

Draft

Economic Development Strategy

2021

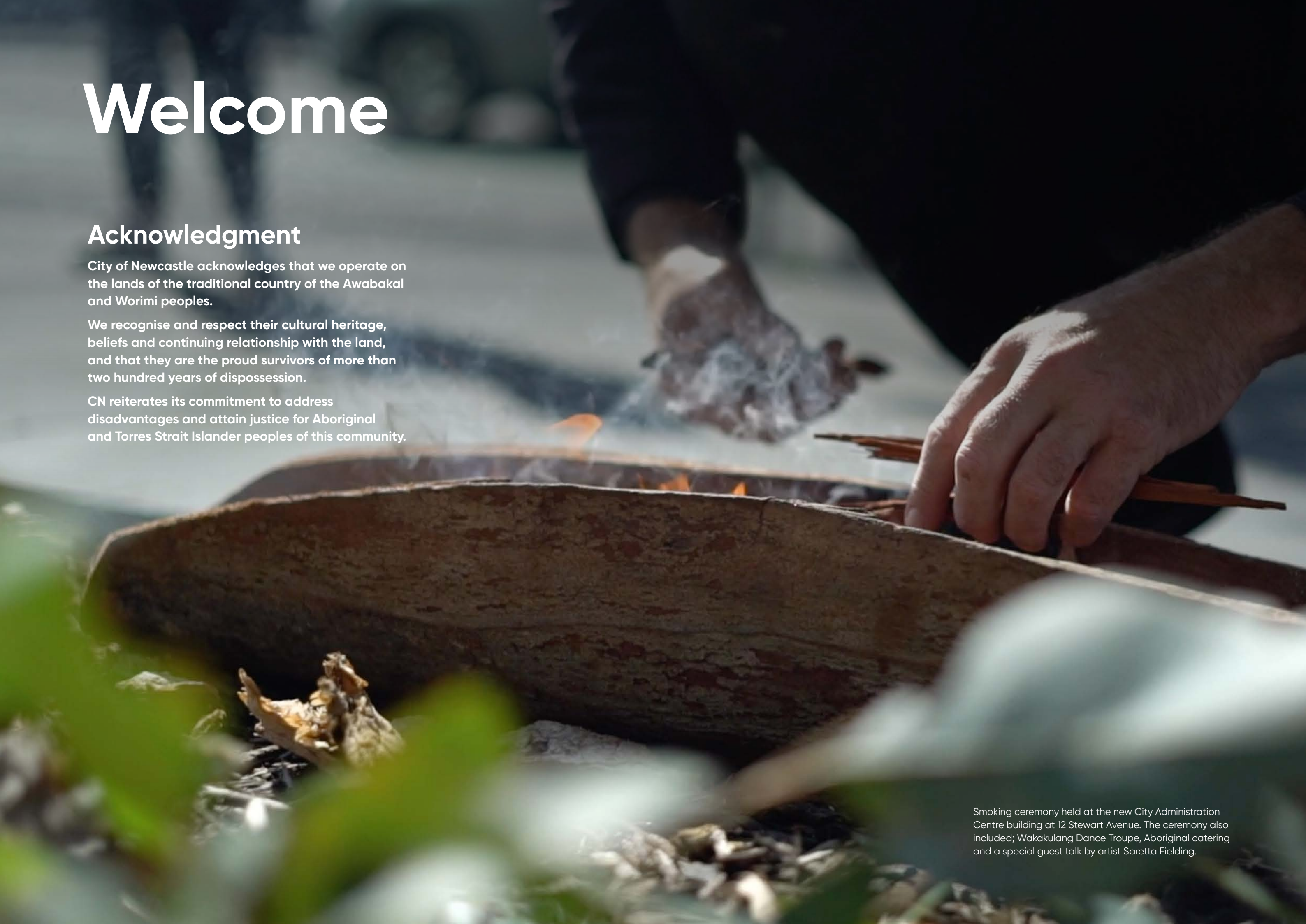


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City of
Newcastle

Welcome

A close-up photograph of a person's hands performing a smoking ceremony. The person is holding several long, thin wooden sticks over a large, shallow, weathered wooden bowl. Smoke is rising from the bowl, and the background is blurred, showing green foliage and a person's legs in the distance.

Acknowledgment

City of Newcastle acknowledges that we operate on the lands of the traditional country of the Awabakal and Worimi peoples.

We recognise and respect their cultural heritage, beliefs and continuing relationship with the land, and that they are the proud survivors of more than two hundred years of dispossession.

CN reiterates its commitment to address disadvantages and attain justice for Aboriginal and Torres Strait Islander peoples of this community.

Smoking ceremony held at the new City Administration Centre building at 12 Stewart Avenue. The ceremony also included; Wakakulang Dance Troupe, Aboriginal catering and a special guest talk by artist Saretta Fielding.

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Executive Summary

The City of Newcastle's 2021 Economic Development Strategy (EDS) offers a transformative perspective to economic development with a deliberate people-centred and place-led approach. Our view is that the success of our local and regional economy is built on the talent, skills and ingenuity of our people. These skills lead to innovation, creativity and ultimately the formation of new jobs and investment. Our Strategy seeks to build a skilled and innovative community supported by key city infrastructure and enhanced by a vibrant lifestyle.

Historically, it has been assumed that people follow jobs. This is changing. Jobs are beginning to follow people. The improvements to communications and technology, combined with the increasingly service-based economy of the 21st century mean that many jobs are no longer anchored to a location. This trend has been further accelerated by COVID-19. This is changing migration patterns and offers an opportunity for Newcastle to strengthen its economy.

Newcastle has a range of economic opportunities surrounding the city centre, which are described as the Innovation Arc in this Strategy. The Innovation Arc is defined as the catalyst areas identified in the Greater Newcastle Metropolitan Plan. These catalyst sites include Williamstown (Newcastle Airport), Port of Newcastle (and surrounding industrial lands), University of Newcastle Callaghan, John Hunter Health and Innovation Precinct, Hunter Park/ Broadmeadow and the City Centre. To these we add Summerhill Waste Management Centre. Each of these areas is aligned to an industry, many of which have received significant government or private-sector investment. Importantly, they provide the right circumstances for new enterprises to establish and scale, as well as for new talent to locate and create new opportunities.

To enable the Innovation Arc, a skilled and diverse labour supply has become the most critical input for enterprise to enable both local and global competitiveness.¹ The service-based economy

of the 21st century demands a skilled workforce with research indicating nine out of every ten new jobs will require post-school qualifications.² Consequently, this presents a challenge for the skills base of the Newcastle population, where almost 50% of our people do not have a post-school qualification and less than 15% of our population are skilled international migrants.

The City of Newcastle is responding to these trends in this Economic Development Strategy. Our approach is based on a framework called 'New Local' which advocates for a people-centred and place-led approach to economic development, and reimagines the role of local government.

First and foremost, our Strategy will invest in people, their skills, their networks and their investments. Our delivery programs will provide a suite of opportunities for local residents and seek to attract new talent to the city to fill existing skill gaps. Our programs will be inclusive and, in many cases, targeted to minority populations.

Our Vision: Strengthen existing and create new economic opportunities for all in the 2020s.

Our Mission: Empower, retain and attract people with skills for the future.

Horizon: The Strategy targets ten-year outcomes for the Newcastle economy. These outcomes will be achieved through four-year delivery programs and one-year action plans.

Review: The Strategy will be refreshed every four years (next in 2025). Action plans will be updated annually.

Governance: The delivery programs and actions will be reported annually to City of Newcastle's Strategy & Innovation Advisory Committee, who provide an important advisory role to the implementation of the Strategy.

Collaboration: Our Strategy seeks to supplement the work of the economic development ecosystem in Newcastle. We have maintained the vision from the Greater Newcastle Metropolitan Plan, with all Newcastle Local Government Area (LGA) catalyst areas being identified with the skills that will enable their success. We have identified Summerhill Waste Management Centre and the circular economy as new emerging opportunities.

Our Strategy also articulates that the City of Newcastle will not actively pursue a business attraction approach. The City of Newcastle will seek to supplement the work of Regional NSW and the Business Attraction Committee rather than lead our own business attraction processes. Research increasingly demonstrates that the marginal rate of return is greater in investing in existing local businesses and enabling them to grow, rather than incentivising big corporates to relocate to the region. Our view is also that business attraction is more effectively delivered at a regional level, where the LGA boundaries are not considered.

Our Approach: Our Strategy has taken an evidence-driven approach to identifying priorities, establishing delivery programs and proposing actions. We have engaged with and implemented the New Local framework to inform our Strategy development. New Local is a series of ten principles, which provide a roadmap to restart, renew and reboot our local economy in a post COVID-19 and climate emergency world. Developed by international experts, New Local advocates for a people-centred and place-led approach to economic development, which builds resilient and regenerative communities, cities, towns and mainstreets. The ten principles have been applied in the Newcastle context and underpin all our work.

Our Strategy also fronts up to the challenges facing our local community. These challenges have been informed by the CSIRO's global megatrend research, which identified significant shifts in

environmental, economic and social conditions that will play out over the coming decades. Our challenges have been disaggregated into four categories: population challenges, industry transition, climate emergency and economic impacts exacerbated due to COVID-19.

In developing this Economic Development Strategy, extensive stakeholder and expert engagement has been undertaken. This included workshops with our Strategy & Innovation Advisory Committee, the City Taskforce and representatives from the business, innovation and community sectors. Engagement also included targeted conversations with population groups most impacted by the COVID-19 economic recession including young people and international students.

Our Priorities: Our detailed and evidence-driven approach has led to four priorities being identified in this Strategy – Skilled People, Innovative People, City Shaping and Vibrant City. Two priorities focus on investing in people and ensuring that the population of Newcastle is skilled and innovative. The remaining two priorities focus on enhancing the foundations of our city, which enable people to create their own opportunities in Newcastle. For each priority there are a number of four-year delivery programs, and then a suite of clear, timely and measurable actions that City of Newcastle and partners will implement.

¹ Buss 2014.

² Goldstein 2018; Heath 2020.



Skilled People:

The Skilled People Priority is about enabling and expanding these human capabilities to strengthen and drive existing and future opportunities in Newcastle. This will be delivered through partnerships with business, industry and local tertiary institutions. Importantly, Skilled People seeks to integrate marginal population groups into all of the delivery programs and recognise the important uplift they can provide for the local economy.

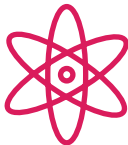
Our vision is to see Newcastle strengthen a local skills-based labour market where job seekers, employers and educators focus on the skills required to do a job, rather than years of experience. Government, industry and business would see widespread adoption of skills-based hiring and targeted training practices.

Novocastrians will be known as a skilled people.

Delivery programs include:

NewSkills	Research, promotion, funding and advocacy to enable local residents to gain new skills.
Local Business People	New communication channels, partnerships (Business Improvement Associations) and data insights to support local business people with the skills, knowledge and networks to grow and expand their local operations.
Talent Attraction	Targeted campaigns, both domestically and internationally, to encourage talented and skilled people to move to Newcastle.
Inclusive Newcastle	Incentives for businesses to improve their environmental, social and corporate governance practices.
International Networks	Support for local business people to attract international skilled migrants and new partnerships with international business networks.

See Appendix A for detailed, timely and measurable actions.



Innovative People:

The Innovative People Priority is about increasing capacity for local residents to solve problems and generate new economic growth. Enabling the right conditions for people to experiment and invest in change helps to diversify and differentiate our economy. Organisations and enterprises with a higher degree of novelty are more resilient to disruption and are typically more globally competitive.

Our vision is to see Newcastle create a supportive environment that enables local residents to be innovative in all jobs and workplaces across the city.

Novocastrians will be known as an innovative people.

Delivery programs include:

Innovation Ecosystem	Provision of physical spaces, information, governance and training to support all entrepreneurs and innovators flourish across the city.
Living Lab	A city-wide platform to solve problems, prototype and validate new ideas for commercialisation.
Inclusive Innovation	Spread awareness of innovation resources and tools to all sectors of the local economy.
Scaling Innovation	Dedicated programming to support local innovators to scale their operations to national and global markets.

See Appendix A for detailed, timely and measurable actions.



City Shaping

The City Shaping Priority is about continuing the transformation of Newcastle towards increased economic diversification and improved amenities that stand as indicators of economic success. Newcastle has emerged as Australia's leading post-industrial Gateway City. It is managing a transition from a heavy industrial past to a more diverse and innovative knowledge and services-led economy, while still retaining strengths from its industrial capability, such as engineering and manufacturing skills. This positions Newcastle effectively to leverage growth sectors of the new economy.

Our vision is that Newcastle emerges as a global city that enables business competitiveness and attracts people to live and invest.

Newcastle will be known as a city where you can create your own opportunity.

Delivery programs include:

Strategic Planning and Development	Support for strategic land use planning to enable the Innovation Arc and distributed local economic centres' growth.
Digital Infrastructure	Deployment of the City Digital Corridor, enabling next-generation networks, including Internet of Things and 5G, and expanding the Living Lab testbed.
Local Capital and Investment	Improving the connection of SMEs to local finance through awareness of options and the nurturing of more grassroots investors and alternative financing models.
Strategic Government Relations Advocacy	Development of staged, evidence-based strategic advocacy plans, renewed support for regional collaboration initiatives and continued engagement with the national Gateway Cities Alliance.
Circular Economy	Development of a strategic framework to enable local support for the transformative and productive potential of the circular economy.



Vibrant City

The Vibrant City Priority is about enhancing the sectors that drive city vibrancy through activation, performance, interaction and cultural consumption. This priority brings a strategic focus to the important role the City of Newcastle plays in nurturing a vibrant city, such as facilitating major events, providing support and direction for the tourism sector and managing the city's cultural and civic venues.

Our vision is for Newcastle to be a city where things are happening, day and night. It is a city where you enjoy living, working and playing.

Newcastle will be known as a vibrant city.

Delivery programs include:

City Activation	Strategic approach to Special Business Rate funding and City of Newcastle grants and sponsorships to enable the community to shape a vibrant city.
Newcastle After Dark	Implementation of the Newcastle After Dark Strategy.
Visitor Economy	Implementation of the Destination Management Plan.
City Events	Development of a City Events Action Plan to provide a holistic and strategic approach to the entire events lifecycle including principles and guidelines for identifying, attracting, promoting and evaluating events.
Multiculturalism and Diversity	Celebrations of diversity through meaningful conversations and culturally focused programs and events.
Creative Economy	Development of a formal cultural precinct within the Newcastle CBD.

See Appendix A for detailed, timely and measurable actions.

³ Markle Foundation 2018.



