universities

With almost 40 institutions within the region, universities are one of Pittsburgh's biggest assets. After the collapse of industry, it was necessary to focus on what Pittsburgh could leverage to sustain an economic transformation and two of the most important and internationally renowned universities within the city took a conscious decision to work towards this transformation. The University of Pittsburgh decided to build on their world-class strengths in medical research and foster its growth. Today, the University of Pittsburgh Medical Centre is one of the largest employers in the region. Carnegie Mellon University, the result of the merger between the Carnegie Institute of Technology and the Mellon Institute of Industrial Research, both founded by two of the most prominent philanthropists of Pittsburgh, made an effort to become a world class leader in computer and engineering, acting as the seed for technology advancement in the region. It is credit to both the universities that life sciences and technology businesses have been growing in the region, and companies like Uber, Google and Apple have been attracted to Pittsburgh. Having a number of Universities in Pittsburgh that have leveraged their range of specialisations has acted as both an attractor and retainer of talent, which has been beneficial to the City.

Uptown Partners and Startuptown

Uptown Partners is a community-based organisation that started working in the Uptown neighbourhood

The Duquesne Incline – Pittsburgh's historical lift.

eight years ago with the aim of maintaining an equitable neighbourhood by reclaiming vacant properties and fostering new residential redevelopment, while dealing with speculation and gentrification. As most of the neighbourhood's community is low-income, Uptown Partners aims to ensure that development does not happen at the expense of the community. This is particularly relevant, because the Uptown neighbourhood sits between two nodes of sustained development: the downtown Pittsburgh and the Oakland neighbourhood where most universities are based.

Startuptown is a non-profit, community-based co-working campus focused on utilising entrepreneurship as a tool to develop community. When it started eight years ago, it was Pittsburgh's first co-working space, and now it has two separate sites. Taking advantage of being in a Pennsylvania key stone innovation zone, which are areas established by the state where development and technology would be promoted, fostered and nurtured, Startuptown benefited from state tax credits. Newly created companies that commit to staying in the area receive grants and are entitled to receive free interns paid for by a state program.

Both organisations have been essential to the development of the EcoInnovation District in the Uptown neighbourhood, and are both centred on intense community engagement, urban equity, wealth building, sustainability, smart growth, transportation, historic preservation and local food and health systems. It is their belief that diversity and inclusion will drive the market place and that co-working spaces, supported by grassroots initiatives and universities, will be essential in a country wherein previsions point to 50 per cent of the population being freelance by 2020.

Key Learnings

- Unlike other North American cities, Pittsburgh has a sustained and continuing history of civic collaboration driven by a robust philanthropic community and has invested strongly in the city's development and with great focus on the cultural sector, repositioning Pittsburgh as one of the richest mid-size cities for arts and culture in the United States.

- In 1944, the Allegheny Conference on Community Development pioneered a civic-interested business leadership model in Pittsburgh, that goes beyond networking between the business community, by consolidating strong private sector leadership with commitment from public sector partners to identify and leverage the city's world-class assets, remains crucial in Pittsburgh's economic development.

- Through the introduction of the Clean Air and Clean Water Acts, Pittsburgh has leveraged environmental enhancements and used them as an economic development tool for the city including for place making. The redevelopment of Pittsburgh's waterfront has enabled a closer connection between the city and its rivers and consequent improvement of the city's green spaces, stimulating the development of infrastructure focused on outdoor activities that attract younger 'millennial' population. This connection between 'blue' (water) and 'green' dimensions of the environment has been a feature of Pittsburgh's transformation.

For consideration

Vacant large industrial plots of land and infrastructure that is already in place from previous facilities can be an advantage for attracting new companies/businesses to Geelong.

- In June of 2016, Shell announced their intention to build an ethane cracker, 30 miles Northwest of Pittsburgh in Manaca. The cracker will take advantage of a former primary metals facility that was decommissioned and cleaned up. Existing infrastructure and highway infrastructure together with the port and rail facilities, combined with other incentives provided by the state to upgrade, contributed to Shell's decision.

Change through land redevelopment is a solution, but it requires time to attract the desired jobs.

- It took Pittsburgh 10 to 15 years since large industrial plots of land became available for the city to attract the necessary density to create meaningful jobs. This was partly due to the nature of land development and the clearing processes, but also due to the need for environmental remediation and the time consuming process of helping politicians and the community to reach a consensus.

1.   Baby boomer is a term referring to a person who was born between 1946 and 1964, during the baby boom after World War II

Committee for Geelong's Second City Research team meets with Port of Virginia representatives at the Port of Richmond.

Richmond

Rationale for the visit

Richmond is the capital of the Commonwealth of Virginia, located on the shores of James River. It has a population of about 220,000 inhabitants, making it the third most populous city of the State. Richmond's flour, iron and tobacco industries bloomed during the mid-19th Century. During the 20th Century, the city growth continued through the annexation of counties (City of Richmond 2000), which contributed to the social unrest induced by racial segregation policies that marked the region. The 1950s marked the beginning of a period of business and population relocation from the city to the surrounding suburbs. In the 1980s, tobacco manufacturing ceased; it was not until the 1990s, that the Richmond metropolitan area started to grow again with a rise in businesses, jobs and inhabitants (Howard 2007). Richmond is now a vibrant city, with a highly regarded food scene, art community and outdoor recreation that is attracting younger tertiary educated workers who are searching for a sense of connectivity and community.

Context

Richmond is a State capital, so its importance is not directly related to its size. A representative at Virginia Commonwealth University (VCU) stated that the Commonwealth of Virginia is much the same; while it is much smaller than California or New York, its history and proximity to Washington has meant that its political influence is disproportionate to its size. From that perspective, Richmond is very important nationally, not just locally and statewide.

The segregation movement and racial diversity challenges that marked Richmond's history led many white business owners to move out to the counties. As a result of this shift, the city lost much of its tax base. This contributed to the development of poverty pockets within the city, as the city remains the place where people can access more services and transport. Richmond was considered the capital of tobacco manufacturing, but as the industry pulled out and tobacco production ceased in 1981 (Bluestone 2012), the tax base was further undermined and the city struggled economically. Between the 1960s and 2000s, the city's population dropped from around 250,000 to 180,000.

Richmond now has a population of close to 220,000 and growing. Attracted by its old buildings and warehouses, a large number of young people have been moving to the city and contributing to the redevelopment of the city's core. For the younger generation, Richmond's smaller size means that there are more opportunities to participate. According to one interviewee, there is more

willingness in developing events and use of public spaces in the city when compared to larger cities. A bicycle culture is growing and cultural and recreational events are happening quite often. The restaurant culture also serves as a magnet for new residents and tourists.

Governance

The Commonwealth of Virginia is characterised by the unusual fact that cities are not part of counties. Unlike in other areas of the United States, the city of Richmond is detached from its surrounding counties. Virginia's cities are also allowed to grow through the annexation of other counties, and therefore growth requires an increase in density within the city, often through redevelopment.

The local government in Richmond follows the Council-Mayor model, in which the Mayor is directly elected to oversee a Chief Administrative Officer for the delivery of daily government operations, and the Richmond City Council acts as the governing body of the city government. The City Council is composed of nine members, each elected from the nine individual Richmond Voting Districts (Richmond City Council n.d.). Since 1948, Richmond's City Council system had been based on a city manager, whom the City Council members would elect. In 2003, the strong mayoral model was approved by a referendum, so it is relatively new to Richmond. A key individual for this change was L. Douglas Wilder, the first African-American to be elected governor in the

United States, after being the first African-American state senator in Virginia since Reconstruction and the first African-American lieutenant governor (Jeffries 2002). After his historic election as governor of Virginia in 1989, L. Douglas Wilder became the first directly elected Mayor of Richmond since the 1940s (Gurwitt 2005).

A representative at VCU indicated that the liability of this model of governance depends heavily on the quality of the elected leader. While the risks of the old council model were low, its upsides were low too. Similar to what was mentioned by some interviewees in Cleveland, a Mayor with vision, ability and integrity could make a great difference, because he/she holds the most responsibility in overseeing and leading the city's activities.

The current Mayor, Dwight C. Jones, has launched an Office of Community Well Being focused on addressing housing, transportation and workforce issues. One of its components is the Centre for Workforce Initiative, which the Council works on directly with people from the communities to understand their needs. The US Department of Housing and Urban Development also supports some of Richmond City Council's initiatives for housing and economic development.

The City Council's office is quite small and not well funded, so they work closely with the Greater Richmond Partnership and with the four other counties to attract investors. At the same time, the local governments of the City of Richmond and of the four counties are competitors, as it is their individual responsibility to sign deals with new investors. The City Council also works with the Virginia Economic Development Partnership. According to a City Council representative, the main difference between the two economic development agencies is that the Virginia Economic Development Partnership offers incentives such as the Governor's Opportunity Development Fund, in which the city has to match any grant from the State given by the Virginia Economic Development Partnership.

Virginia Economic Development Partnership

The Virginia Economic Development Partnership (VEDP) is the state organisation responsible for marketing and recruiting businesses to settle in the city of Richmond and the wider Commonwealth of Virginia. According to a Board member of VEDP, the VEDP works mainly on infrastructure issues, of which tax policy, cheap labour, unions, roads and airports, for example, have been big decision points in the past. While these are still important, the top priority now is talent. Cities grow to provide good opportunities and a lack of opportunities lead to slow economic growth and social unrest. In some interviewees' opinions, VEDP work is focused mainly on Virginia's rural areas.

Greater Richmond Partnership

The Greater Richmond Partnership (GRP) is an economic development agency, formed as a regional group of which the city of Richmond is one of its localities. This region also encompasses three other nearby counties,

Hanover, Henrico and Chesterfield, in total covering an area of approximately one million people. According to a representative at GRP, more economic development is being driven by the regions than by the states. The point was made by the GRP representative that working with a larger group of member organisations can translate into losing scope and scale so, when a city is partnering with others, it is crucial to have similar interests. That is why, even though the metro region includes a total of 17 jurisdictions with 1.3 million inhabitants, the GRP only represents the four localities that account for 77 per cent of the metro region's population but share the same interests. While members of the GRP are the four local governments, the Board is composed of half public sector, half private sector, all with equal voting rights.

GRP's vision is to create economic opportunities and increase the region's tax base. It aims to achieve this through marketing the region, generating domestic and international business attraction, and supporting the local governments' business retention efforts. The cost of these three services are shared between the City of Richmond and its three other county partners; for every dollar that the city invests, it is matched by $7 from the other partners, which is immensely helpful to their overall economic development. The emphasis of GRP is to facilitate businesses to be developed by the local governments. While its work is limited within trading industries, over the last six years, it also carried out the regional export initiative (before transferred to the State), through the Global Cities Initiative, with the support of J.P. Morgan Chase.

City Transformation

The City Council offers partial exemption from real estate taxes through its Tax Abatement program. If improvements are carried out on old properties acquired in the city centre within two years of purchase, and reassessment results in an increase in market value, the increased market value can be credits for up to ten years, only after this period would owners have to pay full taxes. The Tax Abatement and Rehabilitation Tax Credit programs are huge incentives for young adults. Young people seem to be attracted by the old warehouses and buildings in the city centre, so they are impelling a lot of the redevelopment that is been happening in the city. In the last two years, more building permits have been issued in the city than in the last two decades. This adds to the Commonwealth of Virginia's specific "millennial attraction and retention strategy".

The City Council is now in the process of developing their new masterplan. It has been 15 years since the last was developed. Since Richmond has been growing so fast, the City Council felt the need to document its aims for the future, rather than just having specific plans for certain parts of the city as they have been doing in recent years.

The Port

The Port of Richmond, located south of downtown on the James River, is owned by the city of Richmond and long untapped. A few years ago, it was perceived that the port

facility provided a great opportunity for the Virginia Port Authority to relieve a lot of the congestion in the city due to truck traffic around the Norfolk and Hampton Roads region. In February of 2016, the City Council signed a long lease contract of 40 years with the Port of Virginia, giving it ownership of the Marine terminal. According to representatives for the Port of Virginia, this has been vital for starting investments in the port itself, such as infrastructure investments and the dredging of the river channel.

The location of the port, close to main interstate roads, means it is a well positioned site for distribution centres that attract many clients. The location allows the centres to expand their captive market to new potential clients located in the immediate vicinity. Following the example of the Virginia Inland Port, which became its own economic engine that attracted 39 companies to the area, the Port of Richmond is trying to establish the Richmond model through Public Private Partnerships that can help develop infrastructure and expand and attract businesses.

The Port of Richmond used to be an ocean port, due to changes in vessels dimensions and depth restrictions, however, there are several challenges in achieving such a model again. So far the barge model has been quite successful and the port has been able to grow its 'bill of lading' with ten new ship lines. The barges are loaded on Hampton Roads and after a 12-hour transit through the night, they reach the Port of Richmond. As stated by a member of the Virginia Port Authority Board, for every barge brought up the river, 120 trucks are taken off the road. The reliance on the barge service was key to attract the German supermarket chain Lidl to build its US headquarters and distribution centre in Virginia.

Within the State, there are 374,000 direct and indirect port-related jobs. Its development will most certainly contribute to the growth of the region in terms of light manufacturing, advanced manufacturing and distribution centres as a result of the ability to transport products. This is a great opportunity for the region, particularly for the southern part of the city where the port is located and where many impoverished areas exist, to raise the next generation of workers for the port. The lease amount that the Port of Virginia has to pay to the City Council will lower according to the job placements that the port is able to develop 'outside the gates'.

Economic and Social Challenges

According to a representative from the Greater Richmond Chamber of Commerce, the tax structure within the State represents a great hurdle for the city to capture revenue in order to push a vision for the whole region. Being a capital city, Richmond does not collect taxes from the State Government entities that are based in the city. Additionally, Virginia Commonwealth University (VCU) is one of the biggest property owners in the city and does not pay taxes. Property taxes are not able to support residential development by themselves, given that the jurisdiction relies on tax as its source of income, commercial and retail taxes are necessary to support the development, creating an extremely competitive environment. Also, the city struggles more than the surrounding counties due to the lack of green field spaces for development projects.

