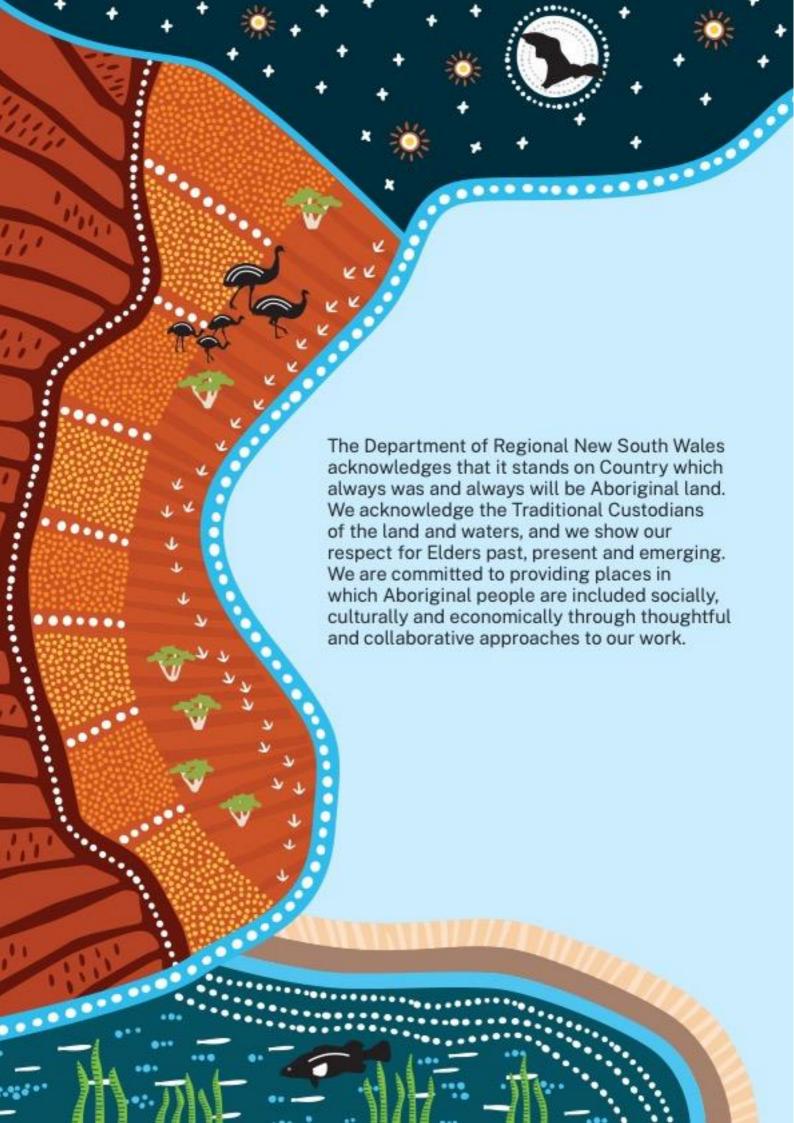


Bathurst and Oberon Regional Economic Development Strategy – 2023 Update





Published by the Department of Regional NSW

Title: Bathurst and Oberon Regional Economic Development Strategy - 2023 Update

First published: February 2023

Acknowledgements

The Department of Regional NSW would like to acknowledge the significant contribution of many stakeholders in the Bathurst and Oberon region to the development of the 2023 REDS Update, with particular thanks to staff from Bathurst Regional and Oberon Councils. The Department of Regional NSW also acknowledges the assistance provided by PricewaterhouseCoopers and ProjectsJSA to help deliver the 2023 REDS Update project.

On Country - Artwork by Mumbulla Creative

"On Country" captures the many different countries located within the Department of Regional NSW footprint. Only part of the image is shown on the Acknowledgement of Country page. The regions included in this partial image are detailed below.

The Far West region of NSW is represented by red earth plains, mallee scrubs and an abundant emu population. Freshwater countries are referenced by the expansive network of rivers stretching through the regions. The Riverina Murray region is represented by the roots of a river redgum on the banks of a river, and a large Murray Cod can be seen in the river. The night sky features as it plays an important navigational and story-telling role in traditional life.

Cover image: Mount Panorama, Bathurst. Photo credit: Domino Houlbrook

© State of New South Wales through the Department of Regional NSW 2023. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute the Department of Regional NSW as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (February 2023) and may not be accurate, current or complete. The State of New South Wales (including the Department of Regional NSW), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own enquiries and rely on their own advice when making decisions related to material contained in this publication.

Table of Contents

Т	Table of Contents4			
1.	Executive Summary	5		
	Changes in the Bathurst and Oberon region since 2018	5		
	Key themes from local consultation	6		
	Bathurst and Oberon REDS - 2023 Update strategies and enablers	7		
2	. About the 2023 REDS Update	8		
3	About the Bathurst and Oberon region	9		
4	. The 2018 REDS and 2020 Bushfire Addendum	10		
5	The big picture: Shocks and trends impacting the Bathurst and Oberon region since 2018	12		
	Significant events impacting major industries	12		
	Macroeconomic trends shaping the region's future	14		
6	Responding to change: Initiatives and investments since 2018	16		
	Significant investments since 2018	17		
7	. Bathurst and Oberon region 2023 economic snapshot	20		
	Demographics	20		
	Housing	21		
	Employment	22		
	Bathurst and Oberon region 2023 engine and emerging industries	23		
	Bathurst and Oberon region 2023 endowments	25		
8	Looking ahead: Strategic opportunities for growth, resilience and liveability	26		
	Opportunities and vulnerabilities in engine and emerging industries	26		
	Key themes in stakeholder consultation	30		
	Bathurst and Oberon REDS - 2023 Update strategies	30		
	Key enablers of economic growth	31		
9	. References	34		

1. Executive Summary

Changes in the Bathurst and Oberon region since 2018

In 2018, the NSW Government developed Regional Economic Development Strategies (REDS) for 38 Functional Economic Regions (FERs) across regional NSW. Since publication, regional NSW has endured shocks including bushfires, floods, COVID-19 and the mouse plague, and significant new economic opportunities have emerged. The 2023 REDS Update provides an updated evidence base to guide governments in making policy and investment decisions to enhance resilience and drive sustainable, long-term economic growth in regional NSW.

The Bathurst and Oberon region has seen significant investment delivered since 2018, with additional projects in the planning or delivery stages



Over \$60 million committed to the Bathurst Gaol expansion.



Investment in the **Bathurst Integrated Medical Centre** to the sum of \$70 million.



Commitment of \$200 million for the Bathurst Base Hospital Redevelopment.



\$18.88 million for the Jenolan Caves Visitor Facilities Upgrade and revitalisation.

The Bathurst and Oberon region has experienced reduced unemployment, rising job vacancies and increased house prices since 2018



The Bathurst and Oberon region has recorded 1.9% population growth since 2018.



Housing vacancy rates in the region sit at **0.67%**, with median house prices having risen by an average of **41%** since 2018.



The proportion of the **population over 55 years** old has increased by **0.6%** since 2018.



Unemployment across the region is well below the NSW benchmark and reflects close to full employment, with job vacancies climbing to a record 2,523 in August 2022.

The FER has been renamed

This FER was previously named Abercrombie, but this was not considered by stakeholders to reflect the regional context. The name has been changed to Bathurst and Oberon, reflecting the geographical coverage of the FER.

Bathurst and Oberon's key industries have remained resilient, with agriculture and forestry, healthcare and education and training continuing to drive economic growth

Agriculture and forestry		
+ 7.6 % Year-on-Year (YOY) growth from 2011-2020	\$ 207 million Gross Value Added (GVA) in 2020	1,051 jobs supported in 2021
Manufacturing		
- 0.5 % YoY growth from 2011-2020*	\$ 295 million GVA in 2020	1,961 jobs supported in 2021
Healthcare		
+ 5.9 % YoY growth from 2011-2020	\$ 258 million GVA in 2020	3,601 jobs supported in 2021
Education and training		
+ 3.3 % YoY growth from 2011-2020	\$ 271 million GVA in 2020	2,479 jobs supported in 2021

^{*}The negative rate of manufacturing growth is consistent with state-wide trends (see page 27). Despite this, manufacturing value-add has increased in the region.