Vision:

**Strengthen
existing and
creating new
opportunities
for all in the
2020s.**

Summerhill

Industry Focus - Circular Economy

Skills - Advanced Manufacturing, STEMM Skills, Waste Management

Economic Opportunities

Summerhill Waste Management Centre is transforming to become a resource recovery hub and green energy precinct.

Government Investment

CN has funded the development of an organics facility at Summerhill, which may act as a catalyst for further investment.

Callaghan

Industry Focus - STEMM

Skills - Research, Innovation, Project Management, Digital Literacy, Communications

Economic Opportunities

The University of Newcastle is developing a \$207 million Regional Transformation Hub within the Hunter STEMM Precinct.

Government Investment

State Government Development Approval has recently been granted.

Williamstown

Industry Focus - Aerospace/Defence

Skills - STEMM, Aerospace Engineering, Advanced Manufacturing

Economic Opportunities

Astra Aerolab, which is co-located in Newcastle Airport and the RAAF Williamstown Base, will become Australia's pre-eminent space for innovation in aviation, defence and aerospace-related manufacturing, maintenance, research and education.

Government Investment

NSW Government announced a Special Activation Precinct (SAP) at Williamstown as a part of its 20 Year Economic Vision for Regional NSW.

Hunter Park

Industry Focus - Sports and Entertainment Precinct

Skills - Event Management, Sports Science, Arts and Entertainment Management, Hotel Management, Retail.

Economic Opportunities

Hunter Park has the opportunity to become a nationally significant sporting and entertainment destination incorporating a best in class entertainment centre and mixed leisure and swimming facility. The new urban precinct will incorporate open space, transport infrastructure, new employment opportunities and residential development.

Government Investment

Venues NSW released a discussion document for community consultation in 2017. More information is due to be released soon.

Newcastle Port

Industry Focus - Renewable Energy/Hydrogen

Skills - STEMM, Project Management, Supply-Chain Management, International Relations

Economic Opportunities

The existing port infrastructure has capacity to generate port-associated industry and regional/local employment opportunities. Renewable energy/ hydrogen has been identified.

Government Investment

A Renewable Energy Zone has been identified in the Hunter / Central Coast.

John Hunter Hospital

Industry Focus - Health Innovation

Skills - Biomedical Science, Public Health, Communications

Economic Opportunities

The John Hunter Health and Innovation Precinct will deliver updated and enhanced facilities providing a larger facility to meet the demands of the Greater Newcastle, Hunter New England and northern NSW Regions. The precinct will encourage partnership with key health, education and research partners.

Government Investment

The NSW Government has committed \$780 million for Stage One of the John Hunter Health and Innovation Precinct. Further funding for Stage Two is being considered.

City Centre

Industry Focus - Innovation/Education/Tourism

Skills - Research, Prototyping, Advanced Manufacturing, Education, Communications, Marketing

Economic Opportunities

A business district in the West End; and education/innovation precinct in the Civic Precinct; and arts/tourism opportunities in the East End and Civic Precincts.

Government Investment

All levels of government have invested in the deployment of smart city infrastructure throughout Newcastle City Centre. This infrastructure underpins the city-scale testbed for technology development and prototyping.

Our City

In 2030, Newcastle will be a smart, liveable and sustainable global city

We will celebrate our cultural heritage and history, protect our natural environment and support our people to thrive and prosper. As an inclusive community, we will strive for equal rights and access for all. We will face challenges with integrity, innovation and creativity. Support business growth, education and employment opportunities. We will be a leading lifestyle city with vibrant public places and spaces, connected transport networks and unique urbanism. This will be achieved within a framework of open and collaborative leadership.

Vision Definitions

Smart - refers to a city that puts its community at its centre; enjoys smart and digitally connected public and urban infrastructure; and works to develop a thriving ecosystem to drive innovation and creativity.

Liveable - refers to the factors that influence our quality of life, including the built and natural environments, economic prosperity, social stability and equity, educational opportunity, and cultural, entertainment and recreation possibilities.

Sustainable - refers to both environmental and financial sustainability. Sustainability is about meeting the needs of the present generation without compromising the ability of future generations to meet their needs.

Inclusive - is used to reflect the community's desire to not just be welcoming and open, but to actively recognise and embrace differences.

Community - refers to everyone; residents, workers, businesses, visitors and stakeholders.

Newcastle Urbanism - (refer to Local Planning Strategy) refers to a built environment that addresses public spaces, is scaled for pedestrians, and also respects culture, heritage and place. Urban form that encourages safe and activated places; promotes active and healthy communities and provides opportunities for social interaction.



Newcastle at a glance

Our Population

Newcastle LGA population 2019: **165,571**
Population by 2041: **199,680**



Source: NSW DPIE 2020, ABS 2020a

Our People

Largest age cohort:
20–24 year olds
(about 8.8% of total population)
Estimated annual population growth rate:
1%



3.5%
of our population identify
as Aboriginal or Torres
Strait Islander

Source: NSW DPIE 2020, ABS 2020a

Our Workforce

102,800 jobs in Newcastle
Over
65,000 Newcastle residents
have formal professional qualifications



Largest industry sector by employment:
**Health Care and
Social Assistance**
18,880 jobs, or 19.4%

Source: ABS 2017a, ABS 2017d, Remplan 2021.

Our Economy

Value of building approvals in 2019–20
\$1.15 billion



\$18.2 billion
Newcastle's Gross Regional
Product (2019, nominal)



Newcastle is home to:
80% of the Hunter's office space
30% of developed industrial space

Source: Remplan 2021, City of Newcastle



Our Economic Journey

The Awabakal and Worimi peoples are descendants of the traditional custodians of the land situated within the Newcastle local government area, including wetlands, rivers, creeks and coastal environments. It is known that their heritage and cultural ties to Newcastle date back tens of thousands of years. Muluubinba is the traditional name for the people. Its name is attributed to a local sea fern that was traditionally harvested as a food crop⁴.

Large numbers of clan groups were known to have lived along the river and coast, around the wetlands and hinterlands. Living a settled life managing and farming their lands according to their cultural and family obligations and the Lore, carefully moving with the seasons and for ceremonial necessities.

The year 1797 marked the first time British colonists came ashore on the banks of the Hunter River. The abundance of coal in the area was immediately apparent, and over the next two years several ships sailed from Sydney to the Hunter to collect coal. By 1799, sufficient stockpiles had been gathered to ship overseas – thus Newcastle coal became the first commodity export from a British-colonised Australia⁵.

Surviving what was the complete upheaval of traditional life with the onset of settlement, the survival and growth of Muluubinba, and then what became Newcastle, can be attributed to Awabakal and Worimi peoples. Their intricate knowledge of the flora and fauna of this country was fundamental in the survival of those early settlers. The securing of food, water, bush medicines and building materials were vital in the establishment of the colony in Newcastle.

The Awabakal people were the first peoples in the world to recognise the use of Nikkin (coal) as a fuel source. Newcastle's coal industry grew in

importance during the 1800s and sea transport to Sydney became more frequent. By the latter part of the century, schools, churches, harbour infrastructure, a rudimentary roads network, sewerage, street lighting, telegraph services and other municipal buildings had been constructed. The populations of Wallsend, Merewether, Stockton, Tighes Hill, Carrington, Lambton and Hamilton mining villages grew rapidly, accelerated by the opening of a direct rail line to Sydney in 1889⁶.

Due to the abundance of coal in the region, BHP opened a steelworks in the city in 1915. This facility dominated Newcastle's economy for much of the 20th century and was interlinked with the city's growth. The steelworks also marked Newcastle as a key centre for heavy industry and manufacturing: in 1961 manufacturing jobs peaked at over 39% of total employment in the city, with the metalworking, founding and engineering industries alone accounting for over 26% of the total workforce⁷. The BHP steelworks was by far the largest single employer in this sector. Between 1960 and 1975, the number of jobs at the steelworks never fell below 10,000⁸.

This reliance on heavy industry exposed Newcastle to the structural decline of manufacturing in developed countries over the past 50 years. Due to trends towards larger-scale production, declining international shipping costs, trade policy changes and the rise of the Asian tiger economies, Newcastle's industrial importance has declined since the 1970s.

In 1999, the BHP steelworks closed and, as of 2016, the manufacturing industry's share of employment had fallen to 5.9%⁹. However, Newcastle continues to have strengths in the fields of engineering linked to energy production, which may provide new opportunities for the future.

Newcastle's economy has changed significantly in the past two decades, with the growth of digital technology, service industries and advanced manufacturing industries. Prior to the COVID-19 pandemic, there were many indications of strength and growth for Newcastle's local economy. For example, between 2015 and 2019, the total number of operating businesses increased from 12,475 to 14,312. In the year ended 30 June 2019, the value of building approvals was more than \$814 million, well above long-term averages. In the same year, only three local businesses reported insolvencies of businesses related to "economic conditions", which again was well below longer-term trends¹⁰. In January 2020, immediately prior to the pandemic outbreak, the official unemployment rate in the Newcastle region was at a historic low of 3.5%¹¹.

The continued challenge for the city's development is how to transition to a more diversified, resilient and sustainable local economy. The growth of local world-class research institutions, such as the University of Newcastle, CSIRO and the John Hunter Health and Innovation Precinct, coupled with a vibrant entrepreneurial sector centred on renewable energy, advanced manufacturing, health technologies, defence and aerospace, as well as the creative industries, are new and growing opportunities.

Newcastle's response to the COVID-19 pandemic, and the rise of more local economic networks, may offer further opportunities for transformation. The role of this Economic Development Strategy is to enact a plan for Newcastle's next chapter of its economic progression.



Lycett, Joseph, approximately 1775-1828



Looking across the silo wharf from Honeysuckle 1935, Gold Collection, Newcastle Regional Library



Kings Wharf Newcastle Harbour, 1890, Ben Chapman Collection, Newcastle Regional Library



BHP Newcastle Steelworks closure: final walkout, 30th September 1999, Newcastle Libraries Collection

¹⁰ ABS 2021.

¹¹ ABS 2020c.

⁴ Hunter 1998.

⁷ ABS 1962

⁵ City of Newcastle 2020a.

⁸ Kirkwood 2019.

⁶ op cit.

⁹ ABS 2017b.

Our Global Commitment

The SDGs underpin our work

In September 2015, Australia was one of 193 countries to commit to the United Nations Sustainable Development Goals (the SDGs). The City of Newcastle has been proactive in the strategic implementation and action on the SDGs since this commitment. Central to this has been the implementation of the SDGs in our core Strategy documents.

The Economic Development Strategy (EDS) will provide vision and delivery programs for the Newcastle economy over the next 10 years. Consequently, the global language of the SDGs has been applied, not just at a goal level but embedded as targets and indicators throughout this Strategy. The City of Newcastle has an essential role in educating and leading the achievement of the SDGs for the region. The core alignment and implementation has been outlined as follows.



The SDGs and the EDS:

SDG and targets		How it is addressed in the EDS
4 QUALITY EDUCATION 	SDG 4 Quality Education – Ensure inclusive and equitable high-quality education and promote lifelong learning opportunities for all.	A skills-based labour market is one of the priorities of this Strategy. A number of programs will provide local residents with opportunities to gain new skills.
8 DECENT WORK AND ECONOMIC GROWTH 	SDG 8 Decent Work and Economic Growth – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	The vision of this Strategy is to create new opportunities for all. Every program is designed to be inclusive and to remove barriers to access.
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	SDG 9 Industry, Innovation and Infrastructure – Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation. Targets 9.4 and 9.5, address upgrades to infrastructure, with a focus on sustainability and enhancing scientific research.	The Innovation Economy and City-Shaping Initiatives (including advocacy and digital infrastructure) are priorities of this Strategy. City analytics incorporating scientific research is embedded throughout the Strategy.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	SDG 12 Responsible Consumption and Production – Ensure sustainable consumption and production patterns. All of the targets for this SDG directly relate to the reduction of waste and the growth of a circular economy.	This Strategy identifies the economic development opportunity of the circular economy and proposes more work to be taken both by the City of Newcastle and across industry.
17 PARTNERSHIPS FOR THE GOALS 	SDG 17 Partnerships for the Goals – Strengthen the means of implementation and revitalise the global partnership for sustainable development.	This Strategy is centred around a collaborative approach to implementation. By virtue, it follows that our actions will require partnerships to achieve them.

Our Collaborative Approach

The City of Newcastle's Economic Development Strategy offers a transformative approach to economic development with a deliberate people-centred and place-led approach. Our Strategy seeks to build a skilled and innovative people supported by key city infrastructure and enhanced by a vibrant lifestyle. This section details the approach we have taken to identify priorities, establish delivery programs and propose actions.

The section begins by outlining the context of our Economic Development Strategy. Firstly, the Strategy's relationship with the City of Newcastle's Community Strategic Plan and other strategic work. Secondly, the regional context

including outlines of key State Government strategies and a map of the key actors in the local economic development ecosystem.

Following is a description of the New Local framework. New Local has been fundamental to our approach and provides context for a number of our proposed delivery programs.

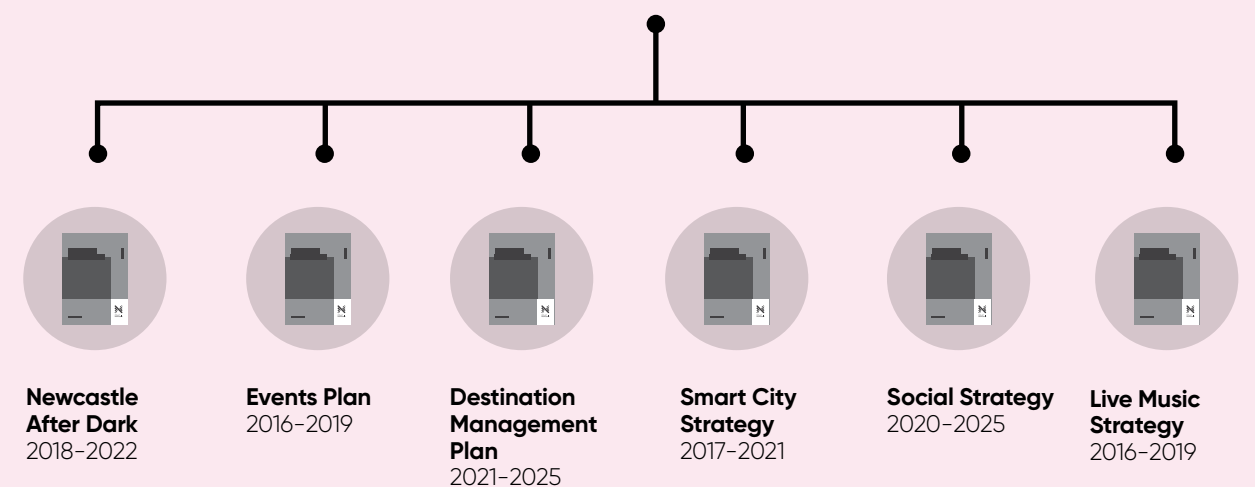
This section then details the challenges facing the Newcastle economy from a population, industry transition, climate emergency and COVID-19 viewpoint. The section concludes by summarising the extensive stakeholder and community engagement we have undertaken to develop this Strategy.