Another challenge for Richmond is the lack of a good quality public transit system. The city still has the typical old bus system that characterised several American cities,
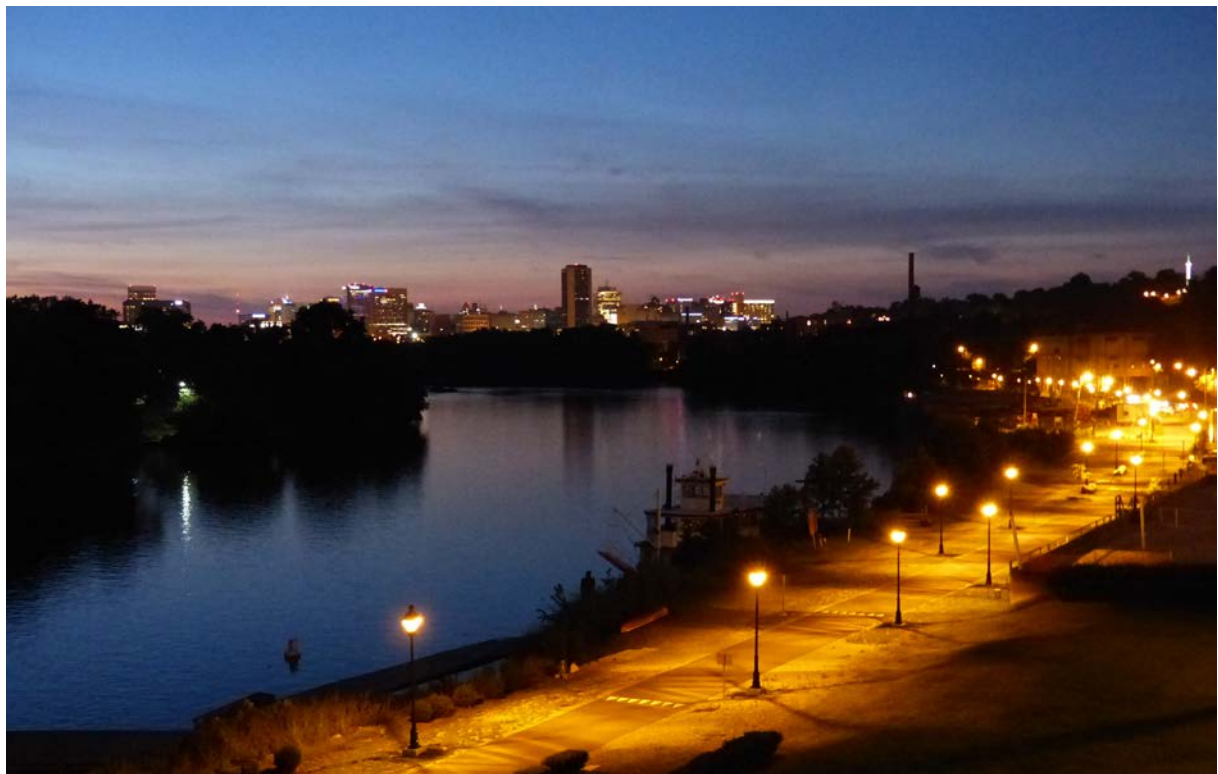
Virginia Capital Trail – a dedicated pedestrian and bicycle trail along James River.

but while most cities eventually moved to a system that is designed to support every inhabitant, Richmond's is still only suited to disadvantaged people that cannot afford cars. Young people living downtown whilst working in new business parks situated just outside the city are having to reverse commute out to the suburbs; it would be preferable to have a modern bus rapid transit or light rail system as an option. This demand might drive a change in the city's transport system.

According to a representative of Richmond City Council, the poverty rate around the city is around 26 per cent and is concentrated in certain neighbourhoods. One of the biggest initiatives of the council is to de-concentrate poverty. Initially the City Council had tried to move people of mixed income, races and jobs into the same area, but the project was met with a lot of scepticism. Currently, the City Council has six public housing estates, each with about 500 units, where they are trying to relocate the people to.

> " The more you highlight and talk about the positive things (of the city) the more people start to come to accept it"
>
> - Kim Scheeler, Chief Executive Officer, Greater Richmond Chamber of Commerce

Change and Development Process

In 2010, a group called Venture Richmond worked to create the RVA [Richmond, Virginia] logo. The creators of the RVA logo insisted on making it accessible to everyone through their website. People and companies wishing to use it could use the 'hollowed' logo to brand their organisation. Instead of imposing a brand, this stirred up a grassroots engagement that drove the acceptance and embracement of the RVA logo by many people around the city. The RVA branding in Richmond seems to have replaced a branding gap within a city that does not have a professional sports team, like Cleveland or Pittsburgh. It is now common to see RVA merchandising, such as bumper stickers, T-shirts and caps, often among young people. The logo became the brand for the region and, since it started, has taken the word 'Richmond' out of the name of many organisations. For example, the Chamber of Commerce used to be known as the Greater Richmond Chamber and is now ChamberRVA. The name change among major organisations also translates to the city's collective shift.

The evolution of the RVA branding is indicative of the city's growth. Richmond is becoming a fashionable place rooted in many grassroots initiatives. The restaurant scene is also playing an important role, with many more local, interesting and unique restaurants emerging in the city instead of chains. This has caught the attention of travel writers who have marked Richmond on the map as a destination for food afficionados.

Committee for Geelong research team members meet a representative from the Governor's Mansion, Richmond, Virginia.

Building of the Institute for Contemporary Art is underway.

Old tobacco warehouses have been converted to condominiums and lofts, attracting young people to move downtown. More retail and commercial spaces are being developed downtown to increase the city tax base and increase the city's revenue.

Partners And Community

In Richmond, many partners are committed to boosting the city's development and attracting a younger generation to the city. The City Council has programs for business attraction and retention and the Greater Richmond Partnership has a program to promote the relocation of people into the region. ChamberRVA, the Virginia Commonwealth University and the Virginia Community Colleges System are all part of this growth movement.

Chamber of Commerce

Richmond's Chamber of Commerce, ChamberRVA, is a membership organisation focused on workforce development and working with existing businesses in Richmond. According to a representative of ChamberRVA, this organization is not focused on networking but on helping businesses grow and develop. To this end, ChamberRVA does extensive advocacy work, works with the state, city and county governments and supports the GRP and the VEDP. According to a representative of ChamberRVA, the organisation worked closely with the Planning District Commission to ensure the development of the Richmond Marine Terminal.

"Where I see the best work being done, I see the leaders, particularly business leaders coming together and solving problems"

- Glenn DuBois, Chancellor of the Virginia Community College System

The Chamber also created a task force to work on potential challenges that might arise from the Port's restructuring. It is trying to plan ahead by working on the infrastructure, land use, growth and economic development components to ensure the collaboration of all organisations involved. The Chamber is also trying to anticipate what skills are needed to train people in advance.

The Chamber has several programs for large well-established companies that are concerned about workforce development. They also support start-up companies through a yearly competition that awards prize money and a mentorship program, whereby small companies can obtain advice and support with accounting or marketing. ChamberRVA tries to focus on trendy initiatives in the city in order to attract more young nationals to move to the region. The Chamber has a program called YRichmond that take more than 200 interns every summer into companies in the region and immerse them in the social, cultural and recreational activities in Richmond. The program tries to retain young talents in region, while also creating a 'grassroot buzz' among millennials[1] around the opportunities the city has to offer.

Universities

According to representatives of the Virginia Commonwealth University (VCU), they see themselves as a university not just for the city but also for the whole state, which is also their main supporter. For the nation to develop it is important to focus on smaller cities; Richmond, for example, is critical from an export perspective. In light of this, the University has been researching how smaller cities like Richmond, which is also the state capital and very important historically, politically and institutionally to the nation, can work regionally and attack issues that cross boundaries, such as unemployment and environment, with the support of city and state governments.

The establishment of the Centre for Urban and Regional Analysis (CURA) within the L. Douglas Wilder School of Government and Public Affairs is part of that strategy. CURA's database provides a regional perspective of the major issues within each of the 17 jurisdictions Richmond Metropolitan Statistical Area and their impact. The L. Douglas Wilder School of Government and Public Affairs teaching programs are also quite focused on Richmond's reality, working with students since their early stages of learning to tackle issues that the city faces.

VCU has also been the biggest agent for Richmond's redevelopment downtown. According to a representative from GRP, this has been actively taken by the leadership within the University as a vision for the University. VCU is the largest public university in Virginia and has single-handedly been the largest driving force in the downtown redevelopment, through a block-by-block expansion every year. The Institute for Contemporary Art is one of VCU's most recent and emblematic projects that will contribute to Richmond's cultural scene, while raising its national and international profile.

The University of Virginia (UVA) is a private university. Although located just outside the core, 12-16 km from the centre, the University ensures that its students are part of the city. Its bus system runs late into the evening to ensure that the students are able to enjoy what the city has to offer anytime of the day.

Virginia Community College System

The Virginia Community Colleges System (VCCS) is a network of 23 community colleges in Virginia, created to respond to the needs of workforce training and higher education in Virginia. These colleges are employer-driven and their certifications are developed after a consultation process with more than 1500 companies. In cities like Richmond, job opportunities and skills shortage co-exist, though not across the board. As there is now a large vacuum in the middle-skilled sector, which has become the number one recruitment issue, VCCS is focused on training people for these opportunities. The New Economy Workforce Industry Credentials Grant was

launched this year, designed to ensure that workforce credentials are affordable and accessible for people in Virginia seeking the skills they need to obtain well paid jobs in high-demand fields (VCCS 2016). Most of the 'baby boomers' that were the primary workforce for this sector are retiring, creating high demand for professions like carpenters, plumbers, electricians or auto-mechanics that will support the supply of highly qualified and the undergraduate jobs.

VCCS has been following the trend of online learning, doubling their online courses offer over the last five years, and now has a total of 100,000 online students. Part of VCCS is the J. Sergeant Reynolds Community College that serves half of Richmond's area. In order to match increased demand caused by the restaurant culture in Richmond, the College is in the process of expanding their culinary program.

Key Learnings

- In Richmond, the development strategy, shared by both local government and economic development agencies, has been focused on attracting more skilled young people into the city. Built in this strategy is the sectoral investments, such as in the area of food and arts, that have been essential to the rise of new businesses.

- The expansion of Virginia Commonwealth University is one the biggest drivers for the redevelopment of downtown Richmond, contributing to its cultural scene, particularly with the opening of the Institute for Contemporary Art in 2017 that will give the city global visibility.

For consideration

Geelong should consider developing an effective brand strategy for the city to encourage pride and investment

- The RVA logo has brought people together creating a stronger identity for Richmond. It is being used by businesses and grassroots movements and embraced by the community as a moniker to promote the city.

Geelong could consider providing incentives for the redevelopment or refurbishment of old buildings to stimulate new businesses and attract millennials.

- Richmond has become the cradle of several start-ups and new companies owned by a younger generation that have been helping to create a more vibrant city. Millennials seem particularly attracted to old and historic buildings and the city has leveraged that through tax abatement programs that foster the redevelopment of parts of the city's built environment.

- A multi-dimensional perspective has been taken in Richmond that attempts to address social disadvantage and the accompanying problems of urban governance and administrative structures that limit taxation capabilities of the central metropolitan council.

1.   Millennial is the name given to the generation born between 1982 and 2004.
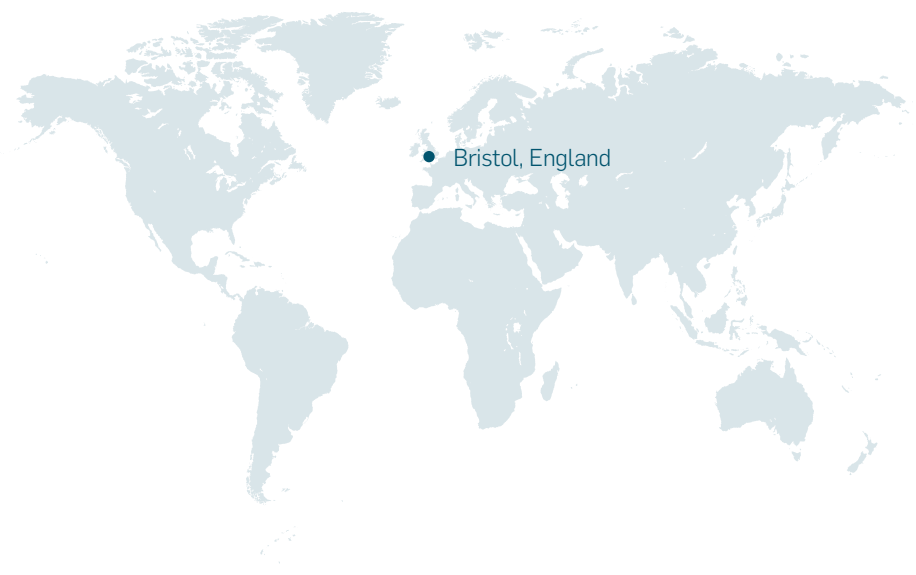
View of James River, from Libby Hill Park, Richmond.

Bristol and Clifton Suspension Bridge

Photo: Kristoffer Trolle

https://www.flickr.com/photos/kristoffer-trolle/21095656222/

Bristol

Rationale for the Visit

Located in South West England with a population of approximately 442,000, Bristol is the 8th largest city in the UK. Innovation in Bristol can be tracked back to the chief engineer of the Great West Railway, Isambard Kingdom Brunel, and in terms of modern history, to the Bristol Airplane Company. Bristol's aircraft industry marked the beginning of their innovation history, which then followed with many advancements in technology and electronics seminal for current well-known companies such as Airbus and Rolls Royce.

Context

As a second city with a diverse economy in the 19th century, Bristol acted as an extremely important enterprise centre in England. The city experienced an economic transition, although without the massive shock that many other large industrial cities' in the north experienced. In recent decades, the aerospace technologies and the IT industries have grown rapidly. The city has also been able to attract and retain entrepreneurs, mainly due to the Universities. Nowadays the city is becoming nationally and internationally known as a digital hub, attracting large innovation companies on account of its highly skilled technology professionals and the city's open mindset towards innovation (Invest Bristol & Bath 2016).

Interviewees consider Bristol to be part of the UK's core cities network, considering it medium sized yet high scoring in terms of productivity. In their opinion, the city has benefited from the diverse economy and from the flows between London and the cities along the southeast corridor, Swindon and Reading. Located close to Cardiff, the city also serves as a gateway to Wales. For some businesses, the distance to London is considered as "nothing", which can have both advantages and disadvantages, but since Bristol is the closest major city to London, they are naturally very connected to the capital.

Governance

In recent years, UK cities were encouraged by central government to shift from the traditional committee-based system of decision making to a system based on an executive. Bristol had a referendum to determine whether the population would prefer to have a mayoral government, which came into effect in 2012. In the last couple of years the city has become more organised and effective in terms of politics, largely due to the hierarchy that comes from having a Mayor and the development of more certainty around the city's aspirations. Before, the city's goals changed frequently due to the political leadership.

The UK government established a system of small-scale voluntary partnerships between businesses and local authorities termed Local Enterprise Partnerships (LEPs) after the abolishment of the Regional Development Agencies in 2012. Bristol is part of the West of England Local Enterprise Partnership, wherein local authorities, businesses, universities and colleges work together to ensure economic growth and jobs for the region. Through the LEP a strategic 5 to 10-year economic plan was developed to set the economic development priorities for the four unity authorities of Bristol; Bath and North East Somerset; North Somerset; and South Gloucestershire, an area of 1.1 million inhabitants.

The region has a structure of enterprise zones and areas that are politically distributed, with every local authority having its own area or zone. The business taxation from these areas is retained in a single fund — the West of England City Deal economic development fund. Mostly, it is a pool of financial resources for projects managed by an investment board made of business leaders from across the region with no political allegiance. The investment board makes decisions on what investments should be financed; all political leaders of the region then sanction these decisions. It is a completely impartial method to unlock funding geared towards the economic development objectives of the region.