Key themes from local consultation

Stakeholders from the Bathurst and Oberon region have highlighted enabling growth through service and infrastructure provision and enhancing regional resilience as being key priorities for the region.

Housing availability and affordability



Stakeholders are concerned that there is a lack of infrastructure to enable housing development, which is being reflected by low housing supply and current housing affordability and availability challenges.

The need for sustainable long term growth



Stakeholders would like to see growth smoothed out over time, to ensure investment brings about long-term economic development and to help ensure councils are well placed to meet increased demand for their services.

Building resilience



Recent natural disasters and economic shocks have highlighted the need to incorporate principles of resilience into planning for population growth and other policies and projects.

Bathurst and Oberon REDS - 2023 Update strategies and enablers

Strategies	Enablers
Increase value-adding in agricultural products through innovation.	 Leverage linkages between the agricultural sector, Charles Sturt University (CSU) and industry bodies to support further development and adoption of agreech to improve industry productivity and competitiveness.
Capitalise on existing and emerging strengths in manufacturing, education, health and information technology.	 Support councils to use the Connectivity Index Tool to review existing coverage and identify the areas of greatest need in the region for upgrades to telecommunications infrastructure. Support cluster development in cyber security, including through leveraging the IBM investment in Bathurst. Support investment in emerging green opportunities such as circular economy processes and renewable energy generation and storage.
Optimise competitiveness in agriculture, forestry and manufacturing through telecommunications, transportation and intermodal networks.	 Support growth in employment lands by protecting potential future sites from incompatible development, identifying critical enabling infrastructure needs, and working with NSW Government agencies to identify additional funding opportunities for industrial land supply and development. Work with local stakeholders to implement the action items of the Macquarie-Castlereagh Long-Term Water Plan and Regional Water Strategy. Support the development and upgrades of transport infrastructure including improving rail networks and delivering connectivity to employment lands.
Enable workforce attraction and retention by delivering additional housing, industrial land and community infrastructure.	 Collaborate with local councils and industry to identify areas of chronic skills shortages in the region and work to align training offerings to support the development of in-demand skills. Improve workforce attraction and retention through a focus on liveability, housing supply, and coordinated branding for the region to inform young people about potential career opportunities in the region.
Develop the region's collaboration in the visitor economy and diversify local product offerings.	 Improve digital offerings for tourists, including wayfinding, and support the expansion of cultural and experiential tourism attractions such as agritourism, eco stays, sporting events, and the Bathurst Winter Festival.

2. About the 2023 REDS Update

In 2018, the NSW Government and local councils developed a series of REDS for 38 Functional Economic Regions (FERs) across regional NSW. FERs are made up of one or more Local Government Areas (LGAs) that work together to create smaller economies with strong economic links.

Supporting the 20-Year Economic Vision for Regional NSW, the REDS set out a place-based vision and framework for economic development for each FER. The REDS identify each FER's endowments, industry specialisations and key vulnerabilities and opportunities, and outline economic development strategies and actions to leverage these strengths.

Since 2018, regional NSW has endured many challenges including drought, bushfires, floods, COVID-19 and the mouse plague. At the same time a range of broader state-wide trends and actions continue to change the economic landscape across regional NSW, including digital transformation, increased remote working and the shift towards net zero. These challenges and trends have altered the landscape of economic development in many regions and created new opportunities for growth.

The 2023 REDS Update provides an updated evidence base to guide governments in making policy and investment decisions to enhance resilience and drive sustainable, long-term economic growth in regional NSW. The objectives of the update are to:

- Highlight progress: reflect on significant initiatives and investments that have supported progress against the key strategies and actions in the 2018 REDS.
- 2. **Capture major changes:** identify and assess the impacts of major changes to regional economies since 2018, including the effect of recent 'shocks' such as bushfires, droughts, floods, mouse plagues and the COVID-19 pandemic.
- 3. **Identify strategic opportunities:** identify key strategic opportunities and vulnerabilities for engine and emerging industries, as well as any changes to local endowments.
- 4. **Set the foundation for the future:** review, affirm and/or adjust the 2018 strategies, including consideration of new strategies to meet emerging priorities, to ensure they remain relevant.



Figure 1: Kings Parade, Bathurst. Photo credit: Wisdom



Figure 2: An Oberon streetscape. Photo credit: Destination NSW.

5. **Identify key enablers to guide future action:** develop a non-exhaustive list of priority enabling actions that will support the 2023 REDS Update strategies.

3. About the Bathurst and Oberon region

The Bathurst and Oberon FER is situated in the central west of NSW, approximately 3 hours drive from Sydney. The region is comprised of Bathurst and Oberon Local Government Areas (LGAs), with the majority of the population living in the growing city of Bathurst, Australia's oldest inland colonial settlement. The region has a temperate climate with four distinct seasons and a varied topography, from the edge of the Blue Mountains in the east to the central tablelands in the north and west of the region.

Total area covered (km²)	7,477
Population (2021)	49,217
Bathurst	43,653
Oberon	5,564
Size of the economy (2020)	\$3.104 billion
Total employment (2021)	22,611

Source: ABS Estimated Resident Population, 2021; REMPLAN, 2020; ABS Census, 2021



Figure 3: Map of the Bathurst and Oberon Functional Economic Region

4. The 2018 REDS and 2020 Bushfire Addendum

In 2018, the Bathurst and Oberon region was actively pursuing growth of its key industry specialisations, in particular agriculture, manufacturing and transport. Endowments recognised in the document accounted for the natural, physical, institutional and industrial comparative advantages the region possesses in attracting visitors. These endowments and specialisations are highlighted below.

Following the 2019-2020 bushfires, the NSW Government developed the 2020 Bushfire Impact Addendum, which offered additional areas of strategic focus centred on recovery and resilience.

2018 Bathurst and Oberon strategies



Increase value-adding in agricultural products through innovation.



Capitalise on existing strengths in manufacturing.



Optimise competitiveness in agriculture, forestry and manufacturing through transportation and intermodal network.



Optimise growth in the development of regional infrastructure.



Provide opportunities for attracting and retaining entrepreneurs and skilled professionals.



Develop the region's brand and diversify local tourism offerings.



In addition to the core strategies articulated in the 2018 REDS, the Bathurst and Oberon region Bushfire Impact Addendum set a series of 14 additional short, medium, and long-term priorities focused upon:

Recovery - overcoming direct and indirect damage sustained by the forestry and tourism sectors.

Resilience - pursuing growth and infrastructure investment that improves connectivity, resilience and disaster response capabilities.

2018 Bathurst and Oberon specialisations

The primary industry specialisations below were identified as comparative advantages for the Bathurst and Oberon region in the 2018 REDS, based on employment concentrations in industry sectors.

44	Manufacturing
	Agriculture, forestry and fishing
	Tourism
i i	Education
	Healthcare and social assistance

2018 Bathurst and Oberon endowments

The region is home to a wealth of natural, physical, institutional and industrial endowments. These endowments play a key role in enabling success and growth across its industry specialisations.

Endowment	Relevant 2018 specialisation
Location – proximity to Canberra and Sydney	
Jenolan Caves	
Mayfield Garden	
Pine forests and National Parks	
Aboriginal history and contribution	
Young and educated population	
Strong business community	4
Railway and road infrastructure	
Aviation	
Mount Panorama Motor Racing Circuit	

5. The big picture: Shocks and trends impacting the Bathurst and Oberon region since 2018

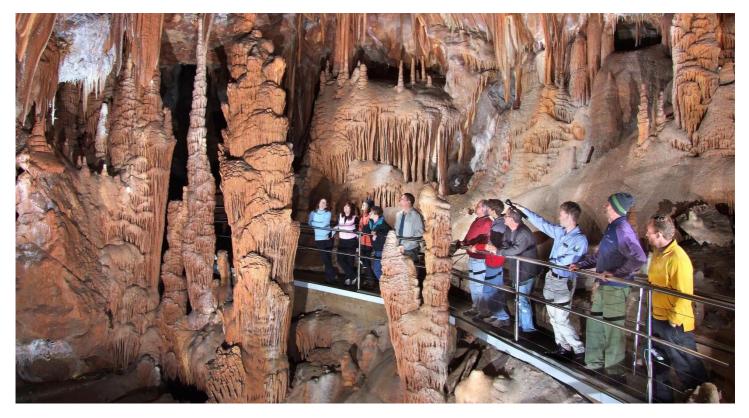


Figure 4: Visitors enjoy a tour of Jenolan Caves. Photo credit: Oberon Council

Significant events impacting major industries

A sustained period of drought, followed by major bushfires and flooding, had severe environmental and economic implications for the region. The COVID-19 pandemic further challenged the region, with local businesses, particularly those in involved with the visitor economy, suffering from the impacts of movement and operating restrictions. From the period 2018 to 2022, the region had 9 disaster declarations^[1] and received \$24.83m in disaster recovery grants funding.^[2] Despite repeated disasters, the region's economy has remained strong (see page 23 and 24), suggesting enduring resilience among both industry and the broader community.