Community Strategic Plan
2018-2028



Economic Development Strategy



Regional Context

The Hunter Regional Plan 2036 and the Greater Newcastle Metropolitan Plan 2036 are the key regional economic development planning documents that impact the City of Newcastle. Published by the NSW Government in 2016 and 2018 respectively, these plans are intended to be the blueprint to deliver future economic and population growth in the region. The Hunter Regional Plan provides an overarching strategic framework for land use plans, development proposals and infrastructure funding decisions. The Greater Newcastle Metropolitan Plan 2036 aims to achieve the vision set by the Hunter Regional Plan but contains a more detailed action plan and has a tighter geographic focus on the Newcastle Local Government Area (LGA) and four neighbouring LGAs.

City of Newcastle’s Economic Development Strategy aims to translate and align the strategic visions for the region into a local context, and to assert Newcastle as the vibrant metropolitan heart of Australia’s leading regional economy. Both the Hunter Regional Plan and the Greater Newcastle Metropolitan Plan identify Newcastle as a key economic hub for northern NSW, and an attractive lifestyle city with the following benefits:

A dynamic and entrepreneurial business culture, with a globally competitive economy and leadership in smart city technology, cleantech industries and renewable energy initiatives.

The vibrancy of a metropolitan lifestyle with green suburban community living, and easy access to beaches and bushland.

World-class infrastructure, including a deep-water port, international airport, university, the John Hunter Hospital Precinct and large-scale development plans across the region.

A culture of change, innovation and renewal.

There is a recurring narrative throughout the Hunter Regional Plan 2036 and the Greater Newcastle Metropolitan Plan 2036 strongly advocating for regional collaboration across council boundaries and levels of government. As stated in the Greater Newcastle Metropolitan Plan: “Metropolitan cities succeed and perform best when all tiers of government collaborate and work together with business, industry and community to deliver a shared vision for their city”¹². The City of Newcastle will seek to embrace the collaboration in all of our delivery programs. Our view is that LGA boundaries are irrelevant to economic development. Expanding economic opportunities in Newcastle benefits the other Lower Hunter Councils and vice versa.

The City of Newcastle also acknowledges key integrations with other NSW Government Strategies including the NSW Economic Blueprint 2040, Productivity Commission Green Paper and Hunter & Central Coast Enabling Adaptation report.

Economic Development Collaborators

Local Coordinating Partners	Local Small Business Support	State Government Partners
Regional NSW	Newcastle Airport	Department of Planning, Industry and Environment
Hunter Joint Organisation	Port of Newcastle	Hunter New England Health
Hunter Central Coast Development Corporation	Hunter Water	Health Infrastructure
Regional Development Australia Hunter	Local Innovation & Creative Networks	Transport for NSW
Committee for the Hunter	Hunter iF	Infrastructure NSW
Local Business/Industry Networks	Independent Creative Alliance Newcastle (ICAN)	NSW Treasury
Business Improvement Associations (BIAs)	I2N	Destination NSW
Hunter Business Chamber	Eighteen04	Create NSW
Local Business Chambers and Business Groups	Local Research/ Education Partners	NSW Office of the Small Business Commissioner
HunterNet	The University of Newcastle	Federal Government Partners
Ai Group Hunter Region	TAFE NSW	Infrastructure Australia
Newcastle Tourism Industry Group	Hunter Medical Research Institute (HMRI)	Data & Analysis
Property Council of Australia Hunter Chapter	Commonwealth Scientific and Industrial Research (CSIRO)	id Population Experts
Urban Development Institute of Australia	National Institute for Energy Research (NIER)	REMPAN
Local Infrastructure Authorities	National Partners	Spendmapp
Newcastle Airport	Gateway Cities Alliance	Australian Business Register
Port of Newcastle	International Partners	Australian Tourism Data Warehouse
Hunter Water	G20 Pioneer Cities	

¹² NSW DPE 2018: 14.

New Local

New Local is a series of ten principles, which provide a roadmap to restart, renew and reboot our local economy in a post COVID-19 and climate emergency world. New Local advocates for a people-centred and place-led approach to economic development, which builds resilient and regenerative communities, cities, towns and mainstreets.

The ten principles have been applied in the Newcastle context and provide the theoretical framework that underpins the programs of work in this Strategy. All of our delivery programs and actions have been aligned to at least one New Local principle

"The City of Newcastle has the opportunity to be a global leader in developing a compelling 21st century economic development vision and roadmap that puts people and planet first, unleashes creative entrepreneurship and becomes an enabler, facilitator and partner of social innovation and positive change"

- Gilbert Rochecouste, Global Placemaking thought leader and Michael Shuman, an Entrepreneur and leading visionary on Community Economics.



Place

Placemaking is the art of creating meaningful, inclusive and connected places. It is the collaborative process of making places that benefit all people, every day. How can the best of every part of the community be given expression in architecture, design, and connected businesses?



Regeneration

Regeneration is where we put back more into our ecological and social fabric than we take out. It addresses the whole system and strives to make it better and more resilient. Regeneration empowers local enterprises to be part of their place and feel pride in contributing to it, supporting them to think about what they can do to improve the local environment.



Connectivity

International connections – especially with people, culture, and knowledge – will allow you to take advantage of the best of what the world offers, without becoming dangerously dependent on it.



Ownership

Local ownership of business matters. A growing body of evidence shows that communities with higher levels of local ownership have more social equality, civic engagement and sustainability.



Reinvestment

Reinvestment means helping local residents', businesses, and governmental bodies redirecting their capital from global businesses to local ones. It means more local banking, more local securities, more local investment funds and more local superannuation options.



Diversification

While traditional economic development encourages the nurturing of a small number of world-class industries to achieve comparative advantages, the New Local encourages economic diversification, greater self-reliance and stronger reliance. Paradoxically, a community that is more self-reliant is often wealthier and has many more promising export sectors.



Equity

Social equity is about providing equitable access to basic needs and opportunities, readily and locally, irrespective of race, class and other dimensions of social identity.

Culture

Culturally rich places are shaped through freedom of expression, creative risk-taking and showcasing diverse voices. Strong, collective community values and cultural assets enhance a sense of place and local identity.



Innovation

Innovation involves continuously looking for ways to expand and improve existing businesses, and successfully launch new ones. It means providing entrepreneurs with the technology, assistance, space, mentors, networks and finance to succeed. Entrepreneurs come from all sectors of the population, such as the young, retirees, immigrants, people of colour, the chronically unemployed and people with a disability.

Democracy

Democracy is about power to the people, where empowered citizens directly participate in the decisions affecting their lives, communities and local ecologies. A new approach to resilience and economic development has a foundation of authentic engagement at its core, supported by powerful engagement and governance tools and models.



Our Challenges

This Strategy acknowledges and fronts up to the challenges facing the local Newcastle economy. These challenges have been informed by the CSIRO's global megatrend research, which identified significant shifts in environmental, economic and social conditions that will play out over the coming decades.

Our challenges have been disaggregated into four categories: population challenges, industry transition, a climate emergency and economic impacts exacerbated due to COVID-19.

Population Challenges

Moderate Population Growth:

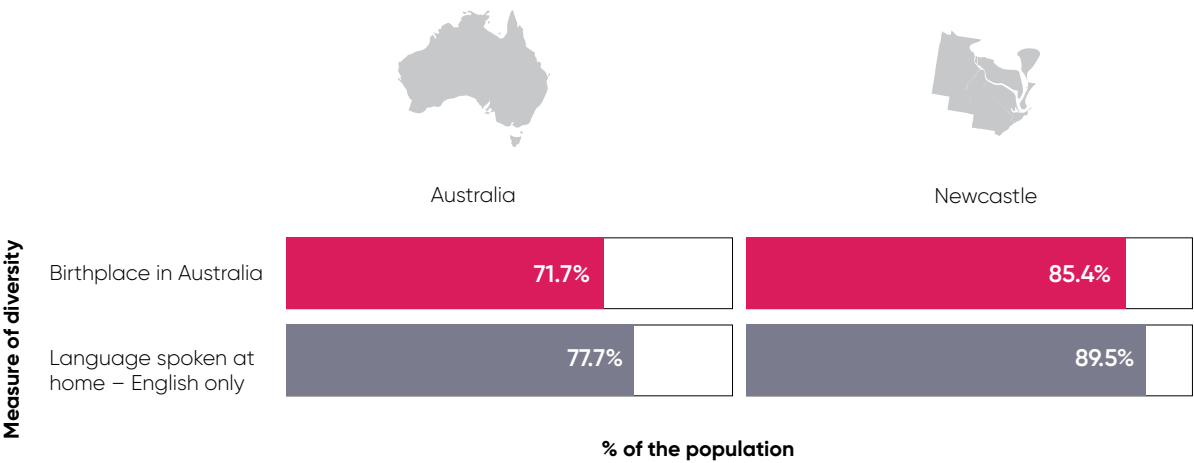
A past challenge for Newcastle has been our lagging population growth compared to Australia's other major population centres, which may contribute to slower economic diversification, output and opportunities. In the period 2018-19, Newcastle's population grew by 1.0%, compared to a capital city average growth rate of 1.8%. Newcastle's population grew slowly compared to similar regional centres like Geelong (2.7%), Adelaide (2.6%) and the Gold Coast (2.3%)¹³.

Local Brain Drain:

Related to the issue of lower-than-average population growth is the composition of who is leaving Newcastle, and at what stage of their lives. Net internal migration (which measures the movement of people within Australia) has remained negative for Newcastle, meaning more people are leaving the city to live elsewhere in Australia than are choosing to relocate here¹⁴. Regional population data suggests the population cohort most likely to move away from Newcastle is 15 to 24-year-old people¹⁵, which is the age group most likely to be engaging in post-school education and entering the workforce. This is a common trend for a university town, but also provides an opportunity for retaining and expanding the local skills base.

Lack of Diversity:

Compared to the rest of Australia's population, residents of Newcastle are more likely to have been born in Australia (85.4% versus 71.7%) and are more likely to only speak English at home rather than other languages (89.5% versus 77.7%)¹⁶. This may signify less exposure to diverse cultures and innovative practices, and fewer international connections¹⁷. Additionally, the Federal Treasury and other research¹⁸ have identified that migrant populations deliver an economic dividend to local economies, with migrants more likely to be employed, earning higher income and providing skills that supplement the needs of the local labour force. Collectively, migrant populations provide multiplying benefits to local communities and drive economic productivity¹⁹. Newcastle's lag in attracting migrant populations may therefore be a significant hindrance on the city's economic development.

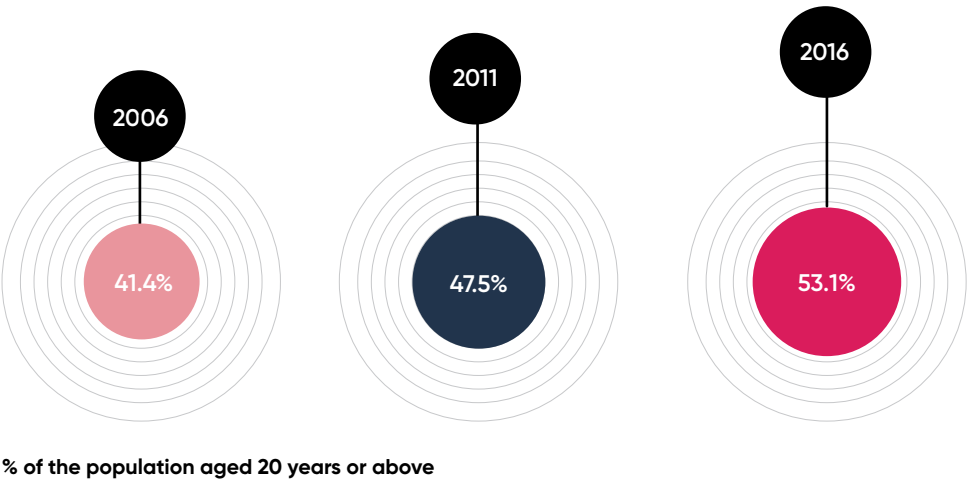


Low Education:

At the 2016 Census, just over half (53.1%) of Newcastle's population above the age of 20 years had attained a post-school qualification of Certificate III or above. The rate of the population with post-school qualifications increased by approximately 1.1% per year between 2011 and 2016, which is slightly above population growth²⁰. With nine out of ten future jobs estimated to require post-school qualifications²¹, there is likely to be a significant decline in demand for an unqualified labour force. This would have a substantial impact on the Newcastle economy and threaten to polarise employment opportunities and increase economic inequality into the future.

Educational attainment in Newcastle

Source: ABS 2017a; ABS 2012; ABS 2007.



¹³ ABS 2020a.
¹⁴ ABS 2021.
¹⁵ ABS 2020d.
¹⁶ ABS 2017a.

¹⁷ International Organisation for Migration 2020: Chap 5.
¹⁸ Massey & Parr 2012.
¹⁹ The Treasury 2018: 1

²⁰ ABS 2017a; ABS 2012; ABS 2007.
²¹ Goldstein 2018; Heath 2020.

Industry Transition

Sunset Industries:

The mining sector continues to play a significant role in our local economy, particularly coal that is extracted in the Upper Hunter region and exported through the Port of Newcastle. Until recently, about 95% of the Port of Newcastle's trade were coal exports. In 2015-16, it was estimated the direct and indirect economic impact of coal mining in the greater Newcastle and Hunter region was \$7.8 billion²². At the 2016 Census, approximately 1,200 people in Newcastle and 12,000 people in the region were employed directly in the mining sector²³. However, intermediate inputs into the mining sector such as advanced manufacturing, transport, warehousing and technical services have a larger economic impact²⁴, and coal industry advocates have claimed that there are 36,000 coal mining related jobs across the Newcastle and Hunter region²⁵.

The significance of coal mining to the local economy highlights Newcastle's exposure to volatility and long-term downturns in the industry. For the past decade, the absolute share of coal consumption for electricity, heating and industrial production has been declining, particularly in the United States, Europe and China²⁶. Between 2018 and 2020, global coal consumption is estimated to have decreased by seven per cent, and forecasts are for this trend to continue²⁷. Since 2012, there has been an overall decline in employment in the coal mining sector²⁸, which may further accelerate through increased automation in the industry.