For 2020, it is expected that local authorities will retain all business rates rather than from just specific areas, which may result in more businesses wanting to engage in influencing how business rates are re-invested.

Invest Bristol & Bath

Invest Bristol & Bath is part of the West of England LEP, promoting inward investment in the region. Invest Bristol & Bath plays a crucial role in attracting creative companies and new businesses to the West of England area and is key in the delivery of new skilled jobs while securing the region's reputation as a technological and innovative cluster. Working closely with Bristol City Council, Invest Bristol & Bath fosters collaboration between businesses, academic communities and local authorities. Since its creation in 2013, Invest Bristol & Bath has attracted 110 companies, creating around 3,000 jobs and contributing almost £200M to the regional economy (Buckland 2016).

Invest Bristol & Bath is based at the Engine Shed, a managed incubator that resulted from a collaboration between the West of England LED, the University of Bristol and Bristol City Council. It intended to foster long term economic growth by supporting businesses, encouraging the involvement of young people and demonstrating to potential inward investors and the public the opportunities that the region has to offer (Engine Shed 2016). Ultimately owned by the University, the Engine Shed is managed by Setsquared who lease offices to new technological companies and connect them to investors' networks, which has generated hundreds of millions of pounds worth of equity over the past six years. After these companies reach a certain size, they can still be mentored but are encouraged to move out to open up opportunities to other smaller companies.

City Transformation

Bristol has been named the UK's leading smart city outside of London (Invest Bristol & Bath 2016). The city is identified as being particularly strong in the digital innovation category. Bristol is also renowned for community engagement, energy innovation and project implementation and delivery of the city's digital strategy (Navigant Consulting 2016). The city's quality of life and work, economic diversity, scale, and geographic positioning have all contributed to it being recognised as the most liveable city in the UK.

According to inward investment leaders, the growing reputation of Bristol, the West of England as a technological, creative and financial services hub will attract thousands of new jobs over the next few years. This trend has started to be seen, with a record of 1,800 jobs being created over the past year through inward investors (Buckland 2016).

Social Challenges and Infrastructure Issues

Despite all recognition in recent years, Bristol still has some of the most deprived wards in the country, located in the south of the city. According to the information gathered from the interviews, it is not easy to get investment in the south of Bristol, making this area more dependent on the public sector. The city has a large regeneration area in this part of town (2-3 major sites) intended for offices and industrial development. However, the city struggles to get developers to build in this location because there is still space in other parts of town. Due to local authority structures, political reasons and the city's accessibility to London (via the M4), the north Bristol fringe has absorbed development, making it a massive commercial hub. For other sides of Bristol, development is lacking and access is quite poor.

There is a deficit in infrastructure and Bristol suffers from congestion in certain parts. As a city, Bristol still has to work hard on basic and transport infrastructure. In the UK, development of transport infrastructure is quite centralised and the city has been dependent on national government funding. Over the years the city developed plans for rapid transit and sustainable transport, but the flow of investment from national government has been slow because the city is perceived as a slightly more prosperous area than other Northern cities. This

The Roman Baths, Bath.

transport shortfall within the city also influences the job market, with skilled people in the south of Bristol finding it impractical to accept jobs in the north fringe of the city due to the cost and duration associated with the commute.

Change And Development Process

So far, a formal identity or brand for the city and region does not exist. According to some interviewees, difficulties have arisen due the fragmentation of the four unity authorities. Nevertheless, they believe that the most credible and appropriate characteristic of the region is its feature of being a significant technological cluster in the UK. The city no longer focuses on activities around aerospace, IT or medicine in isolation; instead they have developed a different way of bringing those activities together, looking at the common processes and technologies. This has been achieved through the culture, environment, knowledge basis and the strategies across all levels.

Based on the opinion of a representative from Invest Bristol & Bath — in an economy underpinned by innovation and Research and Development (R&D) like Bristol, there is a natural inclination to collaborate and to share ideas. The universities also build up expertise, which further promotes collaboration. Although not intentionally designed, Bristol's collaboration framework is unique and different from other cities' like London or Plymouth.

For a regional English city, scale is also important for connectivity. Bristol has its own ecosystem and a successful record of attaining a diverse economy. Still, the city does have the pressure of talent moving to London due to its proximity. Bristol is leveraging this proximity to London and is witnessing the growth of a new model of flexible work wherein people work part-time in London and part-time in Bristol, which has led to an increase of

legal and financial services in the city. Recent investment in the rail infrastructure will also contribute to reducing the journey between Bristol and London that will help the cities to work even closer.

The port and the airport in Bristol have also been crucial in the city's development. Publically owned 30 years ago, the port has since been privatised and has grown substantially. Bristol's port employs 600 people directly and almost 19,000 people are involved in port related activities. The port still has limited containers capacity and is therefore not a global port. However, part of the port's growth strategy is to build a deep-sea container terminal, which already has government permission, to take full advantage of its great distribution network of national motorways and a rail freight terminal right next to the port terminal.

The airport also went from council ownership to private ownership and has been growing steadily. It ranks in the top 10 of busiest airports in the UK but is still developing in terms of international connections. Due to the proximity to Heathrow airport and the plans to have a train connection between Bristol and Heathrow airport in 6 to 7 years, Bristol airport is likely to remain a regional airport.

Partners

Bristol has two universities that have been essential in the development of a dynamic business environment and for the growth of entrepreneurship (Invest Bristol & Bath n.d.) The University of West England was a former polytechnic and is the newer university, while The University of Bristol, founded in 1876, has ranked 30th in the world and 8th in the UK. Within the region, the University of Bath also has a great research record. The universities are well engaged locally, while operating nationally and internationally, which has contributed to their growth

Engine Shed, Bristol..

and to the development of a strong workforce with 40 per cent of the students being retained in the region. All universities work in close collaboration, sharing expertise and strategizing together through partnerships.

Bristol Chamber of Commerce and The West of England Initiative

Bristol's Chamber of Commerce is embedded in Business West, which represents businesses and gathers the Chambers of Commerce across the South West. Business West helps small to medium companies to settle, grow and export, providing a platform for networking and a space to collaborate. They have around 21,000 members and work closely with London Chamber of Commerce. As part of the national response to urban challenges, Business West set up a business leadership team around 30 years ago to respond to the issues that British cities were facing. This initiative was led collaboratively by government and the Confederation of Business Industry to help build the understanding that businesses, beyond making profit, have both the right and responsibility to express an interest in their broader environment through adopting a team approach to amplifying impact. This led to the creation of the West of England Initiative, which brings together private businesses and local government to create an attractive, clean, green, educated, equal and safe place.

The West of England Initiative and the Chamber of Commerce were essential for the four unity authorities of Bristol; Bath and North East Somerset; North Somerset; and South Gloucestershire, to start working together on a voluntary basis on issues surrounding strategic planning, transport and housing among others. This informal strategic partnership grew organically and gave the region a head start when the LEP was established.

Key Learnings

- Collaboration between the formal and informal organisations has been instrumental in driving the development of Bristol and Bath. This has included business, local government, the Chamber of Commerce, civic leaders and the introduction of the Local Enterprise Partnership (LEP).

- Bristol does not have a single 'theme' (i.e. digital, medical). The city seems to trade on the success of innovation. The critical mass they have fosters the collaboration environment, which is necessary to succeed.

For consideration

Bristol is taking advantage of its proximity to London, which is similar to the proximity between Geelong and Melbourne

- This has led key London-based businesses to relocate or expand, allowing employees the opportunity to work outside the capital city and enjoy more affordable accommodation costs and lifestyle benefits. Travel time to London and broadband speed are critical in exploiting the opportunities associated with this proximity.

The Roman Baths, Stall Street, Bath.

Liverpool Princes Dock.

Photo: Akin Ogunsanya

https://www.flickr.com/photos/freshnaijaboi/15069159055/

Liverpool

Rationale for the Visit

Liverpool is located in North West England along Liverpool Bay of the Irish Sea. Once a major trading city in the 18th and 19th Centuries, Liverpool now has a population of around 466,000 inhabitants. After the decline of manufacturing industries and the restructuring of the shipping industry, Liverpool's economy dropped and unemployment escalated. Only in the 2000s did the city begin to recover. Liverpool's major port and the city's historic importance in the growth of the British Empire and to European emigration were honoured by UNESCO's designation of Maritime Mercantile City (Parveen 2016). Nowadays Liverpool has a vibrant culture, heritage and leisure scene that, along with high strengths in the knowledge sector, attracts both tourists and highly skilled professionals.

Context

According to representatives from the Liverpool John Moores University, Liverpool is considered part of the classical British second cities, like Newcastle, Leeds or Manchester. Among this group there are three types of second-cites: growing, intermediate and lagging. Liverpool sits within the lagging category, still struggling but with signs of increasing its performance as a city region in recent times. The population has been growing for the first time in recent decades after a dramatic reduction between the 1980s and mid 2000s. While the inner city has a population of around 466,000, Liverpool City Region now has a population of 1.5 million and is one of England's eight core cities: the most economically important cities outside of London (Liverpool City Region LEP 2016).

Liverpool was not a particularly strong factory city; it mainly acted as a trading gateway. In its role as a gateway, Liverpool reflects what happened across Northern England during the 1900s boom and post World War II whereby there was a decline in manufacturing and industry. Upon integration into the European Union (EU), it was argued that Liverpool was geographically positioned on the wrong side to benefit from this relationship. The changes in raw materials used for manufacturing, EU regulations led factories to close down, which resulted in a massive loss of jobs. Greatly impacted by globalisation and the government's lack of support for industry in the North, this led Liverpool in the late 1970s and early 1980s to experience a period of great deindustrialisation and heightened unemployment rates.

Governance

Since 2012 Liverpool has a mayoral combined authority. The city is now governed by an elected Mayor and the City Council, which comprises of 90 locally elected councillors (Liverpool City Council n.d.). Liverpool's local authority along with the local authorities of Knowsley, St Helens, Wirral, Sefton and Halton form the Liverpool City Region Local Enterprise Partnership (Heseltine & Leahy 2011).

The Local Enterprise Partnerships (LEPs) were introduced in 2010 to replace the Regional Development Agencies (RDAs). To support businesses, maritime projects and other initiatives, local authorities channelled funds coming in from central government and the EU. With changes in central government, RDAs were deemed bureaucratic. LEPs were established to cover a smaller geography and to drive private-sector led growth and job creation. Similar to the West of England LEP (which includes Bristol), Liverpool City Region LEP comprises of local authorities, civic leaders and private sector businesses. Formally established in 2012, Liverpool City Region LEP also involves the key partners Liverpool John Moores University, University of Liverpool and Liverpool Hope University.

Each of the six local authorities of the Liverpool City Region has their own political leadership. However, since 2014 the Liverpool City Region Combined Authority was established to strategically lead work on transport, housing, economic development, employment and skills, thus supporting the region's sustainable economic growth. Strategic decision making for the region is now carried out by a body consisting of the six local authority

leaders and the Chairman of the LEP (Liverpool City Region 2015a).

According to interviewees, the relationship between central government and the city is perceived as poor. During the interviews it was also understood that the introduction of the LEP was not easily embraced. The RDA was considered to be a strong player in the significant physical transformation of the city infrastructure, providing great sources of funding and assistance in developing and articulating Liverpool's case when applying for EU grant funding.

City Transformation

Liverpool's regeneration has been focused on the city's maritime heritage with a lot of revitalisation projects occurring along the river. Albert Dock is emblematic of the Liverpool's transformation. Situated on the harbour, it is representative of the city's shipping history, but much like other buildings around the city it had several abandoned buildings and warehouses in the early 1980s. Nowadays Albert Dock is the tourist hub of Liverpool featuring the largest collection of Grade I listed buildings in England and highly sought after attractions like the Tate Liverpool, Beatles Story and the Merseyside Maritime Museum (Albert Dock Liverpool n.d.). Albert Dock is part of a 'visitors economy' that initially was of some concern as it would probably just provide low paid jobs. However, these have become an important part of the city's economy and the bet on tourist industry has been reinforced with the return of the cruise liners to Liverpool.

Albert Dock is only a portion of a larger revitalisation project of Liverpool's waterfront that has been developing throughout the years. Liverpool City Region has been focused on developing the SuperPort: a combination of projects, investments and activities that support a multimodal freight hub whereby passengers and freight operations will become key drivers in the economy (Liverpool City Region 2014). Similarly to Bristol, moving Liverpool's 'working' port out from the city centre allowed room for tourism and visitors' areas, which prompted a significant change it the city's infrastructure and modus operandi.

The development focus has so far been towards the northern part of the city, which is yet to be regenerated because emphasis has been on the city centre.

Most of the old buildings have been re-purposed to accommodate innovation companies whereas others centred on the services economy—such as hospitals and the two universities—have been strengthened by the important public sectors they serve, generating jobs and investment.

Social Challenges

Liverpool's population is rising for the first time in many years. Still, this increase is below the national average and well below the southeast part of the country. The city faces a serious case of uneven development between the

city and the city region that must be addressed. Although Liverpool's City Region economy has grown in recent years, along with the economic output per resident, there is still an overall gap in the national rate (Liverpool City Region 2015b).

The City Region also has a persistent skills gap compared to national rates, restricting opportunities for businesses and local residents. As per employment rates, these have been broadly positive in recent years but there is still a seven per cent gap when compared to national employment rates. Furthermore, the jobs being offered recently are mainly for part-time or flexible roles, which is also a matter of concern (Liverpool City Region 2015b).

During the interviews it became apparent that the devolution from central government is seen as having potential to strengthen the Northern Powerhouse. However, this would only be highlighted through the development of infrastructure like the high-speed rail connecting Liverpool, Manchester, Leeds and Sheffield, rather than to London. Regarding transport development, the short distance to Manchester is a deterrent for the growth of Liverpool's airport. Liverpool is mainly served by low-cost airlines and the short distance of 40-50 minutes to Manchester makes it difficult to compete with the international linkages provided by Manchester's international airport.

Change and Development Process

In the 1980s, the central government set up a development corporation that imposed a physical redevelopment project on the city's dockland area, which was not well received by local politicians at the beginning. The redevelopment of Liverpool's south dock required a massive public investment and was done very carefully, particularly for the reappropriation and cleaning of the area, which was mainly wasteland and oil spills.

After the imposed development corporation, the government established urban regeneration companies that were more collaboratively organised and helped the development of privately financed projects. According to the interviewees, the use of public sector investment to create infrastructure in the area was crucial to later attract private investment. It was the basis for projects such as Liverpool One, a large open-air shopping centre situated right in the city centre linking with museums and the docks. This is considered by some to be the "beating heart of the city".

Key for the development of Liverpool was also the initial investment of £700M by the European Union in 1994. This funding was allocated under the Objective 1 programme for developing business, people, locations and pathway communities within the Merseyside region that contributed to more than 1,800 projects (Bartlett 2014; European Commission 2016). Another important catalyst for improvements in the city centre was the designation of European City of Culture that Liverpool won in 2008.