Drought

The region experienced prolonged drought during the period from 2017 to 2020, which had a significant impact on residents and businesses. In November 2018, Bathurst Regional Council invoked water restrictions for the first time in more than 20 years. For the agricultural sector, irrigators around Bathurst were restricted to using 20% of their entitlement to conserve supply in Chifley Dam. [4]

In Oberon Shire, the sustained dry period saw primary producers face significant challenges associated with maintaining sufficient supply of water for stock and crops, and fertile land was effectively turned into dustbowls. ^[5] The impact of the drought on the region's engine industries, in particular the agricultural sector contributed to a spike in the unemployment rate, which reached 5.3% in December 2018 (see page 22).

Bushfires

The 2019-20 bushfires had a significant impact on the region, with the most severe effects felt in the Oberon LGA.

Key impacts included:

- 731 square kilometres of land burnt (10% of the total FER area).
- Direct impact on the visitor economy with National Parks and State Forests burnt, including the destruction of staff accommodation at the Jenolan Cayes.
- 16 properties damaged or destroyed.
- Other key industries impacted included forestry, with damage to plantations and the loss of the majority of the 2020 vintage for boutique vineyards in the local viticulture sector.^[6]



Fire impacted areas

Figure 5: Bushfire affected areas within the Bathurst and Oberon region during the 2019-20 fires.

COVID-19

The COVID-19 pandemic had a significant impact on business activity, with 45% of businesses reporting that COVID-19 has negatively affected their business.^[7] In the acute phase of the pandemic, there was also a strong impact on the labour market with a sustained increase in income support recipients since March 2020. Jobseeker recipients rose by 61%, while health care card recipients rose by 23% from March to June 2020.^[8]

Floods

Since 2019, eight of the nine natural disaster declarations have involved severe weather and flood events, four of which have occurred since the beginning of 2021. Severe weather events of early 2022 (in particular in January and February) caused significant flooding of the Abercrombie Caves site, with National Parks and Wildlife Service reporting it as the worst flooding seen in the region in 70 years. [9]

Severe weather and flooding also impacted the region in late 2022 with both LGAs disaster declared. The most substantial flooding occurred in November 2022, when the Macquarie River breached the town levee in Bathurst, causing the closure of the Great Western Highway, dividing the town in two, and causing widespread flooding of low lying areas with damage to property and sporting infrastructure. [10]

Flooding also caused substantial disruption to the gas supply in the Central West region in November 2022, after the largest supply pipeline, which runs under the Macquarie River at Bathurst, ruptured during flooding.^[11] Storms and flooding also impacted key industry sectors such as forestry, causing extended closures of access to state forests as a result of fallen trees and localised flooding.^[12]

Mouse Plague

The 2021 Mouse Plague had a direct impact on the agricultural sector, with 94% of farmers having to bait for mice and a third reporting financial challenges as a result, with key impacts including increased baiting costs, loss of stored grain and fodder, damage to machinery and infrastructure and health impacts such as difficulty sleeping. To support impacted communities, the NSW Government made available up to \$95 million for primary producers in financial need, and \$45 million for the Small Business and Household Mouse Control Rebate. 1,705 claims totalling \$846,899 were paid out to Bathurst and Oberon residents and small businesses impacted by the mouse plague. [14]

Macroeconomic trends shaping the region's future

Macro trends related to climate and migration have played a significant role in the development of the region since 2018 and are likely to continue to have a strong influence on its future. With a growing population, the impacts of successive natural disasters and an increasing role in the shift towards net zero, the region faces both opportunities and risks as it looks to build resilience against challenges and leverage its competitive advantages to take advantage of new and emerging opportunities.

Trend		Opportunities and risks
Digital Transformation	The COVID-19 pandemic has bolstered remote workers who are taking advantage of the regional lifestyle offering while maintaining metro-based employment. This is evident in the population shift in 2020-21, with regional NSW gaining an additional 26,800 residents while Sydney declined by 5,200. [15] Investment in improved telecommunications infrastructure since 2018 through the Connecting Country Communities program, including the rollout of 6 new mobile phone towers (4 in Bathurst and 2 in Oberon) to address connectivity has been a key enabler of this trend. However, some areas still do not have access to reliable internet coverage, and further investment will be required to continue to enhance digital connectivity across the region.	An accelerated digital transformation opens up online opportunities for businesses to scale up e-commerce capabilities and reach new markets. The surge in digital demand puts increased pressure on digital infrastructure, which can create reliability and service quality issues. Improved connectivity can increase the visitor economy in the region's villages e.g. Hill End and Tarana.
Changing Migration Patterns	Increased COVID-19 related migration has been a contributing factor to population growth in the region, which has pushed up demand for enabling infrastructure, especially housing. The competitive nature of migration in filling local jobs, as residents can live and work in higher paying jobs that are not based in the region means population growth may not necessarily solve workforce challenges being currently faced by local employers. Retaining young workers, especially in hospitality and other population-serving roles in demand typically requires high-quality placemaking and amenity [16], as well as a need for employment opportunities which can compete with offerings from outside the region.	A boost in population has the ability to boost local economic activity and attract new businesses and industries to the region. Population increases however place upward pressure on existing key infrastructure and services, for example housing and care economy services.

Trend



Towards Net Zero The Bathurst Regional Council Renewable Energy Action Plan has a target of 50% of council's electricity consumption being powered by renewables energy by 2025, showing the leading role council is playing in the shift towards net zero. This provides certainty for investment, will open up circular economy opportunities and encourages investment in renewable energy.

The ability for the region to leverage its natural endowments related to energy generation is an opportunity to capitalise on the growth trend, and can align with local council planning to help achieve the state's net zero emissions targets.

Opportunity for the region to leverage its natural endowments to drive investment in new energy generation.

Opportunities and risks

A core challenge will be to ensure the region derives long term local benefit from new renewable energy generation and storage facilities, especially post construction phase.



Rising Uncertainty

With the frequency and intensity of natural disasters projected to increase in coming decades^[18], there is a need to enhance climate and economic resilience.

The need for enhanced climate resilience is critical for those parts of the region (in particular Oberon LGA) which already face significant challenges in maintaining infrastructure due to relative temperatures extremes, especially during winter.

Building community resilience alongside enhanced ability of physical infrastructure to be resilient to increased climate variability will also be critical. Rising uncertainty presents an opportunity to improve supply chain resilience in agriculture and energy industries.

Rising uncertainty places upward pressure on inflation, driving up input costs related to major projects.



Figure 6: Truffle dogs at work in Oberon LGA. Photo credit: Oberon Council.

6. Responding to change: Initiatives and investments since 2018



Figure 7: Mayfield Garden near Oberon. Photo credit: Destination NSW

Since 2018, local councils, the NSW Government and other key organisations have delivered new and updated key strategic documents and plans that help guide economic and community development in the region. These documents support the development of local enabling actions that contribute towards progress against key REDS priorities and strategies.