Geopolitical Tensions:

Furthermore, many other important importers of Australian coal (including Japan, South Korea and the European Union) have adopted policy settings aimed at rapidly reducing carbon emissions. In December 2020, the government of China formally imposed import restrictions on Australian coal and other key sectors, bringing uncertainty to a previously

established coal export market worth almost \$14 billion annually. China has been the second-largest market for Australian coal, therefore this policy shift has had an immediate and significant impact on exports through the Port of Newcastle. Regarding future global demand for coal, the International Energy Agency states: "the medium-term outlook is highly uncertain... with regard to the evolution of Chinese import policies and developments in India's indigenous thermal coal production"²⁹. These factors underscore how geopolitical developments can have rapid and detrimental impacts on Newcastle's local economy if diversification is not pursued.

Climate Emergency Challenges

Climate Emergency Impacts:

The climate emergency has become the key social and economic challenge for the 21st century. We are already beginning to glimpse the impacts of a changing climate on our everyday lives. Globally, the last decade was the hottest ever recorded, and 2020 effectively tied with 2016 as the hottest years on record.

The likely effects of hotter and more extreme climate events include more frequent and widespread bushfires, flooding, extreme heat and increased risk of disease and pandemics – all with indeterminate impact on our economic and social fabric. The devastating bushfires throughout eastern Australia in 2019-20 are a case study of the economic, social and ecological costs of a climate emergency. 33 people lost their lives in the bushfires and smoke from the fires was linked to more than 445 deaths. Over 3,000 homes were destroyed and billions of dollars of buildings and infrastructure were damaged³⁰. Eighteen million hectares were burned during the bushfires and more than a billion animals died, with long-term ramifications for biodiversity and industries reliant on natural resources (such as tourism and agricultural production of milk, meat, wool and honey). If the severity and frequency of these types of events continues to increase, it will represent a costly and fundamental disruption to normal economic activity.

Economic Transition:

Environmental limits are placing constraints on local economic growth. Cities in particular are responsible for the majority of carbon emissions and need to be at the forefront of responding to the climate emergency through emissions reductions. Economic transition is not a cost-neutral process and will represent a disruptive force for the modus operandi of Newcastle's economy and its stakeholders. For example, in 2018-19 the majority (61%) of Newcastle's carbon emissions were from electricity generation, and private businesses were responsible for about 70% of electricity consumption³¹.

In order to affect lasting change and create new opportunities, collective action and commitment from businesses, as well as government and the community, will be required.

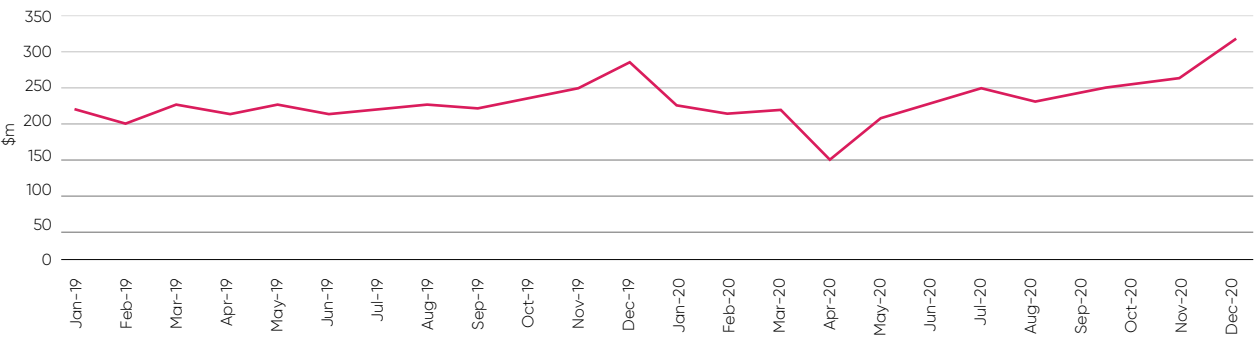
COVID-19 Pandemic Challenges

The COVID-19 pandemic has been an unprecedented economic and social challenge for Australia. In the June 2020 quarter, the nation's GDP fell by seven per cent, the largest quarterly decrease on record³². This trend was mirrored in Newcastle with the official local unemployment rate peaking at 11%, compared to around only four per cent prior to the pandemic³³. Young people were even more severely impacted with unemployment climbing to almost 30% at the early peak of the pandemic³⁴.

During the first period of lockdown in April 2020, local economic activity fell by almost half compared to the peak Christmas trading period in December 2019³⁵. Many thousands of Novocastrians relied on Jobseeker income support, and an average of approximately 6,500 businesses per month applied for JobKeeper payments between April and September 2020³⁶. Although some industries recovered strongly towards the end of 2020, other sectors such as tourism and hospitality have been disproportionately impacted and are struggling to return to normal trading levels³⁷.

Alongside these challenges are new opportunities for Newcastle's economic development. Research has indicated that the COVID-19 pandemic has greatly accelerated the adoption of digitisation technologies in the workplace across the Asia-Pacific region³⁸. This technological shift is facilitating the uptake of more long-term Working from Home arrangements for workers in many industries, which in turn is encouraging a demographic drift away from congested capital cities to second cities and regional areas. There are indications that Sydneysiders are choosing to emigrate to regional NSW at significantly higher rates than prior to the pandemic³⁹, and the uptake of office space in the Sydney CBD in 2021 is predicted to fall by as much as 15 per cent⁴⁰. These trends represent an opportunity to attract more internal migration to Newcastle, with the working population enticed by lifestyle, cost of living considerations and competitive infrastructure.

Figure 1: Economic downturn during the COVID-19 pandemic: Total expenditure activity in Newcastle LGA, Jan 19 - Dec 2020



Source: Spendmapp 2021

²² Port of Newcastle 2017: 6

²⁵ Port of Newcastle 2017: 6.

²⁸ Australian Industry and Skills Committee 2020.

²³ ABS 2017b; ABS 2017c.

²⁶ International Energy Agency (IEA) 2020a.

²⁹ IEA 2020b.

²⁴ MacroPlanDimasi 2017: 31.

²⁷ IEA 2020b.

³⁰ UNEP 2020

³¹ City of Newcastle 2020b: 21

³⁴ ABS 2020f; 2020g.

³⁶ The Treasury 2021. 1991

³⁹ Wright & Duke 2021.

³² ABS 2020e.

³⁵ Spendmapp 2021. See graph in draft form above.

³⁷ Spendmapp, op cit.

⁴⁰ Lenaghan 2021.

³³ ABS 2020f.

³⁸ LaBerge et al 2020.

Our Engagement

How we have engaged:

The preparation for the Economic Development Strategy began in early 2020. As a result of the global pandemic, we responded and changed our approach to engagement, with a greater focus on virtual forums. Across two months in late 2020, we engaged with our community and stakeholders through a community-wide survey and a range of face-to-face and virtual workshops. This included workshops with our Strategy & Innovation Committee of Council⁴¹, the City Taskforce⁴² and representatives from State Government agencies, and the business, innovation and community sectors. Our engagement was shaped by a Discussion Paper, which proposed a new people-centred approach to economic development with an inclusive focus of creating opportunities for all.

Our engagement included targeted conversations with population groups most impacted by the COVID-19 economic recession. In particular, we successfully held discussions with young people by partnering with TAFE NSW, HunterNet, the University of Newcastle and the Hunter Young Professionals. We also focused on engaging with people from non-English speaking backgrounds, talking to four cohorts of international (English as a second language) students from TAFE NSW.



400
individuals were
directly and
indirectly engaged



187
community surveys
were completed.



A social media reach of
246,000



11
workshops with 200+
attendees representing over
30 organisations and groups.



880+
visits to the Have
Your Say webpage

Emerging Themes

The engagement was carried out to provoke discussion and critical consideration around a suite of proposed economic development programs under four proposed pillars:

- Priority One: Enabling Skills – “The future of work is people”.
- Priority Two: Enabling Innovation – “The foundation to create your own opportunity”.
- Priority Three: City-shaping Initiatives – “The support and infrastructure to facilitate success”.
- Priority Four: Vibrant City – “An activated and supportive city for all”.

Key themes emerging from the engagement program included support for the proposed pillars and the associated program statements. At the City Taskforce workshops, feedback also reflected strong endorsement of the Economic Development Strategy vision, with the addition of “strengthening existing”.

Support was highest overall for programs that encourage or enable city activation, a digital corridor and an innovation ecosystem. Support was lower in comparison for programs around international networking, the Gateway Cities Alliance and city analytics.

Other themes to emerge were ensuring the Economic Development Strategy is clear in purpose, written in accessible language and has actions and evaluation measures. City of Newcastle’s role as an advocate and ideas around how taking a coordination role, facilitating incentives and supporting pathways and entry into employment, and the transition to more sustainable pursuits through innovation or green actions, also emerged from the comments.

Overall, the engagement activities evidenced a strong interest from a wide range of community and stakeholders who demonstrated an interest towards economic success for Newcastle’s future.

Advocacy and Energy Towards



To learn more about the valuable insights you shared with us read the full engagement report.

⁴¹ The Strategy and Innovation Advisory Committee consists of Councillors and key stakeholder & community representatives. The purpose of the Committee is to provide advice and guidance on the development of strategies, and identification of challenges and opportunities, in relation to activation of Newcastle as a destination leading in innovative technologies, smart infrastructure, and high value investment, and major events and tourism.

⁴² The City Taskforce, led by the City of Newcastle, was established to act as the local coordinating advisory committee to oversee the recovery phases of the COVID-19 pandemic. The City Taskforce was made up of 17 key city leaders from across manufacturing, small business, financial services, tourism, transport and logistics, arts and culture, workers, education and the community sector. The first meeting was in mid-April and the Taskforce concluded in December 2020.



Our Strategic Priorities

Skilled People Priority

Objective	What do you want to achieve?	1.1 NewSkills: To facilitate opportunities for Newcastle residents and businesses to acquire new skills that drive innovation and employment. 1.2 Local business people: To support local business people to expand their existing operations in Newcastle. 1.3 Talent attraction: To attract talented domestic and international people to live and expand their business interests in Newcastle. 1.4 Inclusive Newcastle: To drive environmental, social and corporate governance practices amongst small and medium enterprises in Newcastle using economic incentives. 1.5 International networks: To establish new and deliberate international networks, which support the attraction of skilled migrants to Newcastle.
Community Benefit	What does success look like?	The growing of our local skills base, an increase in skilled migration to Newcastle and the embedding of inclusive practices in all actions of local business. Newcastle will effectively establish a skills-based labour market.
Community Indicator	How will our community change?	• 75% of the Newcastle population has a post-school qualification by 2030, which represents two per cent year-on-year growth. • Newcastle's population grows at an average of two per cent per annum. • The number of active skilled migration visas in Newcastle increases. • International student numbers in Newcastle double by 2030 (Feb 2020 baseline).
Links to CSP		4.1 A welcoming community that cares and looks after each other. 6.1 A vibrant, diverse and resilient economy built on educational excellence and research. 6.2 A culture that supports and encourages innovation and creativity at all levels. 6.3 A thriving city that attracts people to live, work, invest and visit.
Links to New Local Framework		Connectivity, Diversification, Equity, Culture.
Links to other City of Newcastle strategies/plans		Social Infrastructure Strategy (forthcoming), Wellbeing Strategy (forthcoming), Disability Inclusion Action Plan.

Our Newcastle economy is built on the talent, skills and ingenuity of our people. Thus, people are at the centre of local economic development, both as individuals and within enterprise. The Skilled People Priority is about enabling and expanding these human capabilities to strengthen existing and drive future opportunities in Newcastle. This will be delivered through partnerships with business, industry and local tertiary institutions. Importantly, Skilled People seeks to integrate marginal population groups into all of the delivery programs and recognise the important uplift they can provide for the local economy.

A people-centred approach to economic development builds in flexibility and promotes resilience to structural changes in the economy, such as those prompted by the COVID-19 pandemic and the long-term shift away from carbon-based energy. This Strategy is proposing key skills opportunities to respond and protect against existing challenges:

Localisation of industry supply chains:

How can we work on encouraging local industries and the local workforce to effectively deliver the goods and services required?

Energy industry transition:

How can we plan for a smooth transition away from extractive mining industries towards a growing renewable energy sector?

Capitalising on digitisation:

What opportunities are there for businesses to boost their online presence and leverage digital technologies to access new markets and create new products and services?

Promoting the knowledge economy:

How can we encourage local growth of industries whose competitive advantage is technical and scientific innovation?

The New Local framework emphasises the value of self-reliant, diversely-skilled people, empowered to engage in their own communities, who are proud of both their place and their culture. A people-centred, skills-based approach highlights the importance of putting local people at the centre of the economic development narrative.

In the long-term, our vision is to see Newcastle establish a local skills-based labour market⁴³ where job seekers, employers and educators focus on the skills required to do a job, rather than the years of experience. Government, industry and business would see widespread adoption of skills-based hiring and targeted training practices. Novocastrians would be known as a skilled people.

Case Study

Research identified that Newcastle had a significant shortage in bookable tourism product. The City of Newcastle partnered with a registered training organisation to provide 15 local businesses with access to professional mentors. These mentors provided advice on how to develop, promote and sell tourism products and experiences to a wider market. Since commencement the program has seen a number of new bookable tourism products be established in Newcastle. Targeted local government assistance, in partnership with industry, can address local market gaps.



53%
of Newcastle's population
have a post-school
qualification⁴⁴

Remote Tulsa was a one-year program that offered a \$10,000 grant and additional benefits to encourage remote workers in the US to move and work from Tulsa, Oklahoma. The program was highly successful with more than 10,000 applications, two billion digital impressions and 300 relocating workers. This talent attraction program is an example of a people-centred approach to economic development.



7,399
international students
enrolled with the University
of Newcastle in 2020.



9/10
future jobs will require post-
school qualifications⁴⁵

Lean in Newy is an online platform where residents living in the Newcastle and surrounding areas sign up to be members and earn points by taking challenges like helping out in their neighbourhood, volunteering for charities or supporting local businesses. The program drives inclusive community practices and engages local businesses in driving opportunities across our city.

⁴⁴ ABS 2017a.

⁴⁵ Goldstein 2018; Heath 2020.



Delivery Programs

NewSkills

Objective 1.1

There is a large and diverse range of organisations, both public and private, involved in the delivery of training and skills development. The Federal Government funds university education while the State Government delivers tertiary education through TAFE and support for a range of Registered Training Organisations. Traditionally, local government has not played a significant role. However, in a rapidly-changing world, where 9 out of 10 future jobs are projected to require post-school qualifications⁴⁶, local government can have an important role in facilitating and coordinating targeted local opportunities and addressing local skill shortages.