Presently, the city has three major areas that can sustain Liverpool's brand: the cultural aspect; the sports teams (since the city has two Premier League teams, one being

the most successful team in English football history: Liverpool FC); and the maritime heritage of the city, which is recognised with the title of Maritime Mercantile City as a UNESCO designated World Heritage Site. Along with these three areas that attract people to the city, the development of knowledge through the Universities has retained people in Liverpool and contributed to an economy based on knowledge.

Partners and Community

The Baltic Triangle is a regeneration area that has been redeveloped through transforming old industrial/commercial buildings into start up zones and trendy hipster style residential living. Baltic Creative is a community interest company established in 2009, working in the Baltic Triangle and playing a major part in this area's regeneration. Baltic Creative provides low cost spaces and generates a creative environment and cluster. To be a tenant, companies are required to

be in the creative or digital industry. Low fit out costs and the creation of critical mass has been a key driver in generating its own momentum. Baltic Creative now has a waiting list and is expanding. Unlike Bristol's Engine Shed, this is not a classic incubator for start-ups. It is a low cost leasing and collaborative environment wherein all surpluses are reinvested into supporting their own businesses.

The Universities have also been key in Liverpool's regeneration by supporting local authorities and businesses. The city now has a knowledge quarter, encompassing the University of Liverpool, Liverpool John Moores University, Liverpool School of Tropical Medicine, the Royal Liverpool University Hospital and the Science Park, among others. The knowledge quarter provides a concentration of expertise in science, health, technology, innovation and education right in the city centre, with shared office spaces to foster collaboration and attract plus retain the very best talents in these fields, along with business innovators.

Key Learnings

- Liverpool has been extremely successful in the enhancement of the docks. This has provided the opportunity for the city to focus on its maritime heritage thus creating a tourism hub at its centre, which has been a significant economic driver and job creator.

- Liverpool is focused on developing low-cost collaborative hubs that can leverage the knowledge sector to attract and retain highly qualified professionals.

Walker Art Gallery, Liverpool.

Photo: Alex Liivet
https://www.flickr.com/photos/alexmartin81/25238357903/

Peace Garden fountains and lawns

Photograph courtesy of Sheffield City Council

Sheffield

Rationale for the visit

Sheffield is located in South Yorkshire, north of London, and has a population of around 565,000. The city developed along the banks of river Sheaf and was renowned for its iron and steel industries and heavy manufacturing (Sheffield City Council 2009). After two decades of considerable disruptions—due to the closure of large steelwork, engineering and manufacturing businesses, which led to a considerable loss of jobs—Sheffield has been experiencing a significant regeneration through which the city is being revitalised by an industry led strategy. While Sheffield still has a strong steel industry, its service industries have diversified, particularly with education and health care, and its manufacturing capabilities have improved.

Context

The 8 core cities of England are the largest economic hubs outside of London that together contribute to more than a quarter of the combined wealth of England (Core Cities n.d.-a). Along with Bristol and Liverpool, Sheffield is also part of this group.

Sheffield suffered a brutal economic shock from the rapid deindustrialisation that still marks the city today. In the 1980s Sheffield's economy was severely affected by rapid industrial decline and the closure of the steel industry and heavy manufacturing. Sheffield's economy has since diversified and has experienced growth in the service industry (Sheffield City Council 2009), strengthening sectors of advanced manufacturing and research. Within the Core Cities, Sheffield has seen the highest growth between 1998 and 2007 in the digital and new media sector (Core Cities n.d.-b).

Governance

Like Bristol and Liverpool, Sheffield has been subjected to changes from the central government and is now working at a regional city level, which is economically functional at a geographic level. The Sheffield City Region is composed of nine local authorities: Barnsley, Bassetlaw, Bolsover, Chesterfield, Derbyshire Dales, Doncaster, North East Derbyshire, Rotherham and Sheffield (Sheffield City Region n.d.). The main urban areas of the region are Sheffield and Doncaster, with neighbouring Rotherham sharing an economic and labour market.

Similar to other cities, the Local Enterprise Partnership (LEP) was introduced into Sheffield (Sheffield City Region LEP), replacing the Regional Development Agency. For the first time in history the public will next year in May elect a city regional mayor to manage and supervise the entire region and to develop long-term plans. According to an interviewee, this may lead the city to make better and braver decisions, inspire longer term planning and solve geographic problems. The Devolution deal, formally approved in March 2016 between central government and local politicians and business leaders, secures greater control for the city region over its own economic affairs (Sheffield City Region n.d.). From the taxes that Sheffield collects, each 95 pence of a pound are sent to central government. When these funds return to the city in the form of a grant, there are strict directives from central government on how they should be spent. Therefore, devolution is seen in Sheffield as a means to greater long-term planning and greater local capability.

According to a representative of Creative Sheffield, although governance structures might change, the bedrock in Sheffield has been the city council. Sheffield's City Council has 84 councillors representing 28 wards and is run on a leader and cabinet model (Sheffield City Council n.d.). The city has a Lord Mayor: a ceremonial post held by a member of the council that is elected by fellow councillors.

City transformation

Local leaders were essential in ensuring that Sheffield became an outward looking city: more international and more confident as an English core city. The development of the city's public realm has helped shift focus onto its quality of life, which was pivotal in encouraging private equity to invest in Sheffield. Nowadays, Sheffield has top class public spaces, such as the Peace Gardens and the Winter Gardens: one of the largest temperate glasshouses in Europe.

Industry and manufacturing are still part of Sheffield's identity and economy. However, Sheffield now produces

as much steel by value as it used to, but in much less volume and requiring less workers. The city is now characterised by high technology manufacturing and a strong research sector that work as magnets for private investment, thereby resulting in economic growth.

Social and Employment Challenges

Although Sheffield has been rebuilding what the city lost since the decline of jobs in manufacturing, people's confidence and psyche need to be re-shaped. There are still some fundamental structural weaknesses, such as low entrepreneurship, scarce business density and poor business skills. According to an interviewee, if Sheffield wants to close the gap with national statistics, they still need to outperform the national productivity index by 1 or 2 per cent every year for a substantial period of time to make any significant improvement.

Traditionally Sheffield does not have the blue-chip headquarters of large companies due to the city's industrial history. This impacts the city centre, particularly when compared to other cities like Manchester or Leeds, because Sheffield has a lot less high valued office workers. In the future, there is still some work to be done around re-skilling and developing pathways to help blue-collar workers to transition. There has been some investment around training from central government, but the focus was on outputs instead of outcomes, and this requires improvement.

Change and Development Process

Essential to Sheffield's urban regeneration was the stable leadership that characterised the city from the early 2000s wherein the city had a very supportive government and regional agency with funds being invested in the North part of England. During this period Sheffield had a strong authority leader, Jan Wilson, and a strong chief executive, Lord Bod Kerslake. Since there was no real perception of where the core of the city was, a lot of investment was made into projects like the Heart of the City. The city had large retail areas in the outskirts and no defined office areas. In Sheffield, the initial regeneration investment focused on developing the public realm, creating a new commercial district and strategically revitalising the main gateways to the city in order to influence people's perceptions. Steel and water were central themes of Sheffield's regeneration; the first representing its legacy and the second because the city's industrialisation period had concealed most of the river.

The public investment that allowed for the city's revitalisation to be initiated served as a catalyst for private investment, which then led to the development of a new office area in the city. Banks and law firms are now attracted to a city core characterised by rich public spaces. This gave a sense of pride to Sheffield's population and the city started "acting" like a large city, which helped local authorities to lobby and ensure that Sheffield became part of the Core Cities of England.

Another crucial change for Sheffield was the development made in advanced manufacturing. Sheffield has been characterised by a factory-based economy that transitioned from a high volume commodity base to high-value specialised research, which then advanced manufacturing. The city is still transitioning but already has some strong Research and Development (R&D) businesses strongly supported by the city's two universities. The Advance Manufactory Research Centre (AMRC) of the University of Sheffield collaborates with Boeing and works in flagship advance technology with manufacturing businesses. Rolls Royce, which also has

Sheffield City Centre.

a factory in Sheffield, is one of the members of AMRC, having access to its resources and expertise.

Sheffield's economy is characterised mainly by Small and Medium Enterprises (SMEs). The city does not have large Original Equipment Manufactures (OEMs). Although this can be seen as a weakness, in recent years the SME supply chain economy has proven to be quite nimble and resilient, with the ability to diversify away from declining sectors. According to a Sheffield Creative representative, this flexibility presented by an SME based economy has been valuable to Sheffield.

Partners

Sheffield's two universities—University of Sheffield and Sheffield Hallam University—are the city's big brand. The universities help to define the city's identity and majorly contribute to international recognition. According to a representative from Creative Sheffield, the majority of their inward investment enquires relate to the universities. The city is also home to two University Technical Colleges that focus on Creative and Digital, Engineering, Health, Sports, Sciences and Computing (Creative Sheffield n.d.).

Key learnings

- Governance structures have come and gone over the years, but a couple of very strong individuals have been instrumental in Sheffield's change, lobbying for Sheffield's inclusion in the Core Cities group and for investment and funding.

- Long term planning that focuses on an economic region/area is thought to provide the best planning approach. This regional approach from a funding and planning point of view is being introduced through the devolution process. At a regional level this will be good for the further enhancement of Sheffield as a city region.

Sheaf Square, outside Sheffield's train station..

Recommendations

Introduction

The following recommendations draw on the insights from the transformation of the post-industrial second cities included on the study tour. Although each of the cities was unique in its thriving industry sectors, policy prescriptions and governance, there were recurring themes across the study tour. These include:

- Centralised economic development agencies;

- Supporting innovation and entrepreneurs;

- Prioritising of industry sectors based on the inherent strengths of the city;

- Differentiation from other secondary and major cities, as a place to live and invest as well as in the priority industry sectors; and,

- Making the city a good place to live through waterfront developments, arts and culture, food, and revitalising city centres.

It is also important to consider how Geelong, and Australia, differs from the study cities and their countries. Geelong is part of a strongly monocentric region, centred on Melbourne, without any other settlements having a significant impact on it. The American cities may be further from that country's major cities, but will have sizeable settlements nearby. The city of Eindhoven is located within an intensively urbanised region of major cities such as Amsterdam, Rotterdam, Antwerp, Brussels and Düsseldorf. The three-tier system of government in Australia is different from the European examples, indicating the latter may have greater autonomy.

The overarching recommendation is for Geelong to advocate for a second cities policy with Federal and State governments, as well as for continuing public investment in the city. Policies for the development of second cities have been more prominent in Europe, as a way to reduce the divergence in economic fortunes on the continent and associated social disparities. In Australia, the regular references to regional cities when discussing the mooted City Deals, included within the 2018 *Smart City Plan*, indicates the interest of the Federal Government in this topic (Department of the Prime Minister and Cabinet 2016). Concerns regarding the rapid population growth of Melbourne also provide opportunities for Geelong, as per the State of Cities direction within Plan Melbourne (Department of Transport Planning and Local Infrastructure 2014).

Of the supporting recommendations, *Industry mapping and opportunity identification* and *A co-ordinated approach to economic development* are the essential ground work for transforming the Geelong economy. As well as identifying the industry sectors for prioritising and supporting within the city, these recommendations provide the basis for the medium term recommendations for rebranding and developing clear arguments for public and private investment. The ongoing recommendations, to support start-ups, innovation and entrepreneurship, and continuing the investment in Geelong's appeal as a city to live in, reflect the evidence gathered in the study tours that these have been important in other second cities.

Overarching Recommendation: Second City Policy

The primary objective of this project is to understand what has been important in the transformation of comparative cities in Europe and the United States as a basis for Geelong to advocate for greater policy, planning and funding for second cities. The overarching observation of the research is that there are significant benefits to be gained from a greater policy focus on second cities, and that the development of second cities such as Geelong can produce benefits that extend further than their boundaries. Although recent initiatives such the *Smart City Plan* and *A State of Cities* within Plan Melbourne indicate an awareness of the opportunities for development in second cities (Department of Economic Development Jobs Transport and Resources 2016; Department of the Prime Minister and Cabinet 2016), it is important to work with Governments to continue the development of policy as well as implementation and ensure concrete outcomes. For these reasons, advocating for second cities with Federal and State Governments is the overarching recommendation for the Committee for Geelong arising from the research.

There have been movements towards second city policies in Europe, which can be linked to the long standing concerns over the spatial distribution of wealth and economic activity across the European Union (European Commission Committee on Spatial Development 1999; Evans 2015). There is also a view that the overwhelming focus on the development of major cities has been at the expense of other regions, and that second cities may offer greater returns on investment (Parkinson et al. 2012). Also in the European context, highlighting the number of cities, their population and economic importance has been instrumental in attracting the attention of policy-makers to second cities (ibid).

Prior to the 2016 election, the Australian Senate commenced an inquiry into the *Future role and contribution of regional capitals to Australia*. Although the report was not completed by the time parliament was dissolved, it indicates some interest in developing second cities in Australia. In addition to the inquiry, the Federal Government's *Smart Cities Plan* and the Victorian State Government's *Plan Melbourne* and regional growth planning indicates an interest in the development of second cities such as Geelong.

Parkinson et al. (2012) suggest that "clear evidence about the negative externalities of capital city growth" warrants the development of second city development policy. *Plan Melbourne*'s A State of Cities direction, as well as the regular media reports of declining housing affordability and increased commuting distances, note the potential for diseconomies arising from Melbourne's rapid growth (Department of Transport Planning and Local Infrastructure 2014; Lucas 2016; Morris-Marr 2016).

Advocating for a second city policy needs to be differentiated from advocating for Geelong, depending on the purpose and level of government. Geelong will be recognised as Victoria's second city in the updated Plan Melbourne, according to the recent review (Ministerial Advisory Committee 2015). However, there is no supporting policy framework to reflect this formal recognition. Regional Capitals Australia provides a vehicle for second cities advocacy: it has 30 member cities including Geelong and a mission to "provide a formal platform to champion the continued growth and sustainable development of regional capitals around the nation" (Regional Capitals Australia 2015). In Europe, the focus is on policy development for second tier cities rather than a single second city within each jurisdiction: 31 capitals and 124 second cities were included in a recent ESPON review (Parkinson et al. 2012, p. 7). Positioning Geelong as Victoria's second city within the context of other regional cities in the state could provide a point of advantage under this policy.

In the short term, Geelong should investigate the feasibility of working with the Federal Assistant Minister for Cities on a City Deals strategic partnership. The Federal Government is promoting the *Smart Cities Plan* as a plan for regional cities, as it will "drive economic growth and create new jobs in regional Australia" (Nash 2016). The updated Plan Melbourne may also provide opportunities for Geelong, as the discussion paper proposes to "prioritise game changing land use strategies such as those for Avalon Airport, the Port of Geelong, improved arterial road connections and high quality health, tertiary education and research infrastructure that positions the G21 region for accelerated growth and as a centre of employment and higher order service provision for Melbourne's west" (Ministerial Advisory Committee 2015, p. 98).