Strategies and plans	Relevant 2018 strategies	
The Central West and Orana Regional Plan 2041 sets out the strategic framework for the region's land use, centred around the 3 major investments of Inland Rail, Parkes Special Activation Precinct and Central West/Orana Renewable Energy Zone. Each Council's Local Strategic Planning Statement sets out land use planning objectives for the LGA in line with the Regional Plan.	₩ №	
The Oberon Council Community Strategic Plan 2019-2040 and the Our Region Our Future - Bathurst Community Strategic Plan 2022 highlight key community aspirations and set out a long-term vision for each of the LGAs in the region.		
The Bathurst Smart Community Strategy seeks to provide a 5-year roadmap for the region to use technology, data and human capital to improve connectivity, fast-track innovation and improve resource, energy and service management.	// & &	
The draft Future Transport 2056 Central West and Orana Regional Transport Plan provides a blueprint for how Transport for NSW will respond to the transport needs of the region. Key goals include boosting alternative transport (walk, cycle, public transport) and improving access to day return services to major destinations.		
The draft Central West Destination Management Plan 2022-2030 seeks to establish a collaborative framework to guide growth of the visitor economy, with key objectives of supporting industry recovery, building a regional brand, investing in major events and attracting investment into tourism in the Central West.	•	
The Bathurst Region Destination Management Plan 2019-2024 sets out a vision of how to grow the region's visitor economy, with a focus on building out experiential tourism, improving capacity and enhancing visitor services.	•	

The Central NSW Joint Organisation Economic and Social Environmental Scan reviewed relevant strategic documents across government and the private sector to identify the risks, opportunities and challenges for the region.



The Macquarie-Castlereagh Long-Term Water Plan sets the framework for the maintenance and improvement of environmental outcomes in the Macquarie-Castlereagh catchment. This complements the Macquarie-Castlereagh Regional Water Strategy, which sets out the plan to secure water in the broader region over the coming decades.







Significant investments since 2018

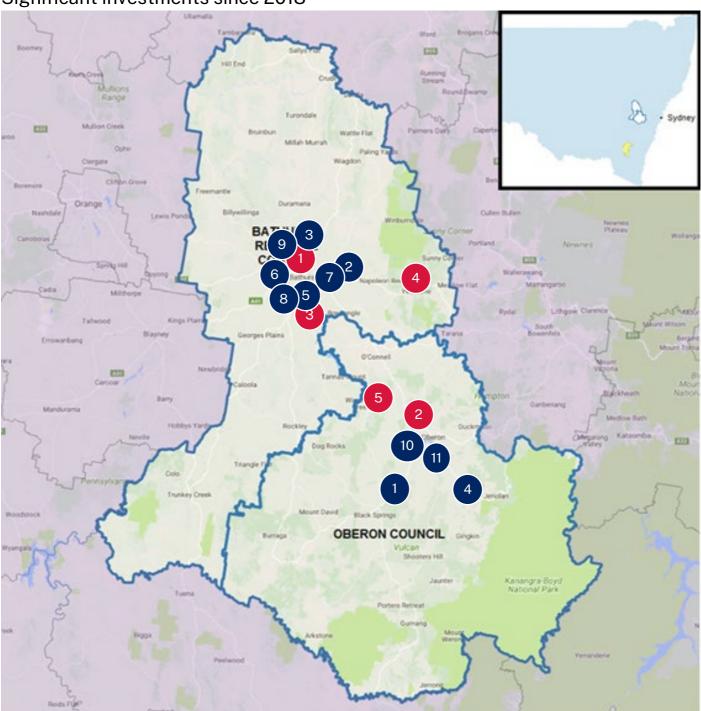


Figure 8: Significant investment in the Bathurst and Oberon region, as set out on pages 18 and 19.

As shown in Figure 8 above and detailed in the table below, since 2018 the region has seen significant local, state and federal funding, as well as private investment. These investments are at varying stages of progress, with some delivered, some underway, and some investments still in the planning stage. Public investments have largely focused upon developing infrastructure which supports amenity for the local community and visitors, as well as major transport and health related projects. Grant funding has played a key role in delivery of many of these projects.

Major private investment since 2018

Investment		Estimated total project value	Relevant 2018 strategies
1	Bathurst Integrated Medical Centre	\$70 million	~ <u>\$</u>
2	Borg Manufacturing Oberon – Timber Plant expansion and Bettergrow Composting and Landscape Facility	>\$120 million	
3	Simplot Bathurst – Manufacturing Facility upgrade	\$65 million	
4	ATCO 325MW pumped hydro	\$500 million	& //
5	Mayfield Gardens upgrades	Not Available	

Major public investment since 2018

Investment		Estimated total project value	Relevant 2018 strategies
1	Oberon LGA road upgrades - Abercrombie Road, Arkstone Road, Burraga Road, Campbell's River Road, Lowes Mount Road	>\$18 million	
2	Bathurst Airport upgrade	\$2.88 million	
3	Bathurst Base Hospital redevelopment	\$200 million	~ <u>\$</u>
4	Jenolan Caves visitor facilities upgrade and Jenolan Caves revitalisation project	\$18.88 million	Ô
5	Bathurst Rail Museum	\$5.4 million	•
6	IBM/CSU Tech Hub	\$2.70 million	* / &

7	Kelso Industrial Park expansion	\$5.83 million	
8	Central Tablelands collection facility	\$4.6 million	
9	Bathurst Gaol expansion	\$160 million	~
10	Oberon Community Hub	\$3.55 million	∕ ∕ ≜
11	Oberon Multipurpose Sports and Community complex	\$4.88 million	∕ ∕ ≜

Regional grant programs

The region has received \$87.88 million in grant funding since 2018. Key programs have included the Regional Growth and Tourism Fund and Growing Local Economies Fund, with \$19.88 million and \$10.46 million committed respectively for projects including the Jenolan Caves visitor upgrades and the Bathurst Airport upgrade.

Grant category	Approved funding
Community	\$29.44 million
Economic	\$33.61 million
Disaster recovery	\$24.83 million

Note: Total grant funding outlined above only includes programs managed by the Department of Regional NSW, accurate as at January 2023.



Figure 9: Bathurst Winter Festival. Photo credit: David Roma.

7. Bathurst and Oberon region 2023 economic snapshot

Sustained population growth in Bathurst and Oberon is expected to continue, with a focus needed on retaining workers in their prime working age in the region

Population growth

As shown in Figure 10, the region has experienced an average population growth rate of 0.86% between 2011 and 2021. This highlights the liveability of the region and resilience to recent external shocks.

Since 2018, with the region growing at an average of 0.64%, the population has increased by around 935 people in total. Following the beginning of the COVID-19 pandemic, population growth remained relatively stable and consistent with historical growth rates, with a

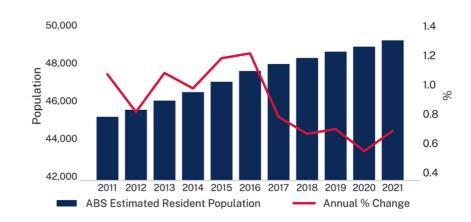


Figure 10: Bathurst and Oberon FER population growth, 2011-2021 (ABS ERP, July 2022)

slight uptick in the growth rate recorded during 2021.

Demographic profile

The region has a higher proportion of residents in the 20-24 age bracket compared to NSW as a whole (see Figure 11) reflecting the tertiary education assets in the region and the role they play in supporting higher education in the Central West. However, age brackets which capture the prime working age years of workers (25-49 years) are under-represented, indicating migration out of the region may be occurring as people enter their prime working years.

Therefore, a key focus for the region needs to be placed on workforce retention, including developing social infrastructure to support attraction and retention of people in their prime working age. Significant opportunity exists for the region to leverage its strong education and training specialisation to maintain a highly skilled workforce, especially in key industries including health care, information technology and advanced manufacturing.

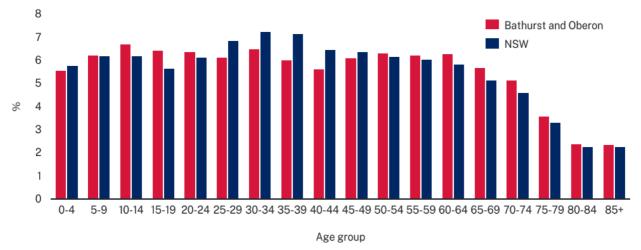


Figure 11: Bathurst and Oberon FER population by age, 2021 (ABS ERP, July 2022).