NewSkills will have four program focuses:

Research: Using novel local data sources to identify existing skill gaps in our population.

Promote: In collaboration with key providers across the city, promote the diverse range of learning and skills attainment opportunities in Newcastle. A comprehensive and local information, advice and guidance service is required, which services all age groups, including school children.

Funding: Where clear skill gaps have been identified, fund local training organisations to deliver targeted short courses, particularly for marginalised population groups.

Advocacy: Partner with State and Federal Government to maximise the local investment in training programs.

Local Business People

Objective 1.2

Small and medium scale enterprises (SMEs) comprise the large majority of jobs and activity in the Newcastle economy. The success of SMEs depends on the decisions and skills of thousands of local entrepreneurs across the city. Our role is to support these local businesses with the skills, knowledge and networks to grow and expand their local operations to the traded economy.

The Local Business People program will expand our traditional role as planning assessors to providing more value-add to our local business people. The program will include three focus areas:

Communication: By establishing regular communication channels, we will consistently listen and act on feedback about how we can support local enterprises to improve and expand existing operations.

Partnerships (with Business Improvement Associations): Continued investment and support for the BIAs across the city and suburban precincts.

Insights: Lead the development of new data analytics to provide easy-to-access insights on local economic activity and customer information.

⁴⁶ Goldstein 2018; Heath 2020.

Talent Attraction

Objective 1.3

Access to a large and skilled workforce is vital for national and global competitiveness. In a service-based economy, with constant innovation in transportation and communication technology, labour has become the most critical input for many organisations. Stakeholder engagement identified accessing and retaining labour in Newcastle as a significant barrier to jobs growth. This was reflected in the population challenges section, which highlights the lack of skills and diversity in the Newcastle population.

The Talent Attraction delivery program will seek to implement strategies aimed at encouraging more internal and external migration to our region, in particular people with skills who can contribute to the city's growth and development. The COVID-19 pandemic has afforded new opportunities for Newcastle's growth, due to the demographic drift away from large metropolitan centres to more liveable and attractive regional centres. These strategic objectives need to be balanced against other pressures, such as ecological sustainability and housing affordability.

The Talent Attraction delivery program will include two focuses, including:

Targeted campaigns, both domestically and internationally, to encourage people to consider Newcastle as an alternative location to live.

Digital Prospectus, which provides real-time data insights to provide people with confidence to move to Newcastle. This platform would be best delivered through regional collaboration.

Inclusive Newcastle

Objective 1.4

This Economic Development Strategy has been designed to drive programming to support marginal population groups in Newcastle. The premise of this approach is that the local economy will organically deliver for the majority of people, but Government at all levels has a role to play in intervening where the market fails. By ensuring that all of our residents have the ability to access employment opportunities, we will drive labour force growth and economic opportunities in the city.

Culturally and Linguistically Diverse (CALD) people, First Nations people and people with a disability are three minority populations in Newcastle. Focused research and engagements have been undertaken to enable new economic opportunities for these populations. Common themes emerged:

Education of businesses through training and guidelines to improve workplaces understanding the value of each of CALD, First Nations and people with a disability joining their workforce. Focused approached, identifying how workplaces can be adapted to be more welcoming to these communities and setting employment targets.

Providing mentoring programs to link graduates with local businesses and jobs.

Celebrating diversity more broadly within the community.

The City of Newcastle leading by example by establishing employment targets, mentoring programs and workplace education programs.

Procurement prioritisation for businesses which support these communities.

Advocacy within the business community on how to change work practices to enable new opportunities for CALD, First Nations and people with a disability.

For all three population groups, targeted programs to enable skills, connect with potential employers and be supported by mentors would assist in overcoming the barriers to gaining skills and employment.

The Inclusive Newcastle program will include three key focuses:

Identifying and incentivising businesses and industries to improve their environmental, social and corporate governance practices.

Connecting businesses and potential employees through a range of forums that promote the diversity of Newcastle.

Developing an Inclusive Newcastle procurement approach for implementation by both City of Newcastle and businesses.

International Networks

Objective 1.5

COVID-19 has radically transformed international networks. While the movement of goods continues between countries, the movement of people has halted. This has a multitude of implications for the Newcastle economy through reductions in international students and visitors and the majority of international business transactions shifting online. While significant for many sectors and industries, it is important to note that Newcastle is less exposed than many other regions of Australia. Simultaneously, geopolitical tensions have increased with the imposing of import restrictions placed on Australian exports by the Chinese Government.

The International Networks delivery program will implement a range of strategies to increase international migrants choosing Newcastle as their destination. A larger and more diverse population will increase the local skills base, expand international networks and multiply opportunities into the future. The International Networks delivery program will facilitate international talent attraction campaigns and provide support for local business people to navigate the visa application process. This program will also explore direct engagement with international business, industry and government networks, particularly across Asia.

Innovative People Priority

Objective	What do you want to achieve?	2.1 Innovation Ecosystem: To maintain and foster an adaptive, interconnected and localised innovation ecosystem of enabling actors and factors, that provide entrepreneurs with access to resources to create, scale and engage innovation. 2.2 Living Lab: To create a Living Lab, a city-scale testbed for prototyping, trialling and validating innovation to support entrepreneurs in commercialising and scaling ventures. 2.3 Inclusive Innovation: To facilitate and promote open communities and platforms of knowledge sharing, support and resources, that reach and nurture all kinds of entrepreneurs, enabling innovation in every sector of the Newcastle economy. 2.4 Scaling Innovation: To accelerate and improve the incubation, scale and clustering of entrepreneurs and enterprise focused on commercialising innovation for global consumption.
Community Benefit	What does success look like?	We are a city that embraces and cultivates innovation. Business and industry are confident to experiment and collaborate to create new growth. Entrepreneurship is encouraged and the resources needed to create change are plentiful. Newcastle is a city where anyone can nurture an idea into a globally scalable business.
Community Indicator	How will our community change?	• 15% increase in engagement at all innovation programs, events and meetups provided by the ecosystem throughout the city across a four-year horizon. 2021 baseline to be established. • 10% growth in the number of enterprise scaling innovation for national and global markets across a four-year horizon. 2021 baseline to be established. • Investment into innovative enterprise increases by 2% year-on-year. 2021 baseline to be established. • Local SME's engaging with the innovation ecosystem increases by 2% year-on-year. 2021 baseline to be established.
Links to CSP		6.2 A culture that supports and encourages innovation and creativity at all levels.
Links to New Local Framework		Innovation, Culture, Democracy, Equity, Connectivity.
Links to other City of Newcastle strategies/plans		Smart City Strategy, Library Strategy.



The benefits of innovation permeate throughout our community. Outputs solve challenges and introduce advantages that can improve well-being and make people and businesses more resilient. Economically, innovation produces a more globally competitive and productive local economy. Newcastle can attain these advantages through equipping people with entrepreneurial capability and access to the resources needed to create change.

Innovative people, also known as entrepreneurs, require resources external to themselves to achieve change and create impact⁴⁸. This priority concentrates on nurturing an accessible ecosystem of enabling external resources that accelerate, amplify and ease the implementation and commercialisation of novel ideas. Originating from anywhere, a novel idea can involve the invention, modification and adoption of change to make an impact, be it through a new product, service, process or improvement.

Enabling the right conditions for people to experiment and invest in change helps to diversify and differentiate our economy. Organisations and

enterprise with a higher degree of novelty are more resilient to disruption and typically more globally competitive⁴⁹. This Strategy endeavours to make this conducive environment more open and inclusive to embed these advantages in a more diverse portfolio of sectors and organisations.

Innovation is one of the ten key principles of the New Local framework. Innovation is a mindset, a process and a culture. We envisage an inclusive model of innovation wherein opportunity is shared equally. The Innovative People Priority is about increasing capacity to implement solutions and build upon existing strengths to generate new economic growth.

Our vision is to create a supportive ecosystem that provides a foundation for innovative people to create opportunity and encourages a culture of problem solving. By nurturing this innovation ecosystem, Newcastle will retain and attract entrepreneurial people that will help build a more resilient and diverse economy. Importantly we will create an enabling environment that enables anyone to scale their idea to create global impact.



⁴⁸ Feld and Hathaway 2020.

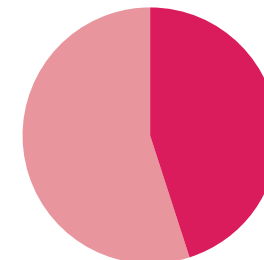
⁴⁹ Office of the Chief Economist 2017.

Case Study

I2N is an innovation hub that is driving business growth through innovation and entrepreneurship. Their programs have supported 71 businesses to scale and raise over \$6 million in funding. I2N is a 4,400 strong community of entrepreneurs.



approximately
\$50m
in private equity was invested
into local innovation in 2020.



45%
of Hunter businesses
implemented
innovation in 2018.

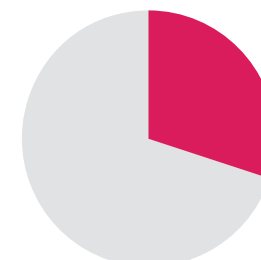
Pegasus is a local software-based company delivering solutions for big business such as Woolworths, BHP and Lendlease. Since 2013, Pegasus has experienced close to 25% year on year growth. More recently, Pegasus raised \$28 million from Silicon Valley tech investment firm Accel-KKR to take their offering to the US, UK, and Europe. Pegasus employs 120 staff, 100 of which work from their Newcastle HQ.

Incubator Eighteen04 provides cleantech and smart cities startups with access to collaborative co-working space, startup capital and experienced mentors. Resident startups have raised over \$8.46 million in funding and created over 60 new local jobs since 2015.



180
local actors and factors
dedicated to supporting
entrepreneurs innovate.

around
33%
of innovation
ecosystem actors
and factors are
designed to help
validate innovation.



SwitchDin develops technology for electricity utilities that makes distributed energy resources visible and controllable. The startup is at growth stage in Australia and has early traction in Europe. SwitchDin has created 27 jobs in Newcastle and raised \$7.3 million from Australian and international investors.

Delivery Programs

Innovation Ecosystem

Objective 2.1

Developing the Innovation Ecosystem ensures people have access to the resources needed to solve problems. The resources required to create change are complex and adaptive. Entrepreneurs need access to the seven capitals to commercialise innovation for scale. These are identified as human, financial, intellectual, physical, network, institutional and cultural capital⁵⁰. Multiple actors and factors play a role in providing these seven types of supportive capital.

The Innovation Ecosystem program is designed to support the maturing of the ecosystem by maintaining and fostering the seven capitals. This is achieved through focusing on four levers that can be leveraged through actions to increase support capital⁵¹:

Physical Lever: Tangible assets and infrastructure.

Information Lever: Connectivity and networking.

Social Lever: Governance and shared goals.

Culture Lever: Mindset and attitude.

Living Lab

Objective 2.2

The Living Lab is a framework that facilitates access to public infrastructure, communities and services to trial innovation. This program focuses on providing innovative people with a foundation from which to solve problems, to prototype and validate novel ideas for commercial application. Providing this platform will help entrepreneurs accelerate commercialisation creating faster pathways to market.

Inclusive Innovation

Objective 2.3

People are innovative in every type of business, organisation, industry and sector imaginable. However, many people may not understand they are being innovative or be aware of the knowledge and resources available to help them implement or grow an idea. The purpose of this program is to spread awareness of the ecosystem and the tools available to help make and accelerate change. Increasing understanding of innovation will help to diversify and build resilience in the local economy as more businesses, organisations and sectors become more attune to adaption and grow novelty. Our aim is to ensure we are reaching and nurturing all kinds of entrepreneurs. We want to make innovation accessible for all of Newcastle.

Scaling Innovation

Objective 2.4

Supporting and attracting entrepreneurs focused on delivering scalable innovation for international trade and global consumers, will help build a more resilient local economy through diversifying and increasing exports. We need to ensure that our city innovation ecosystem is supportive of and attractive to these types of entrepreneurs to retain and attract future industry and new enterprise.

We will support local entrepreneurs to create new economic opportunities through nurturing their ambition to scale local solutions and transform to navigate challenges to meet new market opportunities. Assisting startups, SMEs and corporate sectors to be global and investor-ready, will help more local business scale to create globally-resilient jobs. Our role is to help local entrepreneurs be aware of the resources needed and opportunities to trade in local and distant markets at scale.

⁵⁰ Ibid.

⁵¹ Ibid.





City Shaping Priority

Objective	What do you want to achieve?	1. Strategic Planning and Development: To ensure urban development facilitates investment, enables local economic diversification and supports population growth. 2. Digital Infrastructure: To enable advanced digital technology and high-speed connectivity to support and attract innovative businesses and growth industries. 3. Local Capital and Investment: To increase access to innovative financial infrastructure and investment supporting local creativity and industry development. 4. Strategic Government Relations and Advocacy: To implement an approach to government relations and city advocacy based on local consensus, stage-based evidence and strategic investment. 5. Circular Economy: To support industry transformation leveraging economic benefits of transitions to zero-waste and net zero emissions.
Community Benefit	What does success look like?	Newcastle has fully emerged onto the world stage as a diverse local economy with strong global connections. High quality jobs across a wide range of growth sectors are locally available, and the Newcastle workforce is sufficiently skilled to meet these challenges. Urban development has provided employment and innovation precincts with specialisations leveraging existing competitive advantages and reflecting global opportunity. Success looks like strategic planning and advocacy securing significant investment, which continues Newcastle’s emergence as a premier Gateway City. Newcastle boasts a dynamic and sophisticated mixed-use CBD, and revitalisation is significantly progressed on Broadmeadow. Newcastle is known internationally for its diverse, advanced and competitive economy. Local SMEs are economically resilient and increasingly trade beyond the local economy. Newcastle exports both things and ideas.
Community Indicator	How will our community change?	• Housing affordability and cost of living remain competitive. • New industry sectors are fostered through the development of innovation precincts. • Newcastle businesses enjoy access to future-ready digital networks. • Revitalisation of Broadmeadow including Hunter Park creates a second high-density population centre and lifestyle living precinct. • Local people invest in the local economy. • Newcastle industry is accruing the benefits of leading a national transition to zero waste and net zero emissions.
Links to CSP		6.2 A vibrant, diverse and resilient economy built on educational excellence and research. 6.2 A culture that supports and encourages innovation and creativity at all levels. 6.3 A thriving city that attracts people to live, work, invest and visit.
Links to New Local Framework		Placemaking, Connectivity, Diversification, Reinvestment, Innovation.
Links to other City of Newcastle strategies/plans		Smart City Strategy, Waste Strategy (forthcoming), Sustainable Newcastle Strategy (forthcoming), Local Housing Strategy and Local Strategic Planning Statement.