Summary

As a prominent city in Australia, Geelong can act as an important advocate for State and Federal second city policies. It is important that advocacy for Geelong and advocacy for second cities is clearly delineated to increase the likelihood of positive outcomes. Second city advocacy should be undertaken in collaboration with other cities and organisations such as Regional Capitals Australia, particularly if the Senate enquiry into regional cities reconvenes. Geelong also needs to make the most of the opportunities presented by current policies, including the *Smart Cities Plan* and the Victorian State Government's direction to "rebalance Victoria's population growth from Melbourne to rural and regional Victoria" (Department of Transport Planning and Local Infrastructure 2014, p. 158).

Supporting Recommendations

1. Industry Mapping And Opportunity Identification

To facilitate growth in particular industry sectors and strengthen connections between industries, government and researchers, it is recommended that Geelong apply the method of industry mapping. This is akin to the

Entrepreneurial Discovery Process (EDP), an integral component of the European Commission's strategy for regional development termed Smart Specialisation. EDP is described as:

…. an inclusive and interactive bottom-up process in which participants from different environments (policy, business, academia, etc) are discovering and producing information about potential new activities, identifying potential opportunities that emerge through this interaction, while policymakers assess outcomes and ways to facilitate the realisation of this potential (European Commission n.d.).

To understand the strengths and opportunities for Geelong, it is important to capture connections between producers and intermediate products and services. These links cannot be identified in the existing ABS Census as they occur across ANZSIC categories, with transport and accounting services used by manufacturers for example. An example of a sector hidden in census and economic data is the tourism industry. This led to the development of the *Tourism Satellite Accounts* (OECD 2008). In a recent presentation to the report authors, the Milwaukee Water Council stressed the importance of understanding what was occurring in the city and how it was interconnected was an integral first step in developing the water city's specialisation. It is important to note that the significant amount of activity in water related industries was not found in Census data due to the coding issues discussed above, but by local university students developing a detailed audit of industries on the city and their links.

During the Committee for Geelong's international study tour of second cities, a representative of the Pittsburgh Foundation explained how their city captured and used the knowledge produced by universities to focus on industry sectors in the city and foster economic development. In order to identify these key sectors, a research and development organisation was commissioned to assess the region's weaknesses and strengths. This also assisted local leaders to structure an action plan for advancing the region's tech sector by concentrating on key areas.

Opportunities for import substitution can be identified through mapping industry connections, which can be a fundamental driver of city growth. Import substitution is an internal development process, working with existing industry to develop horizontal integrations and a stronger local economy (Persky, Ranney & Wiewel 1993). Jacobs, J (1969) highlighted the importance of import substitution in the growth of Los Angeles, particularly as the city lost defence manufacturing industries after World War II. This process can begin with mapping the connections of a city's major businesses.

Industry Sectors

The following sectors have been discussed during the project, due to their relevance to Geelong or their recurrence in second cities.

Social Insurance

There is the foundation of a social insurance cluster in Central Geelong, as it is home to the State Government's TAC and WorkSafe, together with the Federal Government's NDIA head office. As the location or relocation of Government agencies is subject to political expediency, it is important to embed and connect these agencies within Geelong through forming links to local service providers; developing training and placement opportunities with Universities and TAFEs; and strengthening connections within that cluster. Building on existing Education and Medicine in Geelong and combining it with Social Insurance would increase the value of this cluster, as it is a specialisation that can be unique to Geelong. There is further potential to expand Geelong's status as a global hub for social insurance with existing public and private insurers, leveraging the existing organisations that have established in Geelong.

Green and Blue Economic Development

Pittsburgh is a case study in revitalising a declining manufacturing city by transitioning to a 'green' economy. Pittsburgh included the development of green buildings in its development plan following the decline of the steel industry in the 1970s and due to its on-going prioritisation, is now one of the cleanest cities in the US. Its transformation from a steel city to green city has been a long-term project, with significant investment in low energy use buildings and remediation works on ex-industrial brownfield sites (Union of Concerned Scientists n.d.). Another city to note as a case study is Milwaukee — due to its innovation, Milwaukee became part of the UN Global Compact Cities Programme and is today renowned as a global water innovation and policy hub.

Geelong's location between Port Phillip Bay, the surf coast, and along the Barwon River, provides the basis for leveraging both a water-centric and green economy. For Geelong to transform into a city recognised for its green economy a significant shift is required from the heavy industry and car-dependent residential developments that dominated the city's economy and growth in the twentieth century. The 6 star green energy rated and 5 star NABERS building being constructed for WorkSafe in central Geelong provides an example for other office developments in the city to emulate. As shown by the Pittsburgh example though, a successful transformation requires significant resources and ongoing commitment.

Pittsburgh's recognition as a leading example of green economic development, in conjunction with their focus on converting their water resources from sites of industry production to sites of leisure and amenity has been identified as an example for the transformation of Geelong. The Committee for Geelong have identified potential to extend this mix of 'green' and 'blue' economic development, under the term 'Turquoise Economy'.

Medicine

Based on similar successes in cities such as Cleveland, Eindhoven and Dundee, medicine as a sector within Geelong has been considered as an area of development. However, Geelong would be competing with well-established and high profile medical research and education clusters within metropolitan Melbourne, associated with Melbourne and Monash Universities.

Cleveland has created a successful medical centre by specialising in cardiac and cancer research, indicating that if Geelong is to develop a stronger medical sector it would likely need to develop a specialisation that differentiates it from other Victorian clusters in this sector.

Tertiary Education

All second cities included in the Committee for Geelong's study tour were home to more than one university, indicating that hosting multiple universities can be of benefit to the success of a second city, and may benefit Geelong. It is of note that a strong education sector can attract, and retain, millennials in second cities. In particular, this research has highlighted that providing a range of education choice, particularly in areas of specialisation, is important to a city's success as variety provides job opportunities and employment growth. Nonetheless, it is important to note that the geography of tertiary education in Australia is very different to those of the US and UK, which have more universities located in second cities with students more likely to move away from home to study. In the US, many of the universities are private and developed through philanthropy, such as Carnegie Mellon in Pittsburgh and Stanford University in Silicon Valley. In Victoria there has been a reduction in tertiary education offers outside of Melbourne as the sector has undergone a series of campus rationalisations and restructures over the past few decades. Given the lack of student mobility in Australian tertiary education, the population of Geelong and its regional catchment would need to increase significantly to support additional comprehensive tertiary education institutions in the city, indicating that this should be a long-term objective. There are however relatively few direct barriers to the establishment of specialised activities by multiple universities, such as industry-linked research centres.

In the short term, further exploration to discover the gaps in areas of specialisation could inform provision of greater educational opportunities and choice. Therefore, an environmental scan of the universities and education facilities and their offerings currently in Geelong, and to what scale, could be undertaken. This might also include understanding growth or entry plans for educational institutions; the pathways available for individuals both university to TAFE and TAFE to university; duplication of effort; and if that competition is beneficial or disadvantageous. In addition, identifying the gaps; undertaking an analysis on where students are going; why they may be leaving Geelong to study elsewhere; and how they can be encouraged to study in Geelong is another area to review. Finally, reviewing the issues for students such as with school retention rates, public transport and accommodation is vital to understanding how the education sector in Geelong can be assisted to scale-up.

Port and Logistics

Supporting international engagement between industry partners can further leverage the economic prosperity of Geelong. During the Committee for Geelong's study tour, Ports and Logistics emerged as an opportunity for further exploration. As a result of the study tour, Geelong Port has been invited by Forth Ports Limited, the Port of Virginia and the Port of Rotterdam to consider the development of a strategic relationship with each port. This action could be supported by the ports sharing knowledge and ideas, exchanging best practice, undertaking benchmarking, promoting professional development and comparing how stakeholder engagement is undertaken.

Summary

Industry mapping, based in the EDP, is a short-term priority for Geelong. It will identify industry sectors for growth, form a basis for creating economic development strategies and solidify connections between industries, agencies and education providers in the city. However, sectors cannot be recommended for growth without developing an understanding of the wider goods and services market. This can be achieved through making an assessment of the unmet demand and other regions' specialisations and strengths.

2. A co-ordinated approach to economic development and planning

There are a number of organisations involved in economic development and planning in Geelong, including the Committee for Geelong, the Geelong Chamber of Commerce, Geelong Manufacturing Council, City of Greater Geelong, G21 Geelong Region Alliance, Regional Development Victoria, Regional Development Australia Barwon South West and the newly formed Barwon Regional Partnership. The cities included in this research show that a co-ordinated approach is an important factor in driving growth. This approach includes having a one-stop shop available to local entrepreneurs and innovators; a shared vision and strategy; and an agreed list of priorities. Pooling resources into an overarching "One Geelong" entity would produce an efficient and effective economic development effort for Geelong.

Eindhoven's Brainport, the Alleghany Conference in Pittsburgh, the Dundee Partnership and the Greater Richmond Partnership are examples that point towards the benefits of having a co-ordinated approach to city development. The success of the Milwaukee Water Council[1] also serves as an example of how citywide co-ordination provides positive outcomes. The experiences of these second cities indicate that there is much to be gained from a high level co-ordinated group, which includes CEOs from major companies, government agencies and education institutes. Opportunities for import substitution; shared knowledge and resources; and collaboration for new ventures can be brokered through a single entity connecting businesses, organisations and institutions while broader and deeper business networks within the city can offer improved local sourcing of goods and services as well as identification of solutions to business challenges.

An agreed long-term vision for how the city should be developed and reflected in strategic plans and infrastructure priorities, to provide the basis for robust funding applications and a clearer focus on the industry

sectors that the city aims to attract. For instance, there is a need for Geelong to decide whether improving transport connections to Melbourne would provide more borrowed size benefits or rather create a larger agglomeration shadow. Funding may be better allocated to intra-city rather than inter-city transport improvements. American cities included in the study tour were not in close proximity to major cities such that reducing travel time to major cities was not a concern. In Eindhoven the train journey time to Amsterdam is one hour and twenty-five minutes, which is considered acceptable, and for that reason the city does not have an agenda to reduce travel time. In contrast, Dundee's TayPlan strategic planning authority is aiming to reduce the travel time to Edinburgh to less than 60 minutes to promote commuting and attracting more Edinburgh-based workers to live in Dundee.

Summary

Evidence from the study tour indicates that unified development agencies, or one-stop shops, plus associated business and community networks are an integral factor in stimulating successful economic transformations in second cities. As noted in the discussion above, there are a number of organisations and agencies actively promoting Geelong and its industries. Combined resources, visions and strategies would provide the best outcome for the city. In the short term, it is important to begin negotiating towards this outcome with Geelong's State and Local Government agencies, industry groups and research institutions.

3. Branding of Geelong

The transformation of the Geelong economy needs to be supported by rebranding the city. As Geelong's close connection with Ford, the oil refinery and aluminium smelter have bolstered its identity as a manufacturing city, new directions for the local economy need to be supported with a new brand. The RVA logo, a contraction of Richmond Virginia, has been widely adopted and is central to the promotion of that city. A new brand for Geelong needs to align with its vision and aspirations, but also needs to be an honest reflection of the city's character: branding needs to lead, but not from too far in front.

Rebranding should be an early aspiration to unify Geelong organisations, discussed in *A co-ordinated approach to economic development*.

Summary

Rebranding is a short to medium-term priority, as it needs to be based on the vision for the city and derive from co-ordinated development agencies.

a) Be clear on why government and industry should invest in geelong (…. and not Melbourne)

Geelong needs to have a clear response to the question of why public and private organisations should locate themselves in the city, clearly outlining what advantages this offers. *Second-tier cities and territorial development in Europe* provides the following rationale for investing in second cities and provides a framework for considering the case for investment in Geelong (Parkinson et al. 2012, p. 63):

* The gap with capitals is large and growing;

* The business infrastructure of second tier cities is weak because of national underinvestment; and

* There is clear evidence about the negative externalities of capital city growth.

The first two points are pertinent to Government funding proposals, while the third can form the basis for attracting private investment. There is evidence that the gap between the Geelong and Melbourne economies is significant: more than 80% of the state's economy is located in the state capital (Kelly, J-F, Donegan, P, Chisholm, C, Oberklaid, M 2014, p. 9).

Private investment attraction should draw on the agglomeration diseconomies associated with Melbourne, such as congestion, pollution and high real estate prices, as well as the benefits compared to smaller, more remote cities in the state. Geelong offers comparatively cheap land and a readily accessible and easily navigable city with access to road and rail networks, a port and an airport. As the second most populated city in Victoria, it also offers thick labour markets and a wide range of services to support new ventures. This emphasis on the business advantage offered by Geelong means that firms that decide to locate in the city are more likely to stay if they are attracted by profits and productivity rather than by (short term) relocation incentives.

Summary

Geelong's population, infrastructure, location and institutions provide the basis for developing strong arguments for business and Government agencies to locate in the city. Contrasting the city's attributes with those of Melbourne and regional cities in Victoria will enhance Geelong's chances of attracting activity. This is a medium term priority, as it builds on the outcomes of *Industry mapping and opportunity identification* and is best developed by the unified development agency referred to in *A co-ordinated approach to economic development*.

b) Lifestyle And Amenity

Second cities offer advantages over major cities as places to live, which is important given the evidence that lifestyle is becoming an increasingly important factor in population mobility (Clark, Terry N. 2003; Clark, Terry Nichols et al. 2002; Glaeser & Gottlieb 2006; Glaeser, Kolko & Saiz 2001). Population growth creates larger markets for local business, as well as creating larger employment markets and talent pools within Geelong.

The Committee for Geelong's study tour indicates that second cities are recognising and investing in their attractiveness to new residents. The recent redevelopment of the waterfronts in Dundee and Pittsburgh, which echo

Geelong's waterfront renewal, have been important in revitalizing the city and attracting the first regional iteration of the Victoria and Albert Museum to Dundee. Pittsburgh and Richmond have attracted young, creative and skilled people through development of arts, culture and food, but mainly through enabling a new lifestyle within the city appealing to so-called millennials. Pittsburgh has been working on creating more bicycle lanes and upgrading the transport system to ensure that a transit system is available to a generation that has rigid work schedules and tries to avoid driving cars to work. As per Richmond, the incentives for the redevelopment of old buildings satisfy the environmental concerns of a generation with the urge for 'the new' but with a profound appreciation for the old and authentic. There has been a concerted effort in US to reinvigorate city centers, many of which declined following post-WWII suburbanization of employment and population. With its dense mix of people, housing and activities, Cleveland attracts young, creative people, which links to nurturing a culture of innovation and start-ups.

Geelong has natural advantages in amenity; it's positioned on Port Phillip Bay, the Barwon River and at the gateway to the Great Ocean Road. Compared to Melbourne, it is less congested and offers relatively more affordable housing, particularly close to the centre of the city. The city has also invested in its waterfront and the library and arts precinct. This focus on developing the inner city of Geelong is important; having a vibrant, attractive city centre that offers a range of retail, culture, leisure and entertainment is likely to attract new residents. There are a growing number of people choosing to live in Geelong but work in Melbourne, which highlights the attractiveness of the city, both its amenity and its affordability.