Growth in housing supply in the region needs to accelerate to meet demand

The region has faced a decline in housing availability since 2018. This has placed pressure on house prices, with substantial growth in dwelling price value occurring during the pandemic. This upward pressure is likely to be exacerbated by population growth and increased demand resulting from major projects planned in the region.

Housing availability

Residential vacancy rates in the Central West region have dropped from a peak of 2.7% in December 2018 to just 0.7% in August 2022, as displayed in Figure 12. The residential vacancy rate decreased rapidly during the acute phase of the pandemic in May 2020, and has remained below 1% since, placing significant pressure on the housing market and acting as a potential barrier for people looking to move to the region.

While there has been a slight uptick recorded in residential building approvals in 2021, they remain largely consistent with historical levels. With the potential expansionary effects of major project investment expected in coming years, development approval processes are likely to come under more pressure given the demand that housing availability places on planning.

Housing affordability

Between June 2018 and June 2022, median house prices in Bathurst regional LGA have increased by 51% (\$435,000 to \$655,00). Oberon LGA house prices have increased 32% to \$560,000 in the same time period.^[19]

While house prices have grown, the price to income ratio for the region was estimated to be 6.23 in July 2021, below the NSW benchmark average of 8.12. [20] This highlights that despite significant recent house price increases, the region still maintains a relative housing cost advantage compared to other regions despite the strong growth.

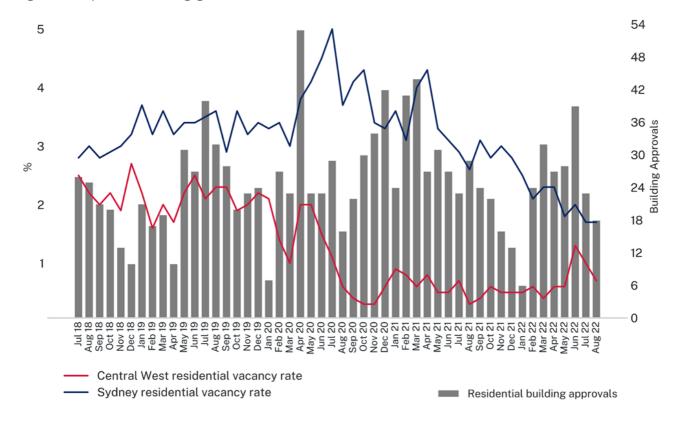


Figure 12: Bathurst and Oberon FER vacancy rate and building approvals, 2018-2022 (REINSW, 2022)

Note: REINSW vacancy data collection is not aligned with the FER boundary map, resulting in an overlap with other FERs. These results are therefore intended to provide an indication of housing vacancies in the region.

The region is facing a constrained labour market with near full employment

A constrained labour market has been a key issue for the region since 2018, with job vacancies tripling across this period and unemployment falling despite major shocks to industry and the region.

Employment

As at June 2022, the unemployment rate in the Bathurst LGA was sitting at 2.2%, with Oberon slightly lower at 1.7%, both well below the NSW benchmark of 3.3% (see Figure 13). This represents a very tight labour market nearing on full employment, which is consistent with consultation feedback that highlighted many industries are struggling to find workers to fill vacancies.

Similarly, the growth in the demand for labour is reflected in increasing levels of job vacancies for the broader region, reflecting a strong recovery from a low in May 2020 by reaching a historical high in August 2022 of 2,523, as shown in Figure 14.

The top vacancies sat in healthcare with carers and aides (236), while population serving sectors such as retail (206) and administration (167) were the most in demand. Given the key role Bathurst plays as a health hub in the region, addressing these current workforce challenges will be critical to meeting long term demand for health services.

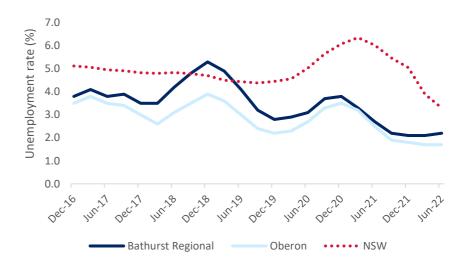


Figure 13: Bathurst and Oberon FER unemployment rates (%), 2016-2022 (National Skills Commission, 2022; ABS Labour Force, 2022)

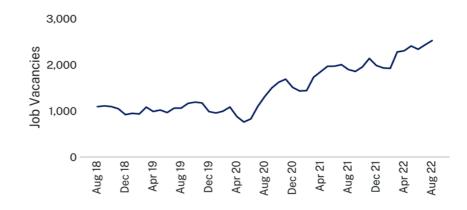


Figure 14: Job vacancies, Blue Mountains, Bathurst, and Central West region (2018-2022) (Regional IVI, National Skills Commission, 2022)

Note: The regional IVI – National Skills Commission job vacancy data collection is not aligned with the FER boundary map, resulting in an overlap with other FERs. Job vacancy data only includes online job vacancies. These results are therefore intended to provide an indication of job vacancies in the region.

Aboriginal employment

The Aboriginal unemployment rate in the region has dropped significantly from an estimated 18.5% in 2011 to 10% in 2021. This rate is just above the NSW Aboriginal unemployment rate of 9.8% and is above the NSW unemployment rate of 4.9%.

Aboriginal unemployment rate: Bathurst and Oberon	2011	18.5%
	2016	15.1%
	2021	10.0%
NSW Aboriginal unemployment rate	2021	9.8%
NSW unemployment rate	2021	4.9%

Source: ABS Census 2021

Bathurst and Oberon region 2023 engine and emerging industries

The Bathurst and Oberon region has a \$3.1 billion economy. Despite the significant shocks experienced since 2018, Bathurst and Oberon's agricultural and manufacturing industries continue to be a key source of economic activity and resilience. Continued expansion of the health and education cluster in the region can provide key support for ongoing development of a skilled workforce for the region. The relative strength of each industry is measured using location quotient (LQ) analysis¹ as displayed in Figure 15, where industry size correlates with bubble size.

Engine industries

Agriculture and forestry (LQ of 3.32) endures as an engine industry for the region, generating \$207 million in GVA in 2020 and average annual growth of 7.6% since 2011, the second fastest growth rate of any industry over this period. The specialisation is driven by **forestry and logging** with a GVA of \$73 million (LQ of 22.8) and **sheep, grains, beef and dairy cattle** with a GVA of \$95 million (LQ of 3.1).

Manufacturing is also a key source of economic output for the region, with the industry representing the largest contribution to local GVA, contributing \$295 million in 2020. This specialisation is broad-based and aligns with comparative advantages in the agriculture and forestry sector, including fruit and vegetable product (LQ of 23.0), sawmill product manufacturing (LQ of 18.4), meat and meat products (LQ of 3.0) and other food products (LQ of 6.0).

Although an enabling industry rather than an engine of economic growth, **health care** remains a key specialisation for Bathurst and Oberon, contributing \$258 million to local GVA in 2020 and growing at annual rate of 5.9%, outstripping the state's annual growth rate. Equally, **education and training** leverages the region's endowments in the education sector, adding \$271 million to GVA in 2020 (LQ of 1.69) and highlights the economic benefit derived from having education assets, such as CSU and TAFE Bathurst.

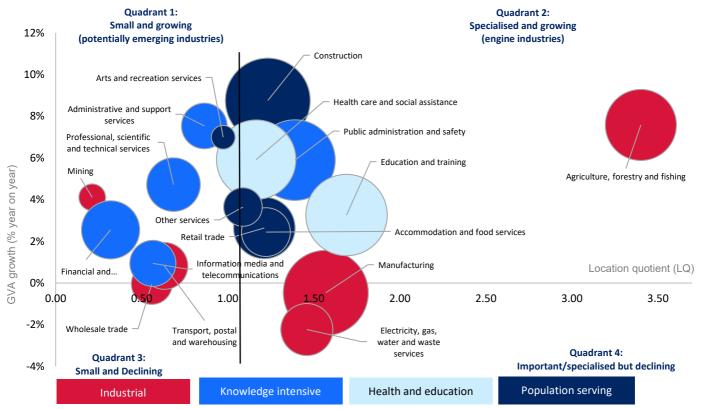


Figure 15: Location Quotient Analysis by GVA, 2011-2020 (REMPLAN, 2020)

¹ LQ analysis is used to measure industry specialisation by comparing the relative size of an industry in the region versus the whole of NSW. Note: While the 2018 REDS used employment data as the basis for LQ analysis, the 2023 Update has used Gross Value-Add (GVA) data. This allows for a clear demonstration of the changing economic impact of both engine and emerging industries across the regions.