Newcastle has emerged as Australia's leading post-industrial Gateway City. It is managing a transition from a heavy industrial past to a more diverse and innovative knowledge and services-led economy, yet retaining important ties to industrial capability, engineering and manufacturing that see it well-positioned to leverage growth sectors of the new economy⁵².

Continuation of this trajectory requires bold and fundamentally transformative city-shaping initiatives to be developed and supported. Newcastle's recent history is a tale of such transformative projects. These projects share certain characteristics: they demonstrate tight calibration to existing challenges, they typically occur over extended periods of time due to their scale and complexity, and they deliver significant economic value by supporting new growth opportunities.

The New Local framework reminds us not to lose sight of local community inputs and impacts of these

ambitious city-shaping initiatives. A key focus of this priority is diversification of the economy – both geographically and across industry sectors. These changes have real local impacts on opportunities and prospects. The creation of local places with international trade and industry connections links the Newcastle community into the global economy. Simultaneously, increasing a sense of local ownership, and leveraging it to drive ever greater reinvestment, is a proven input into higher economic resilience and more diverse growth.

The intent of the City Shaping Initiatives program is to accelerate the transformation of Newcastle towards increased economic diversification and improved amenity that stand as indicators of economic success and high quality of life. It is a series of high-value moves that position Newcastle as an emerging global city, enable business competitiveness, support opportunities for our citizens and increase the attractiveness of Newcastle as a place to live and invest.

⁵² Gateway Cities Alliance 2019.



Case Study

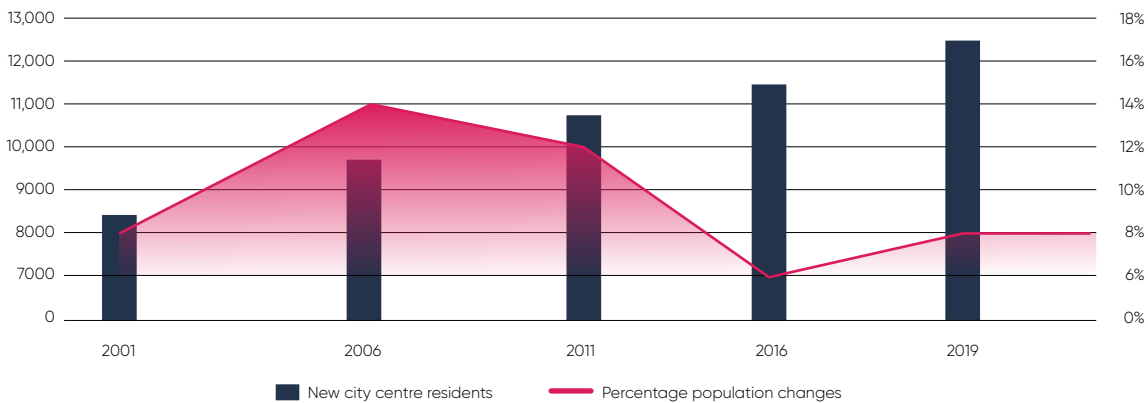
Light Rail

The installation of the Newcastle Light Rail was a huge public infrastructure project that had significant impact on local small business during the construction phase.

The project provided certainty to investors and unleashed a renewed sense of confidence in the future of the city that has translated into a sustained boom in commercial and residential development.

Light Rail has delivered unprecedented development investment into the city centre. The monthly average value of development assessments (DAs) lodged along Hunter Street in the 12 months prior to the announcement of the heavy rail line closing were approximately \$1.4 million. Since then, the average monthly value of DAs is \$14.1 million, resulting in an additional \$1.38 billion invested **into Hunter Street**.

New city centre residential population trend⁵³:



City centre population changes 2018-19⁵⁴:



⁵³ ABS 2020a. 1

⁵⁴ ABS 2020b.

⁵⁵ Spendmapp 2021.

Places of Economic Opportunities

A wide range of City Shaping Initiatives are underway across Newcastle. Collectively, they represent the most significant transformation of the economic foundations of the city in a century.

Innovation Arc Economic Catalyst Areas

The Innovation Arc is defined as the catalyst areas across the city, which provide opportunities for new enterprise to establish and scale. These catalyst areas are aligned to an industry and have often received significant government or private-sector investment.

Newcastle City Centre is the regional economic and cultural capital of Greater Newcastle, with about 80% of the region's office space and 30% of its developed industrial space⁵⁶. Significant development triggered by the State Government investment in urban revitalisation has encouraged over \$1.7 billion in new residential and commercial building developments since 2014 in the city centre⁵⁷. This precinct is home to civic and cultural facilities, and investment in infrastructure, public domain and next-generation technologies are driving the emergence of a sophisticated waterfront CBD with a focus on education, tourism, innovation and business.

Port of Newcastle has been the epicentre of economic activity in the Hunter region since the early 19th century. Port of Newcastle is the largest port on the Australian east coast with a deep-water shipping channel, capacity to double trade volumes, available portside land and berth-side connections to the heavy rail network. Port diversification to enable containerisation capacity, intermodal connection, energy resources and bulk goods import/export facilities represents \$4 billion in potential investment.

Newcastle Airport is a global transport hub that, prior to COVID-19, was used by more than 1.27 million

people annually. The Airport has plans well advanced for expansion of the runway to code E status enabling international flights. This project is modelled to create 4,400 regional jobs and deliver \$12.7 billion in regional economic activity across a 20-year horizon. The airport is co-located with the RAAF Base Williamtown, home to the Wedgetail and F-35A Joint Strike Fighter programs. Employment lands surrounding the airport have been designated by the NSW State Government as a Special Activation Precinct with up to \$200 million in allocated funding. Astra Aerolab and Williamtown Aerospace Precinct are home to internationally significant firms in defence, aerospace, advanced manufacturing and digital services.

John Hunter Hospital and Innovation Precinct is the subject of State Government plans to renew the primary referral and teaching hospital for Northern NSW as a health technology precinct. An upgraded hospital will be co-located with university and industry-led innovation and technology facilities, including the Hunter Medical Research Institute, to spearhead the growth of the health services sector. The John Hunter Hospital and Innovation Precinct has been approved with \$780 million in state government funding for stage 1.

University of Newcastle (UoN) is a research-intensive university focused on improving the quality of life in our regions and across the globe. The university is currently ranked 197th in the world by the QS World University Rankings. Most notably, 27% of students at UoN come from low socio-economic backgrounds. UoN is currently developing an expanded City Campus at Honeysuckle on lands made available by the introduction of light rail and has received state significant planning approval for a \$200 million Science, Technology, Engineering, Maths and Medicine (STEMM) hub for driving regional transformation through industry-engaged research and innovation at its unique bushland Callaghan campus.

Summerhill Waste Management Centre is a key asset in the delivery of waste management services to the City of Newcastle and broader region. City of Newcastle investment at Summerhill into Cell 9, the resource recovery centre, organics recycling facility, landfill gas-capture and onsite power generation, and a 5MW solar farm is transforming Summerhill as a resource recovery hub and green energy precinct. Summerhill forms the sixth site in the Newcastle Innovation Arc with the potential to drive new jobs creation in growth areas including circular economy, energy innovation, advanced manufacturing and reprocessing, and development of secondary material and by-product markets.

The development of Broadmeadow as a nationally significant sporting and entertainment precinct that also provides a mix of uses that facilitate growth and change in surrounding centres and residential areas. It is the next stage of Newcastle's city revitalisation. Broadmeadow is centrally located in the LGA, features existing sporting and entertainment infrastructure, which provide a significant role in community life. Major investment will see its transformation as Hunter Park: providing new facilities and public domains, increased density of housing around improved transportation networks, and the redevelopment of several edge sites including industrial re-use and remediated land.

Economic Catalyst Sites

Beresfield/Black Hill is a catalyst site located at the intersection of three local government areas in Greater Newcastle. The site straddles rail and road connections linking the economies of the Hunter with the global gateways of the port and airport. Beresfield/Black Hill represents potential as an integrated freight and logistics hub, with complementary manufacturing and light industrial activity with significant industrial land available for release enabling growth and expansion of industries.

Steel River Industrial Estate is prime waterfront industrial land adjacent to the Newcastle's Central Business District and with access to key arterial road and rail connections to Sydney, Brisbane and the New England Highway. Built on old BHP land, Steel River is home to traditional and advanced manufacturing, the CSIRO energy & resources facility, technology focused SMEs and two data centres.

Local Centres Upgrade Program

By virtue of its history as an amalgamation of eleven municipal councils in 1938, the Newcastle LGA is home to multiple thriving local commercial centres. They play a key role in providing for the retail, entertainment, recreational and social needs of the community, as well as local employment. The Local Centres Public Domain Program (LCPDP) is a City of Newcastle ten-year program of upgrades and infrastructure renewal works to enliven these centres, reflecting their role in the community and local economy and ensuring appropriate retail, commercial and public amenity within the micro-catchments of local neighbourhoods

⁵⁷ Remplan 2021.

⁵⁶ City of Newcastle 2021.



Delivery Programs

Strategic Planning and Development

Objective 3.1

Strategic Planning and Development is a driving force in the evolution of the local and regional economy. Planning is critical to fundamental economic factors such as determining the scale and mix of land uses for economic activity, the attraction, location and development of industry, housing density, affordability and cost of living, as well as the sustainable growth of the city. City of Newcastle undertakes a wide range of planning and development assessment activities, which enable economic development in alignment with community aspiration⁵⁸, and coordination with State Government and regional planning.

The Greater Newcastle Metropolitan Plan identifies a range of catalyst areas across the 'metro core' of Greater Newcastle that represent industry growth areas capable of underpinning a diverse and globally competitive economy. These catalyst areas include those sites identified as the Innovation Arc (see image on p8-9), retail, transport and logistics sites, and the next stage of Newcastle's revitalisation as Broadmeadow transforms into a world-class sporting and entertainment precinct, including transit-oriented development. As the world emerges from the pandemic, the value of ensuring diverse economic opportunity and self-reliance across the city is foregrounded.

Also apparent is the need to ensure that strategy and investment is well-targeted, data-led and based on international best and next practice. The City Analytics Program will better inform policy decision-making and stimulate applied research into the economic and social dynamics of Newcastle. This will be achieved by bringing together data, information and analytical skills from government, academic and industry partners across the region, and by using big data analytics frameworks, including those enabled by the City's Internet of Things (IoT) network.

The ongoing revitalisation of the city, the decentralisation of the local economy through strengthening local centres, strategic planning support to bring the precincts of the Innovation Arc and

catalyst areas to fruition, and a robust and innovative approach to analytics and insight are the primary objectives of this program.

Program focuses include:

Strategic land use planning to support sustainable growth.

Support for a distributed local economy in commercial centres.

Enabling the Innovation Arc.

City Analytics.

Digital Infrastructure

Objective 3.2

Increasingly, work is no longer anchored to place and highspeed digital connectivity forms an essential part of the attractiveness of a city emerging onto the global scale. There is growing international evidence of the value of city innovation districts for their capacity to drive the economy and enliven urban spaces⁵⁹. The intersection of digital infrastructure and internationally competitive business productivity and innovation is clear: Such places are attractive within a global competition for talent and capital⁶⁰.

Delivery of high-speed digital connectivity represents a transformative piece of infrastructure that will attract digitally-focused businesses, which drive economic growth and support major city centre investment into light rail and education precincts. Investment in smart city infrastructure is embedding next generation network technologies in the Newcastle city centre. This includes the fibre and wireless connectivity for city centre buildings, the physical and network infrastructure for an IoT-enabled city, future 5G deployments and digital and data services that enable accelerated technology adoption, faster business innovation and new opportunities for economic growth.

Program focuses include:

Deploy the City Digital Corridor.

Leverage next generation networks (IoT and 5G).

Expand the Living Lab Testbed.

⁵⁸ City of Newcastle 2018.

⁶¹ City of Newcastle 2020c

⁵⁹ Katz & Wagner 2014.

Local Capital and Investment

Objective 3.3

The realisation of opportunity and innovation through entrepreneurial action requires access to capital. Rarely does the person with the idea have direct access to the resources to bring it to fruition. Typically, people looking to start or expand a business seek investment and, on many occasions, turn to standard sources such as banks, venture capital and investors, who may not be locally based and therefore do not necessarily have the strength of the local economy, and the wellbeing of the local community, as priorities.

There is enormous economic potential in developing local sources of investment capital and resources to support local business get started and grow. When money stays local it is an investment in the future of a place, and its circulation delivers multiplier effects and added value in each transaction. This program seeks opportunities to improve the connection of SMEs to local finance through both increasing awareness of options, and the nurturing of more grassroots investors and investment vehicles.

Program focuses include:

Connect SMEs to local finance options.

Identify and mobilise grassroots local investors.

Build access to investment capital.

Strategic Government Relations Advocacy

Objective 3.4

A strategic and collaborative approach to advocacy for the city and region is crucial to ensuring that Newcastle is properly recognised in policy and funding decisions by State and Federal Governments. Advocacy memos created by the City Taskforce in response to the COVID-19 economic crisis provide a solid foundation from which to build. Advocacy was united across the city, detailed local stories of how we were contributing, and offered a partnership approach to enable change.

Our Delivery Program will focus on three key areas:

Strategic City Advocacy: We will embrace a new approach to advocacy for key policy recommendations and funding requests to State and Federal Governments. We will develop Advocacy Action Plans for key city-shaping initiatives, which acknowledges their complexity and addresses the challenges through incremental staging and evidence-based progression.

Regional Collaboration: Renewed support for regional collaboration initiatives. Regional collaboration is at the heart of the Greater Newcastle Metro Plan, and many challenges facing the city do not start and stop with local government area boundaries. Pressing regional challenges like transportation and environmental planning require collaboration across borders, and between sectors.

Gateway Cities Alliance: Strategic policy pressure alongside peer cities nationally through the Gateway Cities Alliance. The Alliance is seeking to influence key decision-makers on the strategic and economic value of investing in mid-tier cities or Gateway Cities (like Newcastle), particularly in a post COVID-19 world.

Circular Economy

Objective 3.5

A circular economy is underpinned by three main principles:

- 1. Design out waste and pollution
- 2. Keep products and materials in use; and
- 3. Regenerate natural systems

Adopting the circular economy principles will change the way we produce, assemble, sell and use products to minimise waste and to reduce our environmental impact. A circular economy values resources by keeping products and materials otherwise destined for landfill in use for as long as possible through repurposing. Maximising the use and value of

resources brings major economic, social and environmental benefits. It contributes to innovation, growth and job creation, while reducing our impact on the environment and helping to meet our objectives around carbon emission reduction. The circular economy also promotes innovation through new system designs which are no longer linear. Circular economy concepts provoke the idea of zero-waste possibilities and a regenerative system.