Summary

The lifestyle and amenity attributes of Geelong can be used to attract new residents to the city. By building on the city's appeal through the continued investment in central Geelong as an entertainment, arts, culture, leisure, sport, dining and retail precinct can build on this appeal, particularly for what Florida (2004) refers to as "the creative class". The marketing and improvement of Geelong as a place to live is an ongoing priority.

There should be continued investment in Arts, Culture and Sport to foster new creative talent, attract new people to the region and build on the international profile of Geelong. In addition, more work could be undertaken to further understand the attributes of why Geelong is an attractive place to live.

4. Start-Ups, Innovation, Entrepreneurs and Scale Ups

Prominent researchers such as Florida (2004), Glaeser (2011), Moretti (2012), Scott, AJ (2010) and Storper and Scott (2009) have all positioned creativity, innovation and entrepreneurship as central to city development, albeit with distinct views on the processes. Innovative new and existing enterprises are integral to the European Commission's Smart Specialisation development process and have also been linked to second city performance and productivity (Parkinson et al. 2012).

Eindhoven's transformation following the closure of Philips has been linked to the attraction and support of innovation and new industries. As noted in the discussion, Cleveland has worked on capturing start-ups spinning off from the city's Health Tech corridor, spending $87 million to create 3,000 jobs in the city, as well as creating shared working spaces and maker spaces. Development agencies provide a range of services to facilitate start-up development, such as commercialisation, networks, links to local supply chains, exporting and navigating Local Government permit processes.

Milwaukee has found that second cities can provide better support for new ventures, as major cities are more concerned with working with larger businesses. This creates opportunities for second cities to support innovation and emerging entrepreneurs, particularly through the single development agency models such as Eindhoven's Brainport. Brainport provides a unique business climate whereby new companies have access to a network in the high-tech industry and expertise that, along with high-quality infrastructure, generates new opportunities.

Geelong has advantages in supporting new ventures: it is large enough to have support, infrastructure and suppliers in place; affordable rents; and good access to the large Melbourne market and distribution points. There has been recent Victorian State Government support for start-ups in Geelong. Examples include the Runway project, a business incubator, and a cyber-security incubator linked to Deakin university, which are all positive developments for fostering new businesses in the city (Dalidakis 2016). There is also a commercial IT incubator located in the Geelong CBD.

While new and innovative businesses may generate excitement within a city, assisting their development should not be at the expense of scaling up existing businesses. Scaling up existing businesses can expedite the transformation of the economy, as results can occur much quicker than waiting for the maturation of start-ups. Eindhoven, Richmond and Sheffield noted the importance of SMEs in their economy, noting how these small to medium enterprises are more nimble than larger organisations, which enables them to respond to changing markets more quickly. These cities provide support through assistance with grant applications and connecting SMEs with large businesses in mentoring programs. These services, as well as assisting businesses to innovate, develop new products and access new markets are important for existing businesses as well as new ones.

Summary

Support for innovation, entrepreneurs and start-ups is at the centre of contemporary second city development thinking, which is supported by evidence from the study tour. The support for new and existing business activities in Geelong needs to be an ongoing activity.

Geelong Waterfront.

1.   http://thewatercouncil.com

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Appendix A

The following set of questions informed the interviews:

1. What is the vision for your city? How has this been developed?

2. How has the city's strategy developed? Who is responsible for its implementation? How is it measured?

3. What is the relationship between local/state/federal government, and how has this affected your city?

4. Please describe the key projects that have helped shape your city over recent years. Why were they needed? What challenges were facing the city?

5. Who led those developments? What other sectors or stakeholders were involved? How were they involved in the process? How was the community engaged in the process?

6. What has been the impact of these projects?

7. How would you describe your city's approach to economic development?

8. How are your community's social, cultural and economic needs considered and planned for?

9. What influence has the city's geospatial and built environment had in the city's redevelopment? How has this been considered and integrated?

10. What role has education and innovation played in your city's transformation?

11. What is your inter/relationship with your state's capital city?

12. What role has the port played in the economic development of your city and how has your city dealt with encroachment issues?

13. What role has infrastructure investment played in facilitating change and growth in your city?

14. What investment has there been in skills development as part of the economic transformation?

15. What role has the private sector and non-profit sector had in the transformation process?

16. Please describe the governance processes in the city; do you have a directly elected mayor?

Appendix B

Extract from the Assessment criteria overview from Gray and Walker (2016, p.6-11)

City	Country / State	Population (rounded to the nearest thousand)	Assets: A=Airport S=Shipping port U=University			Scale / Density	Key Economic Sectors	Does the city make a substanial contribution to the State / Country economy?
			A	S	U			
Antwerp	Belgium	506,000	✓	✓	✓	Second largest city in Belgium.	Diamonds. Petrochemicals. Electricity generation (nuclear and conventional)	Yes. Generates 17% of Belgium's national GDP.
Bilbao	Spain	347,000	✓	✓	✓	Bilbao is the main urban area in what is defined as the Greater Basque region. Greater Bilbao is the fifth-largest urban area in Spain.	First class commercial port. Tourism.	Yes. It is the economic centre of the Basque Country.
Bremen	Germany	547,000	✓	✓	✓	Second most populous city in Northern Germany and tenth in Germany.	Germany's fifth largest manufacturing workforce – food and beverages, automobile production, aircraft manufacturing, shipbuilding, armaments and defence. Logistics sector.	Yes. Major economic hub of the northern regions of Germany. GDP per capita is higher than the average for Germany.
Bristol	England	442,000	✓	✓	✓	England's sixth and the United Kingdom's eighth most populous city, and the most populous city in Southern England after London.	Aerospace Defence Media Information technology Financial services Tourism With a highly skilled workforce drawn from its universities, Bristol claims to have the largest cluster of computer chip designers and manufacturers outside Silicon Valley.	Yes. In 2014 Bristol's per capita GDP was 65% above the national average, the third highest of any English city (after London and Nottingham) and the sixth highest of any city in the United Kingdom.
Chattanooga	Tennessee	174,000	✓	✓	✓	Fourth largest city in the state of Tennessee	Tourism and Hospitality. Significant growth in start-ups. The city is served by several business incubators, with the Chamber of Commerce running one of America's largest, with 60 companies and 500 employees under one roof. Home to a $1b Volkswagen assembly plant.	Yes. Chattanooga has gone from close to zero venture capital in 2009 to more than five organized funds with investable capital over $50m in 2014. Enemployment below State and National averages
Cleveland	Ohio	390,000	✓	✓	✓	The 48th largest city in the US and the second largest city in Ohio after Columbus	Manufacturing Corporate headquarters of many large companies Healthcare Biotechnology Fuel cell research In 2005, Cleveland was named an Intel "Worldwide Digital Community" which injected $12m for marketing to expand regional technology partnerships, created a city-wide Wi-Fi network, and developed a tech economy.	Yes. In 2011 the Greater Cleveland area had a GDP of $134.4 billion (up from $130.7 billion in 2008).

City	Country / State	Population (rounded to the nearest thousand)	Assets: A=Airport S=Shipping port U=University			Scale / Density	Key Economic Sectors	Does the city make a substanial contribution to the State / Country economy?
			A	S	U			
Dundee	Scotland	148,000	✓	✓	✓	Scotland's fourth largest city and the 51st most populous built-up area in the United Kingdom.	Information technology. As one of Europe's foremost gaming hubs, Dundee is an international centre of excellence in digital media. Dundee is a key retail destination for North East Scotland and has been ranked 4th in Retail Rankings in Scotland. Healthcare.	Yes
Eindhoven	Netherlands	223,000	✓		✓	Eindhoven is the fifth-largest municipality of the Netherlands and the largest in the province of North Brabant.	A quarter of the jobs in the region are in technology and ICT. Biomedical technology hub.	Yes. Brainport Eindhoven Region is part of the cross-border Eindhoven-Leuven-Aachen technology triangle (ELAt). The region has an economy worth 157 billion euro of GDP that spends 4 billion euro on research & development
Malmö	Sweden	318,000	✓	✓	✓ ✓	The most populous city in Scania.	50% service-based economy -finance/business, culture/leisure, IT. There has been a major structural shift away from a few major employers towards smaller businesses. A very high rate of business start-ups, averaging 7 per day, and a 68% survival rate at 3 years.	Yes. Malmö is the economic and cultural centre of South Sweden. GDP has increased by 61% over the past 10 years.
Louisville	Kentucky	598,000	✓	✓	✓	The largest city in the Commonwealth of Kentucky and the 30th most populous city in the US.	Shipping and Cargo - the seventh largest inland port in the US. Health care and medical sciences. Whiskey distilling Tobacco Small business Two Ford plants and a major General Electric factory.	Yes. Nationally Louisville ranks 97 out of 363 in terms of per capita GDP.
Nantes	France	285,000	✓	✓	✓	The city is the sixth largest in France. Nantes is the capital city of the Pays de la Loire region and the Loire-Atlantique département, and it is the largest city in the Grand-Ouest (northwestern France).	Growing tourism sector, with the city welcoming 540,000 visitors in 2014, compared to 140,000 in 2006.	Yes
Newcastle upon Tyne	England	298,000	✓	✓	✓	Newcastle is the most populous city in the North East and the eighth most populous conurbation in the United Kingdom.	Biotechnology Retail Education The creative and cultural sector employs over 60,000 people in the region.	Yes. Newcastle is the economic hub of the North East. As part of Tyneside, Newcastle's economy contributes around £13 billion to the UK GVA.

City	Country / State	Population (rounded to the nearest thousand)	Assets: A=Airport S=Shipping port U=University			Scale / Density	Key Economic Sectors	Does the city make a substanial contribution to the State / Country economy?
			A	S	U			
Pittsburgh	Pennsylvania	306,500	✓	✓	✓	Pittsburgh is the second largest city in the Commonwealth of Pennsylvania.	High technology. Google, Apple, Bosch, Disney, Uber, Intel and IBM are among 1,600 technology firms generating $20.7 billion in annual Pittsburgh payrolls. Robotics Health care Nuclear engineering Tourism Biomedical technology Finance Education Alcoa's operational headquarters is located at its Corporate Centre in Pittsburgh, employing approximately 2000 people.	Yes. Pittsburgh is ranked 23rd in America for GDP by metropolitan area.
Richmond	Virginia	220,000	✓	✓	✓	The fourth-largest city in Virginia.	Defence Law Finance Corporate headquarters, including six Fortune 500 companies. Federal, state, and local governmental agencies.	Yes. State level significance
Sheffield	England	567,000	✓		✓	Sheffield is the fourth largest regional city in England.	Steel and metallurgy Advanced manufacturing Mining Services (health, education) Call centres	Yes. The UK Cities Monitor in 2008 named Sheffield one of the top ten cities to start a business.

Appendix C

List of Interviewees

The Committee for Geelong is very grateful for the support and assistance from our colleagues in the international cities we visited.

Dundee

- Kevin Bazley, Sector Deliver, Scottish Enterprise
- Nick Smith, Senior Planner, TAYplan
- Gordon Reid, Manager, TAYplan
- Professor Sir Peter Downes, Principal and Vice-Chancellor, University of Dundee
- Graham McKee, Projects Director, University of Dundee
- Gillian Easson, Executive Director, Creative Dundee
- Diarmid Mackinnon, Digital Producer, Creative Dundee
- Mairi Collins, Designer and Jeweller, Dundee Makerspace
- Alice Moore, Marketing and Communications Coordinator, V&A Museum of Design Dundee
- David Martin, Chief Executive, Dundee City Council
- Mike Galloway, Director of City Development, Dundee City Council
- Stewart Murdoch, Director of Leisure & Culture, Dundee City Council
- Gregor Hamilton, Head of Planning and Economic Development, Dundee City Council
- David Webster, Dundee Port Manager, Forth Ports Limited
- Alison Henderson, CEO, Dundee and Angus Chamber of Commerce

Eindhoven

- Naomie Verstraeten, Program Manager Brainport International Programme, Brainport Development
- Clement Goossens, Innovation Strategy and Partnerships, Technische Universiteit Eindhoven
- Guus Sluijter, Strategic Advisor, Eindhoven City Council
- Peter Portheine, Director, Slimmer Leven 2020

Cleveland

- Richey Piiparinen, Director of the Center for Population Dynamics, Cleveland State University
- Joe Cimperman, CEO, Global Cleveland

- Pamela Ashby, Field Office Director, U.S. Department of Housing and Urban Development
- Richard Hendershot, Program Manager, U.S. Department of Housing and Urban Development
- Freddy Collier, Director of City Planning Commission, City of Cleveland
- Tracey Nichols, Director of Economic Development, City of Cleveland
- Kristen Morris, Chief Government and Community Relations Officer, Cleveland Clinic
- Brian Kolonick, General Manager of Global Healthcare Innovation Alliance, Cleveland Clinic
- Vijay Iyer, Vice President Medical Devices, Bio Enterprise
- Lee Fisher, Senior Advisor, CEOs for Cities

Pittsburgh

- Robert Rubinstein, Executive Director, Urban Redevelopment Authority
- Maxwell King, President and CEO, The Pittsburgh Foundation
- Ken Zapinski, Senior Vice President Energy & Infrastructure, Allegheny Conference
- Peter Schenk, Port Authority of Allegheny
- John Tolbert III, Field Officer Director, U.S. Department of Housing and Urban Development
- Rebecca Maclean, Senior Community Planning & Development Representative, U.S. Department of Housing and Urban Development
- Phoebe Downey, Program Manager, Envision Downtown
- Raymond Gastil, Director of the Department of City Planning Pittsburgh City Council
- Justin Miller, Senior Planner of the Department of City Planning, Pittsburgh City Council
- Jeanne McNutt, Executive Director, Uptown Partners
- Dale McNutt, Executive Director, Uptown Partners

Richmond

- Lee Downey, Deputy Chief Administrative Officer for Planning and Economic Development, City of Richmond

- Kim Scheeler, CEO, Greater Richmond Chamber of Commerce

- Daniel LeGrande, Director of Inland Terminals and Sales Support, Port of Virginia

- Laura Godbolt, Economic Development Manager& Foreign Trade Zone Administrator, Port of Virignia

- Brian Bashara, Port of Viriginia

- Barry Matherly, President & CEO, Greater Richmond Partnership

- Glenn DuBois, Chancellor, Virginia Community College System

- Jeffrey Kraus, Assistant Vice Chancellor for Strategic Communications, Virginia Community College System

- Niraj Verma, Dean, L. Douglas Wilder School of Government and Public Affairs, Virginia Commonwealth University

- Pamela Stallsmith, Director of Communications and External Relations, L. Douglas Wilder School of Government and Public Affairs Virginia Commonwealth University

- H. Edward "Chip" Mann, Immediate Past Chair, Virginia Board of Historic Resources

- Hon. Malfourd W. Trumbo, Judge

- Tyler Trumbo, Documentary Filmmaker

- Professor Edward P. Crapol, Department of History at the College of William and Mary.