Emerging industries

The region's emerging industries have remained consistent since 2018, with each out-growing the state-wide average GVA growth and increasing their importance to the Bathurst and Oberon economy.

Arts and recreational services has grown at nearly twice the rate of the state level since 2011, reflecting a strong pipeline of investment in regional tourism assets such as the Bathurst Memorial Entertainment Centre, the Railway Museum and upgrades to Jenolan Caves. With further investment proposed in this area, arts and recreation services should continue to be an important emerging industry in the region.

Professional, scientific and technical services is also an emerging industry, with local growth accelerating to 4.7% on average over the last decade, compared to the 1.2% growth seen at a state-wide level. This emerging industry is well aligned with the region's goal of attracting and retaining skilled workers and entrepreneurs.

Although an enabler of growth rather than an engine industry, construction has been the fastest growing industry in the region since 2011, growing at an average annual pace of 8.8%. As a result, in nominal terms, the industry has more than doubled its output over this period, expanding from \$138 million in 2011 to \$294 million in 2020. Major projects such as the Bathurst Base Hospital Redevelopment, the CSU Tech Hub and major manufacturing plant upgrades demonstrate strong progress against the strategy from the 2018 REDS focused on optimising infrastructure and growth.

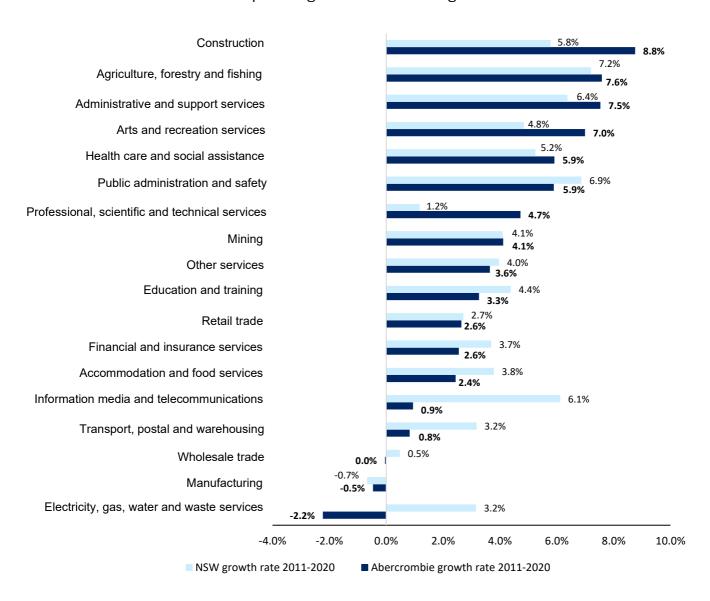


Figure 16: Change in GVA by Industry (% YOY), 2011-2020 (REMPLAN, 2020)

Bathurst and Oberon region 2023 endowments

Review of the 2018 endowments

The 2018 REDS identified a diverse range of endowments underpinning Bathurst and Oberon's economy and regional competitiveness (see page 11 for the complete list from the 2018 REDS). Despite recent shocks impacting many key endowments, consultation affirmed that most of them remain valid, with key endowments including:

- Location proximity to Canberra and Sydney
- Mayfield Garden, National Parks
- Aboriginal history and contribution
- Young and educated population + strong business community
- Jenolan Caves
- Mount Panorama Motor Racing Circuit

New endowments

While not yet reflected in the employment and industry specialisation (LQ) analysis, recent investments and policy efforts have created an expanded cultural and sporting precinct endowment, which can underpin new economic opportunities and future specialisations. During consultation, two additional existing endowments that should be added as part of the 2023 REDS Update were also identified.

+	Proximity to Lithgow and Orange	Greater connectivity between regional hubs facilitates greater mobility of people and goods in local economy.
+	CSU Bathurst	CSU plays a major role in attracting and retaining young people to the region and assisting with meeting skilled workforce needs. CSU's new partnership with IBM to establish a client innovation centre in Bathurst presents a significant opportunity.
+	Expanded cultural and sporting precinct	Jenolan Caves upgrades, the new Bathurst Railway Museum, Central Tablelands Collection Facility and Oberon and Bathurst sport facilities upgrades have expanded the region's visitor economy offerings.



Figure 17: View from Mount Panorama Boardwalk, Bathurst LGA. Photo credit: Ribbon Gang Media Agency

8. Looking ahead: Strategic opportunities for growth, resilience and liveability

Opportunities and vulnerabilities in engine and emerging industries

Agriculture, forestry and fishing

The region continues to leverage its significant natural endowments and strong business community to build the agricultural sector. Future industry growth will be contingent on ensuring resilience against external shocks and the impacts of climate change. Significant opportunity exists for future growth to be underpinned by collaborative research and development efforts led by key local institutions.

GVA (2020, \$m)	207
Employment (2021)	1,051
LQ score (2020)	3.40
LQ forestry and logging (2020)	22.8
LQ sheep, grains, beef, dairy (2020)	3.1

Strengths

- Bathurst and Oberon's specialisation in the agriculture, forestry and fishing sector is centred upon forestry and logging, together with sheep, grains, beef and dairy cattle.
- Oberon is home to timber processing by large firms CSR and Boral, as well as being home to prime lamb and beef cattle farming. Bathurst's agricultural strength is predominantly derived from sheep and cattle farming as well as horticulture.^[21]
- Rural land values are estimated have increased by 22.1% in 2021-22, with high commodity prices, low interest rates and favourable seasonal conditions powering this growth. [22]

Vulnerabilities

- Externalities have impacted the industry since 2018, as demonstrated by multiple environmental shocks in the form of bushfires, floods, drought, floods, mouse plague and COVID-19.
- Recent inflationary pressures have placed upward pressure on key input costs such as production and freight transport costs (4.7% jump in service price in 2021-22).
- Freight costs represent a significant share of Gross Value of Farm Production (GVAP), varying by sector, with grains (27.4%), fruit and vegetables (21%) and beef (6.4%) high-cost sectors.^[23]

- Expanding value-add opportunities by adopting productivity raising practices in biotechnology, new technologies, mechanisation and precision farming.^[21]
- Leveraging the agricultural specialisation across the Central West, through bodies like Central West Farming Systems, Local Land Services, NSW Farmers' AgInnovators and the tertiary education sector to pursue collaboration in research and development and enhance value in the industry.
- Exploring opportunities to develop high value agritourism products and experiences.

Manufacturing

The region has been able to build a manufacturing sector that is well-aligned with the agriculture, forestry and fishing sector, which allows it to deliver substantial value-add in the local economy. Future industry growth will be contingent upon ensuring resilience against external shocks, and alleviating impacts from cross-sector issues such as skills shortages and housing related challenges.

GVA (2020, \$m)	295
Employment (2021)	1,961
LQ score (2020)	1.57
LQ Fruit and vegetable manufacturing (2020)	23.0
LQ Sawmill product manufacturing (2020)	2.7

Strengths

- Bathurst and Oberon's manufacturing industry specialisations are closely linked to the region's strength in the agricultural and forestry sector.
- This value chain alignment facilitates a comparative advantage in local value-add manufacturing activities, including wood products, bakery products, sawmill products, meat and meat products, fruit and vegetable production and other food product manufacturing.

Vulnerabilities

- As part of a broader macro trend, manufacturing as a share of the region's economy has declined since 2011, experiencing negative growth. This has occurred in a macroeconomic environment where Australia's economy is increasingly services driven.
- The strong link between the manufacturing sector in the region and agriculture and forestry creates vulnerabilities associated with external shocks and the impact of changing climatic conditions.