Circular economy represents an enormous industrial transformation on a global scale, and is a rich economic opportunity driving innovation, developing new services, technologies and products. The World Economic Forum estimates the global transition to a circular economy as delivering hundreds of billions of dollars of value annually. Furthermore, CSIRO has identified the job opportunities of the circular economy with the recycling sector currently generating 9.2 jobs per 10,000 tonnes of waste, compared to only 2.8 jobs for the same amount of waste sent to landfill⁶². The National Circular Economy Roadmap found innovation is crucial to realising Australia's largest economic gains, which will come from designing new products and materials, including through advanced manufacturing, and in embracing new business models that will create domestic and export markets for waste streams.

City of Newcastle is developing a strategic framework for establishing and developing a circular economy across waste, environment and climate mitigation strategies. This program acknowledges the vast transformative and productive potential of the circular economy. These strategies will centre on the Summerhill precinct of the Innovation Arc and seek to drive broader industry transformation by monetising waste to create new industries and designing out waste in the initial system designs.

Program focuses include:

An action plan for enabling the Circular Economy.

Enabling Industry Transformation.

Developing Summerhill as an Innovation Precinct.

⁶² CSIRO 2021



Vibrant City Priority

Objective	What do you want to achieve?	4.1 City and Precinct Activation: To lead the activation of our business precincts with a range events, promotions, beautifications and industry development opportunities. 4.2 Newcastle After Dark: To lead and collaborate to enable a city night-time economy characterised by its creative, vibrant and safe nightlife and that contributes significantly to the cultural and economic revitalisation of Newcastle. 4.3 Visitor Economy: To lead and collaborate to enable Newcastle to become a premier Australian visitor destination, showcasing a rich art, cultural and food scene, a vibrant night-time economy, and accessible nature-based and coastal experiences. 4.4 City Events: To lead and collaborate on the attraction and development of signature events in Newcastle, including the growing of the business and conferencing events sector. 4.5 Multiculturalism and Diversity: To celebrate the city's multiculturalism and diversity so that it becomes central to the city's identity. 4.6 Creative Economy: To support industry development leveraging existing economic and social strengths.
Community Benefit	What does success look like?	Newcastle CBD and suburban precincts are locations where people choose to be. They are dynamic and activated places, which highlight the diversity of Newcastle's population, our cultural and creative economy. More than just consumption it is about the creation of local creative and cultural content.
Community Indicator	How will our community change?	The number of people employed in Newcastle's night-time economy increases by two per cent year-on-year. The diversity of options in Newcastle's night-time economy continues to expand, particularly for multicultural communities. Newcastle will establish a role and reputation as a holiday leisure destination with significant increases in the number of visitors. The number of visitors to the city from outside the LGA to attend specific events increases by two percent year-on-year. 2021 baseline to be established. The number of people employed in a creative business increases by two percent year-on-year. 2021 baseline to be established.
Links to CSP		3.1 Public places that provide for diverse activity and strengthen our social connections. 3.2 Culture, heritage and place are valued, shared and celebrated. 3.3 Safe and activated places that are used by people day and night. 4.1 A welcoming community that cares and looks after each other. 6.1 A vibrant, diverse and resilient economy built on educational excellence and research. 6.2 A culture that supports and encourages innovation and creativity at all levels. 6.3 A thriving city that attracts people to live, work, invest and visit.
Links to New Local Framework		Placemaking Diversity
Links to other City of Newcastle strategies/plans		Newcastle After Dark Strategy, Destination Management Plan, Events Action Plan (forthcoming), Live Music Strategy.

A vibrant city is an attractive city. It is a city where things are happening, day and night. It is a city where the community are empowered to be involved and actively shape their city. It is a city where multiculturalism, aboriginal culture and the arts are celebrated. It is a welcoming city, where people visit and feel part of the community. At its heart, a vibrant city is a place that you actively want to be, a city that you enjoy living, working and playing in and around. The lifestyle benefits of Newcastle are numerous from our beautiful and diverse natural assets – such as our world-class beaches and urban bushlands – to our accessibility, where a 30-minute city is not just an academic concept but a reality.

Currently, City of Newcastle plays an active role in nurturing the vibrant city at both a strategic and local scale through:

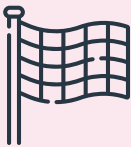
- facilitating major events,
- managing business support grants,
- managing funding of smaller activations and events,
- providing support and direction to the tourism sector,
- managing the city's cultural and civic venues,
- running a tourism information centre,
- collaborating, advocating and actively promoting the city's night-time economy,
- facilitating a renewed focus on live music and performance industries,
- celebrating what makes our city a great place to live, work and play, protecting it and enhancing these factors into the future.

Within this context, this Strategy is focused on enhancing the sectors that drive city vibrancy through activation, performance, interaction and cultural consumption. These sectors were heavily impacted by the COVID-19 pandemic and related economic contractions but remain central to our vibrant city vision. Residents and visitors alike are delighted by a city that showcases local talent, nurtures creativity and performance, and provides for activated public spaces. Vibrancy and creativity are intrinsically linked, with actions to foster one also supporting the other. Taking a broader perspective, the value of having a vibrant city will attract and retain people who will engage with and grow the local economy.

Brad Feld and Ian Hathaway state: *"Today's knowledge-economy workers, entrepreneurs, and startup employees want more than traditional attractors like affordable housing, access to transit and high-quality schools. They also desire plentiful cultural, social and natural amenities, and to be around other exciting and creative people,"*⁶³.

Newcastle is undoubtedly rich with natural amenities and the creative landscape to underpin a uniquely vibrant city. This program aims to accentuate and support industry sectors individually contributing billions of dollars annually to the local economy. Moreover, they provide the rich cultural life that provides the intangible attractiveness of a place and its people. The New Local framework identifies a diverse, connected and creative Newcastle as a special city with a dynamic future.

Case Study



Newcastle 500

A major sporting event in the annual calendar. It has been running in the city's east end since 2017. The Hunter Research Foundation Centre (HRFC) undertook an independent investigation into the economic and non-economic impact . The research identified that the benefits of the Newcastle 500 in 2017 included:

- \$30.1 million increase in local economic output.
- 83,000 visitors to the city.
- 344 media stories.
- Reaching a combined domestic audience of more than 14 million people.

The night time economy employs more than **12,000** novocastrians.



Hometown Holiday

Visitor economy businesses throughout the city of Newcastle were severely impacted by COVID-19. The Hometown Holiday project aimed to incentivise local residents to visit Newcastle as tourists and to engage to our city as a tourism destination. A competition was run with 100 \$500 vouchers awarded to local residents. More than 3,500 entries were submitted with \$50,000 spent between December 2020 and February 2021 at 70 participating visitor economy businesses.

Visitor Economy Highlights 2019:



\$954m



4,920 jobs



total of **5.1m** visitors

In 2018, a live music census was undertaken by City of Newcastle, the results were:



460 local gigs.



700 local artists.



80 local venues across the LGA.



Music People

COVID-19 hit the music industry particularly hard. All events were cancelled and most opportunities for informal performance were also made impossible by public health orders. Musicians had limited options for alternative income sources or to share their art. Music People, a 12-episode live music program, provided the perfect pivot to allow our local music scene to have an outlet, an audience and an income. Music People showcased Newcastle's diversity of musical talent, live-streamed to a network of social media platforms to allow homegrown talent to be discovered. Music People enabled 120 musicians and a number of production staff to have paid opportunities in Newcastle during COVID-19. Music People averaged 5,500 organic views per episode.

⁶³ Feld & Hathaway, ibid:35.

Delivery Programs

City Activation

Objective 4.1

City Activation is about a number of small acts adding up to a broader atmosphere of vibrancy. It is about empowering the community to actively shape and love their city. Activations can range from community events and markets to pop-up shops, from street art festivals to augmented reality walking trails. We want to embed vibrancy into all of our local centres, high streets and suburbs.

City of Newcastle has an important role in facilitating city activations primarily through the distribution of the Special Business Rate program in the city centre and four suburban precincts, as well as the range of City of Newcastle grants and sponsorships. Our vision is to enhance public spaces to become safe, welcoming and culturally rich environments.

Newcastle After Dark

Objective 4.2

The nightlife of a city has close links to its cultural and community life. The leisure and consumer patterns of the city at night have evolved over decades to meet this demand for spaces that facilitate public and civic life and allow cultural activity to flourish. Yet the night-time economy is equally a place of work and productivity, directly employing more than 12,000 Novocastrians and accounting for 5.7% of the total Newcastle economy – \$1.6 billion in 2019⁶⁵. The Newcastle night-time economy is significant at a national and regional scale; presently it is the sixth-largest night-time economy in the country.

We recognise the importance of the night-time economy and developed a Newcastle After Dark Strategy in 2018 to guide this program of work. A well-planned city night-time economy has a central role to play in connecting city activation with the visitor economy and city events. The Newcastle After Dark Strategy includes six priority areas:

Strategic Alcohol Management.

Night-time economic development.

Night-time design.

Cultural participation and activation.

Regulation planning and licensing.

Research and evaluation.

Visitor Economy

Objective 4.3

Newcastle has experienced significant growth in visitation over the past ten years, attracting more than five million visitors a year. The visitor economy in Newcastle is estimated to be worth almost \$1 billion in total economic output each year and provides jobs for almost 5,000 people.

The City of Newcastle recognises the importance of tourism to the local economy and developed a Destination Management Plan (DMP) to guide this program of work. The DMP will help to ensure the growth and viability of the Newcastle visitor economy, enabling it to become resilient to external influences and changes in a dynamic and competitive market. The DMP includes seven priority areas of work:

Identity, awareness and placemaking.

Connectivity and capacity.

Nature, coastal and wellness.

Creativity, culture and heritage.

Nightlife, food, wine and ferments.

Events, festivals and conferencing.

Industry collaboration and product development.

City Events

Objective 4.4

Events provide opportunities for people to connect with other people, learn something new, see something amazing or just have fun. Events also showcase our city, develop our sense of place and identity and contribute to economic and community development. Importantly, events also play a major role in attracting visitors to our city and extending their stay.

We recognise the importance of events to the local economy and will be developing an Events Action Plan 2021–2024 to guide this program of work. The Events Action Plan will provide a holistic and strategic approach to the entire events lifecycle including principles and guidelines for identifying, attracting and promoting events in Newcastle. Most importantly, the Events Action Plan will develop a consistent framework for identifying and evaluating the economic output of events to the City of Newcastle. The Events Action Plan will also discuss best practice approach for the planning and management of open public space and major event infrastructure.

Multiculturalism and Diversity

Objective 4.5

A vibrant city is one that is welcoming and safe for all. Newcastle’s ethnic, religious and cultural diversity is an integral part of our city’s identity and is intrinsic to our city’s vitality. Multiculturalism is in the interest of all residents and expresses our sense of fairness and inclusion. Migrants to Newcastle, including our most recent arrivals, have brought much-needed skills, labour and ideas to our city. They have given energy, ingenuity and enterprise that makes Newcastle what it is today. Research shows that migrant populations deliver an economic dividend and multiplying opportunities to local communities⁶⁶.

We want to celebrate the diversity and multiculturalism of our existing population and attract more diversity to our city. Our delivery program will seek to facilitate meaningful conversations and culturally focused events and activities.

Creative Economy

Objective 4.6

Newcastle is a creative city with an established history of dynamic makers across all the creative sectors. Our Creative economy covers the full spectrum from music, performing arts, visual arts, architecture, fashion, advertising and design, publishing, radio, through to an established film industry. Within these sectors of the economy, there are considerable employment opportunities with clear social and financial benefits. The creative industries are conservatively estimated to contribute close to \$1 billion to the Hunter Region Gross Regional Product. Specifically, in the city of Newcastle, the creative industry accounts for more than 2,500 jobs⁶⁷. Creative industries are connected to future urban growth and investment, city marketing and employment generation⁶⁸.

Our delivery program will have two distinct focuses to enable local infrastructure for the Creative Economy. Firstly, enhancing performance and exhibition infrastructure to showcase creativity. Venues such as the Newcastle Regional Art Gallery, Civic Theatre and Newcastle Museum are essential to supporting and educating the community on the value of our creative economy. These cultural institutions provide important markers of cultural value, allow us to tell and showcase our own stories, and drive significant economic value to the city. There is an opportunity to define a formal cultural precinct within the Newcastle CBD and provide a framework for planning to enable further growth.

Secondly, is the need for infrastructure to support creative development. The primary cultural and civic institutions are only the most high-profile surface of a deeply embedded cultural infrastructure supporting the production, distribution and consumption of creative products and outputs. A creative manufacturing precinct has emerged in Clyde Street, Hamilton North. This precinct is located in a former industrial area and now contains 38 creative-manufacturing-social enterprise SMEs operating with a broad range of tenants across the creative sector. The value in this organic co-location of creative industries is the establishment of a vibrant, diverse culture resulting in synergistic partnerships, and collaborative projects with local, regional and international stakeholders.

Furthermore, this delivery program will encompass the existing deliverables from the Live Music Strategy. New opportunities to expand and grow the film industry have also been identified.

⁶⁵ Council of Capital City Lord Mayors 2019: 23–24.

⁶⁶Massey & Parr 2012.

⁶⁸ Gibson, C et al 2017.

⁶⁷ McIntyre, P et al 2019: 12–15.



References

Australian Bureau of Statistics 1962, *1961 Census – Volume I – Part I NEW SOUTH WALES Analysis of Population in LGA*, Australian Bureau of Statistics, Canberra, accessed 27 January 2021, [https://www.ausstats.abs.gov.au/ausstats/free.nsf/0/5141CD48F759E789CA2578790016B0AF/\\$File/1961%20Census%20-%20Volume%20I%20-%20Part%20I%20NEW%20SOUTH%20WALES%20Analysis%20of%20Population%20in%20LGA.pdf](https://www.ausstats.abs.gov.au/ausstats/free.nsf/0/5141CD48F759E789CA2578790016B0AF/$File/1961%20Census%20-%20Volume%20I%20-%20Part%20I%20NEW%20SOUTH%20WALES%20Analysis%20of%20Population%20in%20LGA.pdf).

Australian Bureau of Statistics 2007, *2006 Census Community Profile Series: Basic Community Profile (cat no 2001.0); Newcastle (c) (LGA15900)*, Australian Bureau of Statistics, Canberra, accessed 12 January 2021, https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2006/communityprofile/LGA15900?opendocument.

Australian Bureau of Statistics 2012, *2011 Census of Population and Housing: General Community Profile (cat no 2001.0); Newcastle (c) (LGA15900)*, Australian Bureau of Statistics, Canberra, accessed 12 January 2021, https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2011/communityprofile/LGA15900?opendocument.