- Jeanne Zeidler, previous Mayor of Williamsburg

- Suzanne Flippo, Jamestown-Yorktown Foundation

- Stuart Connock, retired State Official

- Richard M. King Jr., Kings Korner Enterprises Inc

- Jacques J. Moore Jr. and Carolyn Moore; Moore Cadillac Co.

Bristol

- James Durie, Chief Executive, Bristol Chamber of Commerce & West of England Initiative and Executive Director, Business West

- Robin McDowell, Economic Development Team Manager, Bristol City Council

- Matthew Cross, Head of Inward Investment, Invest Bristol Bath

Liverpool

- Dr. John Morissey, Senior Lecturer, Environmental Geography Natural Sciences and Psychology, Liverpool John Moores University

- Professor Richard Meegan, Department of Geography and Planning, School of Environmental Sciences, University of Liverpool

- Paul Dickson, Manager, Low Carbon Innovation Hub

- Rosita Aiesha, Post-Doc, Liverpool John Moores University

Sheffield

- Edward Highfield, Director, Creative Sheffield

New York

- Michael Rubinger, President & CEO, Local Initiatives Support Cooperation

- Rashid Ferrod Davis, Founding Principal, Pathways in Technology Early College High School (P-TECH)

New York, USA

Appendix D

Cities for Tomorrow Conference

The Committee for Geelong was invited to attend the Cities for Tomorrow conference held in New York on 18 and 19 July 2016. Organised by The New York Times, the third Cities for Tomorrow conference brought together decision makers responsible for creating vibrant urban centres to discuss successful cities. A community of urban leaders—ranging from policy makers, entrepreneurs, urban planners to architects—exchanged their insights and expertise on topics such as innovation development in US cities; the ways that bureaucrats can help start-ups thrive; the role of Police in the Community; and the issues that cities face today. The remainder of this section makes a selection of observations on case studies, examples and practices that were noted at the Cities for Tomorrow conference.

Denver – Urban improvement through transit investment via sales tax

Denver is one of the fastest growing cities in the US, therefore making it a prime example for other cities to model themselves on. The city rose above urban irrelevance and economic stagnation, becoming a city on millennials' radar. Recent studies have shown that, from 2009-2014, Denver experienced the highest annual migration of young adults within a metropolitan area in the United States (Hanc 2016). The city's healthy economy, proximity to outdoor recreation, its forward-thinking mindset and its walkability are features that attract this new generation.

A key individual for Denver's transition was Governor John Hickenlooper, the current Governor of Colorado and former Mayor of Denver, who led the efforts to convince the population to give back $3 billion in tax refunds that they were eligible to get in order to invest in the city. This was made possible by a referendum in 2004 wherein voters approved a sales tax increase to fund a light-rail transit system of around 122 miles (Hanc 2016). Having the 34 municipalities throughout the metro area agree with the light-rail proposal was pivotal in the success and growth of the city.

For Governor John Hickenlooper, it is paramount that individuals in leadership be able to listen and create consensus, ensuring that all sides of the community are involved in the decisions which lead to a sense of ownership — an extremely important aspect for people

not to distance themselves from democracy by not being involved. When questioned by the Committee for Geelong about long-term vision for cities, Governor Hickenlooper referred to the State of Utah as an example of good practice. The program Envision Utah brought together the Chamber of Commerce, church groups, the private sector and others, to decide what kind of infrastructure should be developed throughout the state. Utah focused heavily on transport, investing in light-rail infrastructure and ensuring that their interstates would have the capacity to handle the growth of its cities.

Public transport as a stimulus to urban enhancement

A pro-transit environment is a decisive factor for new businesses looking for cities to settle. During an entrepreneurial panel with leaders of recently launched successful companies, it was pointed out that cities with educated talent, good public transport connectivity, lower cost living and a growing creative community are highly attractive to new companies. The means by which local governments support entrepreneurship and start-ups is also important, since new entrepreneurial companies want to be encouraged but not made dependent on local government. Young entrepreneurs value cities that are focused on re-energising - not just at their core, but also in the rings around the city centre. This is seen as potentially more advantageous as such cities offer more accommodation options to workers.

Police in the community

A rising concern for new companies is the issue of public safety and how it affects their workers. The balance between effective law enforcement and more compassionate policing has been a huge challenge in the USA and an important theme during the Cities for Tomorrow conference. During a panel discussion, Congressman Hakeem Jeffries and Professor Mark A. Kleiman agreed that young police officers often have to work in extremely hostile environments, which is a result of a multitude of complex issues such as a poor educational system, lack of job opportunities, poor housing and isolation through lack of transportation. These police officers are not always provided with the tools they need to work effectively within their communities.

Personality proof value and mindfulness training are seen as better ways to assist than current training that, according to Professor Kleiman, resembles the training of an infantry platoon. A possible solution could be to build understanding within the police community, rather than an excessive use of force, brutality and false testimony which are types of corruption.

Congressman Jeffries also indicated gentrification as a process that changes a neighbourhood's dynamics, particularly in terms of crime. It was an issue debated within different panels and some speakers raised their view that gentrification may have a lot of positive aspects. Ultimately, however, many people are being pushed out of their neighbourhoods (Tugend 2016)..

Battery Park City Authority

As a result of its attendance at the Cities for Tomorrow Conference, the Committee for Geelong was subsequently invited to meet with the Battery Park City Authority and tour the site. The Authority is a New York State public benefit corporation responsible for planning, coordinating, creating and maintaining a balanced community of residential, retail, commercial and park spaces within a designated 92-acre site on the lower west side of Manhattan. Established in 1968, the Authority's initial task was to extend Manhattan's shorelines in the area along the Hudson River, which were previously occupied by 20 piers that used to handle produce for the Washington Market (nowadays Tribeca neighbourhood) before their collapse in the 1950s (Battery Park City Authority 2016).

Public-private partnerships between private developers and Battery Park City Authority have been the main drivers behind the development of a planned multi-use community along 92-acres of landfill. In 1979 Battery Park City was adopted, allocating 30 per cent of the area to open spaces and public parks (Gill 2014). The remaining area is carefully organised between commercial, retail and residential spaces, being home to more than 13,000 people. Since 2000, Battery Park City has been adopting a series of environmental guidelines for residential buildings as well as for commercial and institutional buildings, trying to ensure that future developments are executed more sustainably and responsibly (Battery Park City Authority 2016). Revenues from the agency have been churned to the city over the past 22 years, making a total of $1.8 billion that has been used to build affordable housing throughout New York (Dwyer 2010).

The redevelopment of the lower west side of Manhattan by the Battery Park City Authority presents similarities to sites in Geelong being considered for redevelopment. For example Alcoa's site at Point Henry and the Victorian State Government's development of the broader Moolap Coastal Strategic Framework Plan.

Local Initiatives Support Corporation

While in New York, the Committee for Geelong was invited to meet with representatives of the Local Initiatives Support Corporation (LISC), a national organisation dedicated to helping non-profit community development organisations operating at a neighbourhood level. LISC was founded over 35 years ago, focusing on the development and preservation of affordable housing. For LISC, local organisations know their neighbourhoods the best and real solutions and lasting changes must come from the ground up. LISC, along with local non-profit finance organisations, build and manage housing but also build other type of facilities that a neighbourhood might need, such as childcare centres or medical centres.

The initial capital pool for LISC in 1980 came from eight funders. Since then, LISC raised almost $15 billion from thousands of donors and supporters, such as foundations, corporations, financial institutions, government entities and individuals. Through these resources, LISC creates grants to support community groups, and also provide loans and equity to develop or preserve affordable housing, health clinics, schools, among others (LISC 2016).

For more than 30 years, LISC has been committed to ensuring that community organisations are supported at every level of government — federal, state and local. Between the 1960s and the beginning of the 1980s, philanthropic organisations played a huge role in supporting community development organisations. Eventually, state and local government started to support these organisations and nowadays banks are also significantly involved. The Community Reinvestment Act is a national policy that induced banks to reinvest in communities where they take deposits, through financing projects of non-for profits. Although this has been in practice since the 1980s, it was only really enforced in the 1990s. Part of LISC's work is to develop strategies for the private sector to also be involved and invest in community development projects. Although the returns may not be substantial, private investors will not experience a loss through participating in such initiatives.

The meeting with LISC was also an opportunity to learn about the revitalisation of Philadelphia and how a textile city in 1960s has recovered from the decline caused by the loss of industry and is now considered one of the "hot cities in America".

Up until the beginning of the 1990s, Philadelphia was struggling due to a lack of jobs and a consequent decrease in population, which led to the deterioration of the neighbourhoods surrounding downtown. The directly elected Mayor, Ed Rendell, propelled the city towards change in 1992, focusing on the revitalisation of downtown, which, according to his belief, would then trigger the development of the neighbourhoods. The city took advantage of its natural advantages and historic attributes to make tourism and history the centre of its rebirth. Similarly to Pittsburgh and Cleveland, Philadelphia now has high-level jobs, mainly due to the technological and innovation start-up companies that spin-off from the city's Universities and Colleges.

UN Global Compact

The UN Global Compact is the world's largest voluntary corporate responsibility initiative. A strategic policy initiative for businesses that are committed to aligning

their operations and strategies with ten universally accepted principles in the area of human rights, labour, environment and anti-corruption. Being the urban arm of the UN Global Compact, the Cities Programme is working to achieve fair, inclusive, sustainable and resilient cities and societies. By bringing together government, businesses and civil society, the Cities Programme addresses complex urban challenges by focusing on the UN Global Compact Ten Principles and on the Global Sustainable Development Goals

The Committee for Geelong delegation had the opportunity to strengthen its relationship with the UN Global Compact Cities Programme and describe the work that the Committee and its partners have been undertaking in Geelong, while meeting representatives of the UN Global Compact at their head-office in New York.

Ginia Bellafante and Charles Duhigg – New York Times Cities for Tomorrow Conference hosts.

Appendix E

Milwaukee – innovative world water hub

Kristian Vaughn, Intern, and Dean Amhaus, CEO and President, The Water Council, Milwaukee, USA

As the City of Milwaukee, Winconsin, USA, celebrates its fifth anniversary as an Innovating City with the Global Compact Cities Programme, The Water Council reflects on its achievements, challenges and lessons learned, from its beginnings as an economic development initiative to its current position of World Water Hub.

Milwaukee's abundant freshwater resources afford the City of Milwaukee unique privilege and great responsibility. Located along the southwestern shore of Lake Michigan at the confluence of the Milwaukee, Menomonee, and Kinnickinnic rivers, the city is naturally endowed with Earth's most precious resource. Throughout the city's history, local industry and residents have taken advantage of the rivers and lakes for monetary gain, drinking water and recreation. Our appreciation and recognition of this resource developed into a dangerous presumption that our community possessed an eternally available water spigot. While countries in arid regions across the globe face water crises in the truest sense of the word, Milwaukee has never run out of fresh water. We were, however, threatened with running out of *clean* fresh water.

Milwaukee's renaissance as the World Water Hub began over a century ago. The strong river network, access to a deep-water port, available labour and a growing market attracted major industry to the region (Romell 2013). The small companies that emerged in the first decades of the 20th century developed into today's major industry leaders — most notably, A. O. Smith Corporation, Badger Meter, and MillerCoors' umbrella of brands. The city's period of prosperity shuddered in the 1960s as many Midwestern American cities suffered from massive de-industrialization, including a broad decline in manufacturing jobs that shifted to southern locations in the United States and overseas (Kanter & Bird 2013).

Economic development efforts shifted focus as the period of prosperity declined. In contrast to a previous era when Milwaukee touted its industrial strength, the 1970s saw leaders and businesses trying to preserve remaining jobs while simultaneously innovating to create new ones. It quickly became apparent, however, that jobs were not the only concern. While Milwaukee's 'wet' industries had thrived for over half a century, its wastewater management practices were irresponsible and misinformed, resulting in the heavy pollution of the city's waterways. Indicating

Milwaukee was not alone, the United States Congress passed the *Clean Water Act* of 1972 to address water pollution nationwide. The Act established specific regulations governing the discharge of pollutants into waterways and the monitoring of water quality in surface water resources (US EPA 2013). In response, Milwaukee businesses abandoned their previous roles as mere water users and innovated to become water technology companies that used their new expertise in efficient water management to grow and thrive. The city not only began to see a resurgence in the strength of its business sector, it also saw new opportunities being created.

As in other world communities, new technologies, shifting business influence and urban demographic changes forced Milwaukee and Southeastern Wisconsin to reevaluate the region's move into the 21st century. Milwaukee leaders knew the area needed a distinct advantage if it was to remain an influential urban centre on the Lake Michigan shore. While water had always been a key component of the region's cultural identity, the unified scope and power of water technology companies in Southeastern Wisconsin had yet to be realized.

Developing a water industry cluster

In early 2007, the Milwaukee 7, a Southeastern Wisconsin business consortium, began an in-depth study of potential economic development opportunities. The group discovered not only a high concentration of successful and prominent water technology companies, but also the Great Lakes WATER Institute — a water research facility of the University of Wisconsin-Milwaukee. This discovery demonstrated the presence of a strong industrial water sector and supporting research capabilities to produce new technologies.

In spring that year, Paul Jones, Chairman and CEO of A.O. Smith Corporation (water heating equipment), and Rich Meeusen, President, CEO and Chairman of Badger Meter

Inc. (liquid flow measurement and control technologies), met to discuss collaborative business opportunities. On a tour of A. O. Smith's innovation laboratory, Meeusen commented on the business power the region could potentially leverage if its water companies worked to strengthen the water industry cluster. Jones agreed and the two CEOs approached Julia Taylor, President of the Greater Milwaukee Committee (GMC) — a key leader in the Milwaukee 7 economic development effort who had already started building the water technology industry under the Milwaukee 7 banner — to see how the GMC could help advance their efforts. The two parallel initiatives combined their work and what is now called The Water Council was formed.

In an effort to confirm the water industry cluster, business leaders called upon Professor Sammis White, a professor of urban planning at the University of Wisconsin-Milwaukee and an economic development scholar, to research the region and determine the feasibility of pursuing an economic development campaign in water. With a team of graduate students, Professor White produced a regional analysis indicating that Southeastern Wisconsin had great potential to gain a foothold in the water market.

In July 2007 the first Water Summit was convened at Discovery World on the Lake Michigan shore. Sixty individuals of various backgrounds attended — fulfilling the initial open, participatory forum envisioned by the organizers (Kanter & Bird 2013). Attendees from government, business, and education quickly recognized the potential of Milwaukee as a water industry cluster and began work to make it a reality. Major business executives devoted portions of their daily activities to developing the idea, while the Greater Milwaukee Committee and the not-for-profit Spirit of Milwaukee donated office space and permanent staff. The Water Council has a mission of economic development, the creation of a talent pipeline

and the development of new technologies to make Milwaukee the Silicon Valley of water.