- Key opportunities for the region's manufacturing industry are well aligned with an increased emphasis on sovereign capability and onshoring of value in the supply chain to improve stock guarantees and product turnaround in the wake of external shocks, particularly COVID-19.
- Significant investments have been made into manufacturing facilities in recent years, such as major upgrades at Borg Manufacturing in Oberon, including major plant upgrades in 2018, and the development of a new Bark and Timber Recycling Facility that can support future growth associated with circular economy processing.^[24]
- A focus on enhancing industry-educational ties can help build on food manufacturing as a key regional specialisation, which could include major players such as Simplot, Mars and Devro. [25]
- Opportunities may also exist to attract smaller food manufacturing businesses from Sydney to Bathurst to leverage this key regional strength.

Education and training

Major recent investments in the education sector in the Bathurst and Oberon region have reinforced the key role the sector plays in the region's economy, and opportunity exists to leverage this significant endowment to enhance economic resilience and support future economic growth in the region.

GVA (2020, \$m)	271
Employment (2021)	2,479
LQ score (2020)	1.70

Strengths

- Bathurst is the home base of CSU, Australia's largest regional university. The region is also home to TAFE Bathurst, providing access to a range of skills and trade programs.
- The region is also home to a strong network of primary and secondary schools, both public and nongovernment schools, including major boarding schools, which provide families with a wide range of access to quality education in the region.

Vulnerabilities

- Tertiary education was severely impacted by COVID-19, with international border closures meaning overseas students were unable to attend or return to in person learning for an extended period.
- University finances were detrimentally impacted, the skilled workforce in the sector shrunk and the knowledge economy also slowed, inhibiting local skill development.^[26]

- The creation of a new IBM Client Innovation Centre in partnership with CSU provides a significant opportunity to develop a leading IT and data-driven knowledge cluster in regional NSW. [27]
- The strength of the education and training sector in the region can support enhanced economic resilience, if it can be successfully leveraged to help build workforce capability to meet key skilled workforce needs for the region's businesses and industry.
- A focus on actions to encourage younger people who move to the region to study to remain following graduation can help meet Bathurst and Oberon meet long term skills challenges and help support growth in the working age population of the region.

Healthcare and social assistance

Substantial investment into new and upgraded health facilities continues to drive significant growth in the healthcare and social assistance sector in the region, and to embed the role of Bathurst as a key regional hub in the Central West.

GVA (2020, \$m)	258
Employment (2021)	3,601
LQ score (2020)	1.17
LQ Residential care and social assistance (2020)	1.4

Strengths

- Bathurst and Oberon's specialisation in healthcare and social assistance is derived primarily from residential care and social assistance services.
- The region is home to multiple major health care assets including Bathurst Base Hospital (providing more than 100 beds), Bathurst Private Hospital and a swathe of residential care and social assistance services.
- In particular, the social assistance services sector has grown rapidly, with an estimated 50% growth recorded over the past 5 years. [28]

Vulnerabilities

- Attracting skilled professionals, from medical practitioners and nurses to carers and aides, is a central challenge to meet the growing demand for health care and social assistance services.
- These occupations are the most in demand in the region but are also in demand across much of regional NSW, meaning there is broad-based competition for skilled health workers.

- The announcement of the redevelopment of Bathurst Base Hospital will expand capacity of the health system in the Central West with more beds, a larger emergency department, increased rehabilitation services and expanded ambulatory and outpatient services.^[29]
- The growth of the region as a health centre is also gaining stronger traction in the private sector, demonstrated by the Bathurst Integrated Medical Centre project, which is proposed to include a new private hospital, women's health service, medical training and other allied health facilities. [30]

Key themes in stakeholder consultation

During consultation, stakeholders highlighted that priorities in the region have shifted from seeking to attract more people and businesses to the region, towards more effectively managing growth in population and demand for business relocations. Stakeholders are focused on maintaining the character of the region through sustainable and inclusive growth, rather than simply looking to maximise growth.

Stakeholders also sought an emphasis on the importance of connections to other parts of the region, as well as clear enunciation of how the REDS can support key investments in the region in the future. Both councils requested the FER be renamed Bathurst and Oberon (from Abercrombie), so to better identify the geographic region to stakeholders.

Housing availability and affordability

Consultation revealed concerns amongst stakeholders that current housing shortages and reduced affordability will only worsen in the face of a growing population, a need to house workers undertaking major project delivery, and a very tight labour market.

High levels of growth are creating challenges

With strong growth in agriculture production and land values, in conjunction with significant health and education infrastructure investment, significant growth and investment is occurring in the Bathurst and Oberon region.

As a result, local councils are being challenged by a significant increase in demand for their services. For example, stakeholders outlined the need to unlock more industrial and residential land which requires more strategic planning, development and delivery of key services by councils.

The need to focus on long term sustainable growth

While major projects bring significant investment and employment opportunity, they can also impact on local amenity and housing availability and affordability. Stakeholders expressed a desire to apply a future-focused lens to major projects to ensure long-term benefits flow to the community from major investments. Stakeholder highlighted the

need to ensure growth can be smoothed over time, so the region can avoid boom-bust cycles.

Building resilience

Recent natural disasters that have impacted the region, alongside the impacts of the COVID-19 pandemic on consumer spending and tourism visitation have highlighted to stakeholders the need to make the principles of resilience central to future policy, programs and project delivery.

Bathurst and Oberon REDS - 2023 Update strategies

The 2018 strategies broadly remain relevant to the Bathurst and Oberon region. However, given the significant external shocks that have occurred since 2018 and significant growth experienced in Bathurst and Oberon, a number of changes have been made to the strategies to reflect changing economic development priorities in the region.

- Amendments have been made to ensure the existing and emerging strengths associated with education, health and information technology are reflected.
- The importance of enhanced telecommunications has been added to the strategy focused on optimising competitiveness in the key sectors of agriculture, forestry and manufacturing.
- The strategy associated with the visitor economy has been pivoted to increase the focus on developing collaboration in the sector and diversifying local product offerings.
- The two strategies centred on optimising regional infrastructure and supporting workforce attraction have been combined, with the focus shifted to delivering the additional housing, industrial land and community infrastructure needed to support workforce attraction and retention, business development and sustainable population growth.

Reflecting the changes outlined above, the 2023 REDS Update strategies for Bathurst and Oberon are listed below (amendments made to existing 2018 strategies are highlighted in **bold**).

Existing	Increase value-adding in agricultural products through innovation.
Amended	Capitalise on existing and emerging strengths in manufacturing, education , health and information technology .
Amended	Optimise competitiveness in agriculture, forestry and manufacturing through telecommunications , transportation and intermodal networks.
Amended	Enable workforce attraction and retention by delivering additional housing, industrial land and community infrastructure.
Amended	Develop the region's collaboration in the visitor economy and diversify local product offerings.

Key enablers of economic growth

A number of key enablers have been identified to assist with delivering each of the strategies. This list is non-exhaustive, with a focus on identifying priority short-to-medium-term enablers. Responsibility for implementation of these enablers sits with various levels of government, and in some cases may also include business, industry or non-government bodies. Collaboration across these entities at a local level will be key to achieving results.

Strategy	New Enablers		Lead and support	Rationale
Increase value-adding in agricultural products through innovation.	People and skills	Leverage linkages between the agricultural sector, CSU and industry bodies to support further development and adoption of agtech to improve industry productivity and competitiveness.	Department of Primary Industries (DPI), agricultural sector, industry bodies	Maximise economic gains from specialisation in agriculture and forestry.
Capitalise on existing and emerging strengths in manufacturing, education, health and information technology.	Infrastructure	Support councils to use the Connectivity Index Tool to review existing coverage and identify the areas of greatest need in the region for upgrades to telecommunications infrastructure.	NSW Telco Authority, Department of Regional NSW (DRNSW), local councils	Improve connectivity and productivity of the region's engine industries.