Australian Bureau of Statistics 2017a, *2016 Census of Population and Housing: General Community Profile (cat no 2001.0); Newcastle (c) (LGA15900) and Australia (O)*, Australian Bureau of Statistics, Canberra, accessed 11 January 2021, https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/communityprofile/LGA15900?opendocument and https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/communityprofile/036?opendocument.

Australian Bureau of Statistics 2017b, *2016 Census of Population and Housing: General Community Profile, Newcastle code LGA15900) – Working Population Profile*, Australian Bureau of Statistics, Canberra, accessed 20 January 2021, https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/communityprofile/LGA15900?opendocument.

Australian Bureau of Statistics 2017c, *2016 Census QuickStats: Hunter Valley excluding Newcastle and 2016 Census of Population and Housing: General Community Profile (cat no 2001.0); Newcastle and Lake Macquarie (111)*, Australian Bureau of Statistics, Canberra, accessed 12 January 2021, https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/106?opendocument and https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/communityprofile/111?opendocument.

Australian Bureau of Statistics 2018, *Estimates of Aboriginal and Torres Strait Islander Australians*, Australian Bureau of Statistics, Canberra, accessed 19 January 2021, <https://www.abs.gov.au/statistics/people/aboriginal-and-torres-strait-islander-peoples/estimates-aboriginal-and-torres-strait-islander-australians/jun-2016>

Australian Bureau of Statistics 2020a, *Regional Population – Population Estimates by Statistical Area Level 2, 2018–19*, Australian Bureau of Statistics, Canberra, accessed 11 January 2021, <https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download>

Australian Bureau of Statistics 2020b, *Regional Population– ERP by SA2 and above (ASGS 2016), 2001 onwards*, Australian Bureau of Statistics, Canberra, accessed 10 February 2021, http://stat.data.abs.gov.au/Index.aspx?DataSetCode=ABS_ANNUAL_ERP_ASGS2016#

Australian Bureau of Statistics 2020c, *Labour Force, Australia, Detailed – Table 16. Labour force status by labour market region (ASGS) and sex*, Australian Bureau of Statistics, Canberra, accessed 28 January 2021, <https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed/latest-release>

Australian Bureau of Statistics 2020d, *Regional internal migration estimates, provisional – June 2020*, Australian Bureau of Statistics, Canberra, accessed 28 January 2021, <https://www.abs.gov.au/statistics/people/population/regional-internal-migration-estimates-provisional/latest-release#data-download>

Australian Bureau of Statistics 2020e, *Australian National Accounts: National Income, Expenditure and Product – September 2020*, Australian Bureau of Statistics, Canberra, accessed 28 January 2021, <https://www.abs.gov.au/statistics/economy/national-accounts/australian-national-accounts-national-income-expenditure-and-product/latest-release>

Australian Bureau of Statistics 2020f, *Labour Force, Australia, Detailed: November 2020 – Newcastle and Lake Macquarie*, Australian Bureau of Statistics, Canberra, accessed 13 January 2021, <https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed/latest-release#labour-market-regions-sa4->

Australian Bureau of Statistics 2020g, *Labour force status by Age, Labour market region (ASGS) and Sex, October 1998 onwards: 6291.0.55.001 – RM1*, Australian Bureau of Statistics, Canberra, accessed 19 January 2021, <https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed/latest-release#labour-market-regions-sa4->

Australian Bureau of Statistics 2021, *Newcastle: Region Data Summary – Newcastle (SA3) (11103)*, Australian Bureau of Statistics, Canberra, accessed 28 January 2021, https://itt.abs.gov.au/itt/r.jsp?RegionSummary®ion=11103&dataset=ABS_REGIONAL_ASGS2016&geoconcept=ASGS_2016&measure=MEASURE&datasetASGS=ABS_REGIONAL_ASGS2016&datasetLGA=ABS_REGIONAL_LGA2019®ionLGA=LGA_2019®ionASGS=ASGS_2016

Australian Industry and Skills Committee 2020, *Industries/Mining, Drilling and Civil Infrastructure: Coal Mining, Australian Government*, Canberra, accessed 13 January 2021, <https://nationalindustryinsights.aisc.net.au/industries/mining-drilling-and-civil-infrastructure/coal-mining>

Buss, D 2014, 'Critical Site Selection Factor #1: Availability of Skilled Labor an Acute Need', *Area Development*, Q4 2014, accessed 15 June 2020, <https://www.areadevelopment.com/skilled-workforce-STEM/Q4-2014/skilled-labor-critical-site-selection-factors-7221554.shtml>

City of Newcastle 2018, *Newcastle 2030: Community Strategic Plan*, Newcastle City Council, Newcastle NSW, accessed 10 February 2021, <https://www.newcastle.nsw.gov.au/Newcastle/media/Documents/Strategies,%20Plans%20and%20Policies/Strategies/3119-CSP-Strategy-FINAL-WEB.pdf>

City of Newcastle 2020a, 'Our History – Our Stories', City of Newcastle History and Heritage webpage, Newcastle NSW, accessed 18 January 2021, <https://newcastle.nsw.gov.au/explore/history-heritage/our-history-our-stories>

City of Newcastle 2020b, *Newcastle Climate Action Plan 2021 – 2025*, City of Newcastle, Newcastle NSW, accessed 18 January 2021, <https://www.newcastle.nsw.gov.au/Newcastle/media/DocumentsHYS/Engagement%20Projects/Climate%20Action/4259-Climate-Action-Plan-WEB.pdf>

City of Newcastle 2020c, 'COVID-19 how we are responding: City Taskforce – Industry Representation', City of Newcastle News and Updates webpage, Newcastle NSW, accessed 3 February 2021, <https://www.newcastle.nsw.gov.au/council/news/covid-19-how-we-are-responding/city-taskforce-industry-representation>

City of Newcastle 2021, *Internal Records: Approved Development Applications 1 July 2014 – 3 February 2021*, accessed 8 February 2021.

Council of Capital City Lord Mayors 2019, *Measuring the Australian Night Time Economy 2018*, prepared by Ingenium Research, accessed 18 January 2021, https://www.lordmayors.org/wp-content/uploads/2019/09/Measuring-the-Australian-NTE_2018_FINAL_OnlineVersion_2019-09-02.pdf

CSIRO 2021, 'CSIRO's Circular Economy Roadmap charts path to triple job creation', CSIRO News releases and statements webpage, accessed 10 February 2021, <https://www.csiro.au/en/News/News-releases/2021/CSIROS-Circular-Economy-Roadmap-charts-path-to-triple-job-creation>

Feld, B. & I Hathaway 2020, *The Startup Community Way: Evolving an Entrepreneurial Ecosystem*, John Wiley & Sons Inc, New Jersey.

Gateway Cities Alliance 2019, *Australia's Gateway Cities: Gateways to growth*, Committee for Geelong, accessed 10 February 2021, <https://gatewaycitiesalliance.com.au/wp-content/uploads/2020/06/Australias-Gateway-Cities-Report-and-Appendices.pdf>

Gibson, C, C Grodach, C Lyons, A Crosby & C Brennan-Horley 2017, *Made in Marrickville: Enterprise and cluster dynamics at the creative industries-manufacturing interface, Carrington Road precinct*, Report

DP170104255-2017/02, Australian Research Council Discovery Project: Urban Cultural Policy, accessed 21 January 2021, http://www.urbanulturalpolicy.com/wp-content/uploads/2017/08/Made_in_Marrickville_DP170104255-201702.pdf

Goldstein, S 2018, 'Nine out of 10 new jobs are going to those with a college degree', *Market Watch*, 5 June 2018, accessed 22 June 2020, <https://www.marketwatch.com/story/nine-out-of-10-new-jobs-are-going-to-those-with-a-college-degree-2018-06-04>

Heath, A 2020, 'Skills, Technology and the Future of Work', *Speech to the Career Education Association of Victoria and Victorian Commercial Teachers Association Work Futures Conference*, Melbourne, 16 March 2020, accessed 8 February 2021, <https://www.rba.gov.au/speeches/2020/sp-so-2020-03-16.html>

Hunter C (ed) 1998, *Riverchange: six new histories of the Hunter*, Newcastle Region Public Library, ISBN 0909115702.

Hunter Research Foundation Centre 2018, *Newcastle 500 Supercars Event: Economic and Non-economic Impact Assessment for the City of Newcastle*, University of Newcastle, accessed 10 February 2021, <https://newcastle.nsw.gov.au/Newcastle/media/Documents/Supercars/Impact%20Assessments/HRF-Centre-CN-Supercars-Impact-Assessment-Report-v2-18-10-18.pdf>

International Energy Agency 2020a, *Coal Information: Overview. Comprehensive historical review and current market trends in the world coal sector: Statistics report – July 2020*, International Energy Agency, accessed 12 January 2021, <https://www.iea.org/reports/coal-information-overview>

International Energy Agency 2020b, *Coal 2020: Analysis and forecast to 2025*, International Energy Agency, accessed 12 January 2021, <https://www.iea.org/reports/coal-2020>

International Organisation for Migration 2020, *World Migration Report 2020*. United Nations International Organisation for Migration, accessed at 27 January 2021, https://publications.iom.int/system/files/pdf/wmr_2020.pdf

Katz, B. & J Wagner 2014, *The Rise of Innovation Districts: A New Geography of Innovation in America*, Brookings Institution, accessed 10 February 2021, <https://www.brookings.edu/wp-content/uploads/2016/07/InnovationDistricts1.pdf>

Kirkwood, I 2019, 'BHP's Newcastle steelworks through the rear-view mirror, 20 years after closure', *Newcastle Herald*, 21 September 2019, accessed 27 January 2021, <https://www.newcastleherald.com.au/story/6394123/ghost-of-bhp-still-haunts-the-hunter/>

KPMG 2014, *Magnet Cities: Decline / Fightback / Victory*, accessed 10 February 2021, <https://assets.kpmg/content/dam/kpmg/pdf/2015/03/magnet-cities.pdf>

LaBerge, L., C O'Toole, J Schneider, K Smaje 2020, 'How COVID-19 has pushed companies over the technology tipping point – and transformed business forever', 5 October 2020, *McKinsey & Company*, accessed 10 February 2021, <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever>

Lenaghan, N. 2021, 'Work from home trend eats into office demand', *Australian Financial Review*, 18 January 2021, accessed 9 February 2021, <https://www.afr.com/property/commercial/work-from-home-trend-eats-into-office-demand-20210116-p56umi>.

MacroPlanDimasi 2017, *Greater Newcastle Metropolitan Strategy – Economic Prospects to 2036*, accessed 16 September 2020, <https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/greater-newcastle-metropolitan-strategy-economic-prospects-to-2036-2017-11.pdf>.

Markle Foundation 2018, 'Skillful State Playbook: 7 Steps to Building a Skills-Based Labor Market', Skillful – a Markle Initiative, accessed 13 January 2021, https://www.skillful.com/sites/default/files/playbook/Skillful_State_Playbook.pdf.

Massey, S.L.J. & N Parr 2012, 'The socio-economic status of migrant populations in regional and rural Australia and its implications for future population policy', *Journal of population research*, 29(1), 1–21, accessed 10 February 2021, <https://research-management.mq.edu.au/ws/portalfiles/portal/62429765/Author+final+version.pdf>.

McIntyre P, M Balnaves, S Kerrigan, E King & C Williams 2019, *Creativity & Cultural Production in the Hunter: An applied ethnographic study of new entrepreneurial systems in the creative industries*, The University of Newcastle, accessed 10 February 2021, <https://soci.newcastle.edu.au/hci/wp-content/uploads/sites/291/2019/03/Hunter-Creative-Industries-Final-ReportV5-1.pdf>.

NSW DPE 2018, *Greater Newcastle Metropolitan Plan 2036*, NSW Department of Planning and Environment, accessed 2 July 2020, <https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/greater-newcastle-metropolitan-plan-2018.pdf>. Accessed 2 July 2020.

NSW DIPE 2020, *NSW 2019 Population Projections*, NSW Department of Planning, Industry and Environment, accessed 27 January 2021, <https://www.planning.nsw.gov.au/Research-and-Demography/Population-projections/Projections>.

Office of the Chief Economist 2017, *Australian Innovation System Report 2017*, Australian Government Department of Industry, Innovation and Science, Canberra, accessed 29 January 2020, <https://publications.industry.gov.au/publications/australianinnovationsystemreport2017/index.html>.

Port of Newcastle 2017, *The Port of Newcastle Economic Impact Report 2016/17*, Port of Newcastle & EconSearch, accessed 11 January 2021, https://www.portofnewcastle.com.au/wp-content/uploads/2019/09/ECO-011-Port-of-Newcastle_Economic-Impact-Report_V4--SK_v6.pdf.

Remplan 2021, 'City of Newcastle: Economy, Jobs and Business Insights' and 'Our Place – Our Community' webpages. City of Newcastle, Newcastle NSW, accessed 27 January 2021, <https://app.remplan.com.au/newcastle/economy/industries/employment?state=gZ5wFkIGW1dFWXkYFokWkLSw8wGAhPcVfq2OUL3J3eu4X2X8c6f6LjifNHee4gHKmO> and <https://app.remplan.com.au/newcastle/community/population/indigenous?state=4l1DirYpBQSE879TzJGJrt7A7V4iMfQu7klhatou6u2bhNu8sZFkrz>.

Spendmapp 2021, 'City of Newcastle Dashboard – Newcastle LGA expenditure data', Spendmapp Knowledge Base, accessed 10 February 2021, <http://www.spendmapp.com.au>.

Startup Genome 2020, *The Global Startup Ecosystem Report 2020*, Startup Genome, accessed 5 January 2021, <https://startupgenome.com/report/gser2020>.

The Treasury 2018, *Shaping a Nation: Population growth and immigration over time*, Commonwealth of Australia, accessed 21 September 2020, <https://research.treasury.gov.au/external-paper/shaping-a-nation>.

The Treasury 2021, 'JobKeeper Postcode Data', Commonwealth of Australia, accessed 13 January 2021, <https://treasury.gov.au/coronavirus/jobkeeper/data>.

United Nations Environment Programme 2020, 'Ten impacts of the Australian bushfires', United Nations Environment Programme, accessed 18 January 2021, <https://www.unenvironment.org/news-and-stories/story/ten-impacts-australian-bushfires#:~:text=1,reported%20to%20have%20been%20killed>.

Wright, S & J Duke 2021, 'Sydneysiders flee for the bush, led by students and workers', *Sydney Morning Herald*, 2 February 2021, accessed 10 February 2021, <https://www.smh.com.au/politics/federal/sydneysiders-flee-for-the-bush-led-by-students-and-workers-20210202-p56yr4.html>.



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