As key stakeholders prepared for the second Water Summit in July 2008, they reflected on recent activities and asked, "Do we *really* have what it takes? Or, did we *think* we had it?" Professor White conducted additional research in support of the initial 2007 discovery and answered the former question with a resounding "Yes!" There was a caveat, though. While it was clear Milwaukee could become both a regional and national centre for water business, its prowess and legitimacy could only be ensured with decisive action from local leaders. Over 120 regional businesses had a direct interest in water, but their disparate foci and goals weakened the region's potential (White 2008). To instigate economic development, the region's water cluster needed to be strengthened and promoted with a forward thinking, unified vision and resolute determination. Professor White's 'Water Summit White Paper' proved to be an important turning point and catalyst for inspiring and accelerating the development of The Water Council: "The speed of development that is needed will not come from small amounts of money. The region needs all the public and private support that it can possibly muster to become a true global leader. The region and its supporters must place a large bet on the water industry, beginning now" (ibid).

Innovating to become a world water leader

With definitive proof of Milwaukee's regional assets, participants left the second Water Summit confident in the region's potential. Julia Taylor and Dean Amhaus, then-President of the Spirit of Milwaukee, travelled to China in late 2007 on unrelated business to the water technology cluster. While there they learned of the Global Compact Cities Programme by a chance meeting in Beijing with

The first floor of the Global Water Centre in Milwaukee features a state-of-the art Flow Lab, providing tenants with the ability to conduct highly accurate testing of water samples in real-time. Image: The Water Council.

Fred Dubee, a Senior Advisor to the UN Secretary-General. They recognized the significance that the designation could have on Milwaukee's ambition to become a world water leader. Water Council leaders began discussions with the Cities Programme and in April 2009 Milwaukee received its designation as an 'Innovating City'.

Because water is a multi-faceted and complex industry and issue, Milwaukee leaders decided to pursue various initiatives within the Cities Programme. Regional water companies in cooperation with the City of Milwaukee work to strengthen and promote aquaculture, reduce phosphorous in regional water sources, reduce pollutants in storm water runoff, improve wastewater treatment, assist municipalities to adopt new water technologies, manage the quality of drinking water supply and integrate multiple technologies to solve complex water problems.

Milwaukee's comprehensive water industry goals and new international prowess have legitimized its efforts. In the past four years, the City of Milwaukee and Water Council have received a massive influx of human and financial capital. Dean Amhaus became the President and CEO of The Water Council in 2010 and immediately implemented his unique guerilla-style marketing tactics to raise awareness about Milwaukee's water culture and current efforts. Community and business leaders invested unquantifiable amounts of money and time to strengthen business practices, develop and promote The Water Council and grow the culture of water in the region.

Fostering talent through education

The future success of Southeastern Wisconsin's water industry depends on its current strength and the growth of water culture in the community. The Water Council, in cooperation with local universities and technical schools, conducts outreach programs to ensure that 100 per cent of students in the community look to the water industry as a viable, strong career path. Students of all ages lie at the centre of activities to promote water education programs, internship opportunities and career offerings. The region's talent development network grows stronger each day as water education is infused in curricula and programs around the community.

In September 2010, the University of Wisconsin-Milwaukee opened the School of Freshwater Sciences — the only graduate school of its kind in the United States to specialize in fresh water. In addition, over $US2 million was granted in 2010 through the United States National Science Foundation and Milwaukee businesses to establish an Industry/University Cooperative Research Centre (see *Milwaukee's blue revolution* on page 49). The University of Wisconsin-Milwaukee, Marquette University and area businesses work in collaboration to conduct research and produce new technologies. The Water Council has also created a network of 20 partners in the Southeastern Wisconsin region to develop education and training programs. Over 90 internships are available and five university student chapters promote the water industry and issues on area college campuses. The programs have thus far reached over 3,000 students.

Aquaponics

In 2011, IBM selected Milwaukee to participate in the Smarter Cities Challenge. A team of executives worked in the city for three weeks studying urban agriculture and concluded that unique expertise in the field and the robust water industry cluster enabled the city to influence the world food supply, act as water stewards and "become a smarter city that feeds itself" (IBM Smarter Cities Challenge 2011). Two examples of Milwaukee's thriving aquaponics movement are Growing Power and Sweet Water Foundation (see an article about this on page 111). Growing Power is an urban agriculture icon founded by Will Allen that specializes in intensive urban agriculture, small livestock production and community development programs.

Establishing a physical hub

On 12 September 2013, Milwaukee celebrated a milestone with the opening of the Global Water Center and launch of The Brew. Located along the banks of the Menomonee River, the Global Water Center is the world's first collaborative business and academic research and commercialization facility focused on freshwater technologies. Housed in a rehabilitated seven-storey, 98,000-square-foot (9km²) factory, The Water Council now runs the World Water Hub from the heart of Milwaukee. The centre serves as a gathering point for the industry where established business people connect with new entrepreneurs to exchange ideas and collaborate.

A world water hub

The Brew operates within the Global Water Center as a mentor-driven seed accelerator that focuses on global freshwater challenges through water technology entrepreneurs. Reed Street Yards, a global water technology business park, is located just across the street. The Yards is a 17-acre (6.8 hectare) office and research zone where water technology companies have the opportunity to construct buildings to their exact specifications and work within the region's industry network to develop new technologies. This development represents the community's cross-sectoral collaboration and subsequent strength of Milwaukee as the World Water Hub.

The Water Council experiences daily triumphs — programs are funded, new industry partners join the effort and opportunities present themselves. But there exists a broader triumph; an ever-stronger, ever-growing sense of unity and community around Milwaukee's water culture. Once, Milwaukee was an American city on a large freshwater lake. Now, we act locally and work globally: hosting delegations from other American cities and foreign countries, calling our partners throughout the world and sparking the imagination of a new entrepreneur who wants the opportunity to work in the Global Water Center. Our partnership with the Global Compact Cities Programme affirms the belief that no one person, business or organization can solve the world's intractable problems alone. It is an effort that requires people in different sectors to recognize their industry and academic assets and then capitalize on their collaborative strengths.

Milwaukeeans have never needed to ask if our freshwater supply can support the region's population — the three rivers, numerous lakes and a Great Lake provide an overabundance of water. However, our complacency and inattentive government and business policies served our region poorly.

As we confront the freshwater issue in the 21st century, we are keenly aware of the delicate balance that exists between human productivity and protection of the world's natural ecosystem. While Milwaukee uses its water technology expertise to strengthen companies through strategic water consumption and recycling processes, all parties involved feel passionately that our

endeavour transcends our community and country. Our region's responsibility is great and we are humbled by the fact that our actions impact our fellow human beings across the globe. We proudly uphold the United Nations' vision: for our community, for our country, for us all.

The City of Milwaukee has been a participant of the United Nations Global Compact since 2009. Engaging at the Innovating level, Milwaukee committed 15 water-related projects to its participation. Also a Leading city, Milwaukee has exemplary urban planning practices and shares lessons and models with other cities.

(From left) Co-chairs of The Water Council, Rich Meeusem (CEO, Badger Meter) and Paul Jones (CEO, A. O. Smith Corporation) 'breaking the ice' at the Global Water Center opening with Scott Walker (Governor of Wisconsin). The initial concept for the council was born from Meeusem and Jones' vision that business could be leveraged for the region if Milwaukee's water companies came together in a cluster. Image: The Water Council.

Committee for Geelong members, research project partners and research team.

Second Cities Symposium: smaller and smarter
Newcastle, 3-5 October 2018

Strategic investment across key sectors is earning Greater Newcastle a reputation as one of Australia's emerging dynamic metropolitan cities. This investment comes at a time when Australian governments at the federal and state levels are looking for new ways to stimulate and leverage the economic and social contribution of the country's major regional centres, of which Newcastle is a prime example.

This national focus on the contribution of cities outside the capital regions reflects a growing global interest in 'second cities'. These second cities represent a significant proportion of the world's people, economy and activities. Generally, they are characterised by a population of between 50,000 and 1 million people, they have undergone a planned and strategic economic transformation, and they are contributing significantly to the national economy. As well as easing pressure on their capital city counterparts, second cities are often recognised for providing strategic gateways to regional economies – such as in Australia's productive 'resource regions' that are prominent in New South Wales, Queensland, and Western Australia.

Newcastle offers a compelling example of an emerging second city. With the closure of BHP in 1999, it has reshaped itself economically and socially over the past two decades. This latest renaissance will reshape the city again. Newcastle is also a gateway to the Hunter – Australia's most economically productive region.

As a result, Newcastle is ideally positioned to host a unique event focusing on the reality and opportunities of a transitioning second city. The *Second Cities Symposium: smaller and smarter* will provide an international platform for airing and contesting leading contemporary thought in urban and regional planning and development. The event will showcase Greater Newcastle's experience and potential on its journey to becoming a global 'second city'. It will also offer the opportunity to explore aspects of the important city-region nexus of economic flows and travel for work and recreation.

Symposium focus: Innovation, infrastructure, liveability

Drawing on local, national and global expertise, the symposium will provide a forum for analysing, debating and informing thinking on the evolution of second cities toward a state characterised by resilience, sustainability and liveability. It will explore innovation and disruption in urban design, city and regional planning, economic development, technology development, infrastructure, innovation, liveability and wellbeing.

The symposium will address three broad intersecting themes:

1. Innovation: industry, education, technology, disruption, living lab

2. Infrastructure: urban planning, design and development, technological opportunities

3. Liveability: wellbeing, community, identity, arts, culture, and placemaking.

The symposium will host thought leaders among expert practitioners (e.g., city managers), consultants and academics in a range of disciplines. They will share practical insights, research and overarching analysis of long-term trends and opportunities. They will also be asked to challenge each other – with managers challenging academics, and academics challenging consultants, for example.

An important facet of the symposium will be the combination of local expertise and local case studies. They will be provided by the region's government, consultancy, and academic communities. For comparison, international leaders in their fields will offer their benchmark cases and forecasts.

The format will comprise up to three keynote speakers; panel discussions combining academics, practitioners and consultants; and 'walk-shops' – interactive walking workshops to sites of particular interest in Greater Newcastle, hosted by experts.

Appeal: Cross-sector / cross-disciplinary

The symposium will be designed to appeal to delegates from industry, government, the community sector and academia across a range of disciplines including:

- architecture
- engineering
- environmental science
- economics
- information science and technology
- housing
- health and social services
- arts and culture.

Logistics: Planning and timing

The Hunter Research Foundation (HRF) Centre of the University of Newcastle is leading the development of the symposium. The aim is to provide a much needed forum for a growing cross-sectoral dialogue on the future of Greater Newcastle and the Hunter.

A key role in the delivery and impact of the symposium will be local and international partners providing financial and in-kind support.

The core of a working group has begun to design the symposium. Further planning and implementation of all aspects of the symposium will benefit from additional input from major partner organisations. The efforts to be undertaken include program development, marketing and promotion, and organising for conference facilities and delegate services. This group will be led by the HRF Centre.

The symposium is slated to be held from 3-5 October. The date of the symposium has been determined in light of competing conferences and other events in Newcastle, nationally, and internationally. The organising team will work to leverage other events in the region and elsewhere in Australia that are appealing to a similar target audience (e.g., through sharing speakers, joint advertising or cross promotion).

Approximate timing for the development of the symposium is as follows:

Establish working group	June
Draft program	July
Develop prospectus	July
Select and invite presenters	July
Finalise conference facilities (venue, delegate registration and accommodation etc)	July
Commence marketing	July/August
Confirm all partners	August
Confirm presenters	August/September
Finalise program	August/September

Engaging the city: Sponsorship opportunities

This Second Cities Symposium is intended to be the first in an annual series hosting international thought leadership in this domain. As an initial event, it represents an experiment and a catalyst for cross-sectoral collaboration in Greater Newcastle.

Organisation of this effort requires contributions of cash and in-kind. The in-kind support would include staff time, ties to internationally recognised specialists, and sharing of expertise (either staff or consultants). Funds are needed to cover the investment of staff time by the non-profit HRF Centre for this first symposium. Additional funds are needed for travel and fees of expert presenters. Cash contributions from major partners are sought to address both organisational costs and speaker expenses.

Sponsorship benefits will be commensurate with the size of contribution. By way of example, an investment of $20,000 includes:

- **branding and exposure** for the sponsor through the symposium registration website, acknowledgement on all event collateral, sponsor branding on all promotion and publicity
- **ticketing and networking** for the sponsor through complimentary passes for the symposium and related networking activities
- **input to event composition** for the sponsor through a role on the symposium reference group and opportunities to establish additional activities for sponsor organisations with guest speakers.

The Centre is looking for synergies, such as a sponsor funding a guest speaker, who then provides an additional workshop or consultation for the sponsoring organisation.

For further information about the Second Cities Symposium – Newcastle, please contact the HRF Centre: Kate Robinson, Project Manager, kate.robinson@newcastle.edu.au m: 0408 115 467 or Will Rifkin, Director, will.rifkin@newcastle.edu.au p: 02 4921 5972.

Internal Memo

TO:	ALL COUNCILLORS
CC:	CHIEF EXECUTIVE OFFICER
FROM:	DIRECTOR STRATEGY AND ENGAGEMENT
DATE:	4 NOVEMBER 2019
SUBJECT:	**CITY WIDE – GATEWAY CITIES LAUNCH - INVITATION**

This memo responds to a Lord Mayoral Minute (24 July 2018) requesting the City of Newcastle's engagement in the development of a National Second Cities Policy Framework.

CN has supported the development of a research report led by the Committee for Geelong in partnership with the University of Newcastle / Hunter Research Foundation Centre, University of Wollongong and Deakin University. CN has also supported the delivery of two successful Smaller and Smarter Cities (previously Second Cities) Symposiums in Newcastle.

This research report has recently been completed and is titled 'A Tale of Three Cities'. Key highlights:

- A definition of what are Second Cities of Australia, or newly named Gateway Cities – Newcastle, Wollongong and Geelong.
- The human advantage of Second Cities – liveability, connectivity and population.
- The economic advantage of Second Cities – industry pioneers and innovation gateways.

Collectively, the report suggests that the three Gateway Cities are well positioned to facilitate new industries and jobs, while also providing the amenity and lifestyle people desire. The research advocates for greater strategic investment in Gateway Cities by all three tiers of government and identifies the following four steps that governments can take to work in lockstep with each other:

1. Collaboration and prioritisation strategy
2. Housing, services and infrastructure
3. Mobility and access options
4. Project priorities.

The research report includes nine recommendations for action. Most notably, the report calls for the development of an alliance between the City of Newcastle, City of Wollongong and 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.

Councillors are invited to attend:

Event:	The launch of 'Tale of Three Cities' Research Report with Federal Minister for Population, Cities and Urban Infrastructure, The Hon Alan Tudge MP
Date:	Monday 25 November 2019
Time:	10am
Location:	Parliament House, Parliament Drive, Canberra, ACT.

Contact: Ashlee Abbott, Manager Corporate and Community Planning on 4974 1310.