Strategy	New Enablers		Lead and support	Rationale
		Support cluster development in cyber security, including through leveraging the IBM investment in Bathurst.	CSU , Local councils, industry bodies	Support the emerging cyber security industry.
	Utilities	Support investment in emerging green opportunities such as circular economy processes and renewable energy generation and storage.	Local councils, DRNSW, Department of Planning and Environment (DPE), local industry bodies	Create new economic opportunities in emerging energy generation and waste management.
Optimise competitiveness in agriculture, forestry and manufacturing through telecommunications, transportation and intermodal networks.		Work with local stakeholders to implement the action items of the Macquarie-Castlereagh Regional Water Strategy.	DPE Water , local councils, DRNSW	Improve the reliability and resilience of water assets as population and industrial use grows.
	Infrastructure	Support the development and upgrades of transport infrastructure including improving rail networks and delivering connectivity to employment lands.	TfNSW , local councils, DRNSW	Improve transport connectivity to support local industries.
	Land use	Support growth in employment lands by protecting potential future sites from incompatible development, identifying critical enabling infrastructure needs, and working with NSW Government agencies to identify additional funding	Local councils, DPE, DRNSW, Department of Infrastructure, Transport, Regional Development, Communication s and the Arts (DITRDCA) (Federal)	Support industry growth by improving the availability of suitable land.

Strategy	New Enablers		Lead and support	Rationale
		opportunities for industrial land supply and development.		
Enable workforce attraction and retention by delivering additional housing, industrial land and community infrastructure.	Government, information and regulation	Collaborate with local councils and industry to identify areas of chronic skills shortages in the region and work to align training offerings to support the development of in-demand skills.	Training Services NSW, local councils; TAFE NSW, CSU, Registered training organisations	Bolster the skilled workforce in the region to meet current and future demand for labour.
	People and skills	Improve workforce attraction and retention through a focus on liveability, housing supply, and coordinated branding for the region to inform young people about potential career opportunities in the region.	Local councils, DRNSW, DPE, CSU	Retention of people aged in prime working years will grow the local population and businesses.
Develop the region's collaboration in the visitor economy and diversify local product offerings.	Services	Improve digital offerings for tourists, including wayfinding, and support the expansion of cultural and experiential tourism attractions such as agritourism, eco stays, sporting events, and the Bathurst Winter Festival.	Local councils, Create NSW, TfNSW (Smart Places), Regional Arts Development Organisations, Destination Central West NSW, Office of Sport, Destination NSW	Broaden the base of the visitor economy, improve experience to encourage repeat patronage, and diversify revenue streams across the region's tourism sector.

9. References

- 1. NSW Government (2022), *National disaster declarations*, https://www.nsw.gov.au/disaster-recovery/natural-disaster-declarations
- 2. DRNSW (Department of Regional NSW) (2022), Grants Data
- 3. Chamberlain, R (2022), *Water restrictions imposed in Bathurst for the first time in 20 years*, Western Advocate, https://www.westernadvocate.com.au/story/5775209/its-time-to-be-more-than-a-little-water-wise-in-bathurst/
- 4. Department of Planning, Industry and Environment (2020), *Macquarie Valley snapshot 2017-2020 drought*, https://www.industry.nsw.gov.au/__data/assets/pdf_file/0011/469253/macquarie-valley-snapshot-drought-2017-20-20210914.pdf
- 5. Claughton, D (2021), Dustbowl to record breaking canola harvest for family farm at Oberon, ABC News, https://www.abc.net.au/news/rural/2021-02-24/science-drives-record-canola-crop-at-oberon/13186092
- 6. DRNSW (2020), REDS Bushfire Impact Addendum Abercrombie
- 7. Department of Customer Service (2022), Outcomes of Business Sentiment Survey
- 8. DSS (Department of Social Services) (2022), DSS Payment Demographic Data, https://data.gov.au/data/dataset/dss-payment-demographic-data
- 9. Western Advocate (2022), Worst flooding in 70 years: Big clean-up awaits at Abercrombie Caves, https://www.westernadvocate.com.au/story/7604022/worst-flooding-in-70-years-big-clean-up-awaits-at-abercrombie-caves/
- 10. Deacon, B and Pezet, I (2022), Intense thunderstorms, flash flooding spark rooftop rescues, ABC News, www.abc.net.au/news/2022-11-14/intense-thunderstorms-flash-flooding-south-eastern-australia/101650382
- 11. Murphy, B (2022) Lithgow, Oberon, Wallerawang communities rally as flooding disrupts gas pipeline, ABC News https://www.abc.net.au/news/2022-11-11/nsw-floods-gas-supply-outage-bathurst-lithgow-wallerawang-oberon/101637384
- 12. Forestry Corporation (2022), *Orange, Bathurst and Oberon State forests affected by flooding and storm damage*, https://www.forestrycorporation.com.au/visit/closures/orange,-bathurst-and-oberon-state-forests-affected-by-flooding-and-storm-damage
- 13. Turnbull, T (2021), Farmers can't afford to end mice plague, Western Advocate https://www.westernadvocate.com.au/story/7248072/farmers-cant-afford-to-end-mice-plague/
- 14. NSW Government (2022), *Grant distribution mouse control rebate*, https://www.service.nsw.gov.au/grants-and-payments-distribution/mouse-control-rebate-2021
- 15. ABS (2022), More growth in the regions during the pandemic, https://www.abs.gov.au/media-centre/media-releases/more-growth-regions-during-pandemic.
- 16. Nissen, S et al. (2020), Young people and environmental affordances in urban sustainable development: insights into transport and green and public space in seven cities, Sustainable Earth Review 3(17) https://sustainableearth.biomedcentral.com/articles/10.1186/s42055-020-00039-w
- 17. Bathurst Regional City Council (2022), Renewable Energy Action Plan, www.bathurst.nsw.gov.au/images/stories/council/public_docs/REAP_Final_version_June_2020.pdf

- 18. AdaptNSW (2022), Climate change will exacerbate natural disasters, including flooding, www.climatechange.environment.nsw.gov.au/climate-change-will-exacerbate-natural-disasters-including-flooding
- 19. Department of Communities and Justice (2022), *Rent and Sales Report interactive dashboard*, https://www.facs.nsw.gov.au/resources/statistics/rent-and-sales/dashboard
- 20. Analysis using ABS census and CoreLogic median dwelling price data.
- 21. Andrews, J (2016), Value adding to Agriculture in Central West NSW, RDA Central West (2016), https://rdacentralwest.org.au/wp-content/uploads/2019/10/FINAL-Value-Adding-to-Agriculture.pdf
- 22. NSW Valuer General (2022), Report on NSW land values at 1 July 2021

 https://www.valuergeneral.nsw.gov.au/__data/assets/pdf_file/0018/230274/Valuer_Generals_Report_on_NSW_Land_Values_at_1_July_2021.pdf
- 23. IBISWorld (2022), Road freight service price June 2022.
- 24. Borg Australia (2020), *Major planning approval for new bark and timber recycling facility*, www.borgs.com.au/locations/oberon-nsw/news/major-planning-approval-for-new-bark-and-timber-recycling-facility/
- 25. Bathurst Region Live Invest (2022), Manufacturing our highest contributing industry, https://bathurstliveinvest.com.au/invest/industries/manufacturing/
- 26. Russell, L (2021), Border closures' impact on Australia's higher education sector is not only a revenue problem, BDO Australia, https://www.bdo.com.au/en-au/insights/education/articles/border-closures-impact-on-australia-s-higher-education-sector-is-not-only-a-revenue-problem
- 27. Charles Sturt University (2022), Charles Sturt and IBM partnership to grow digital skills and tech talent in regional NSW, https://news.csu.edu.au/latest-news/charles-sturt-and-ibm-australia-partnership-to-grow-digital-skills-and-tech-talent-in-regional-nsw
- 28. Bathurst Region Live Invest (2022), *Health supporting a growing population*, https://bathurstliveinvest.com.au/invest/industries/health/
- 29. Health Western NSW Local Health District (2022), \$200 million upgrade for Bathurst Health Service, Media Release, https://wnswlhd.health.nsw.gov.au/in-the-media/200-million-upgrade-for-bathurst-health-service/
- 30. Bathurst Region Live Invest (2022), *Bathurst Integrated Medical Centre*, https://bathurstliveinvest.com.au/invest/major-projects/bathurst-integrated-medical-centre/