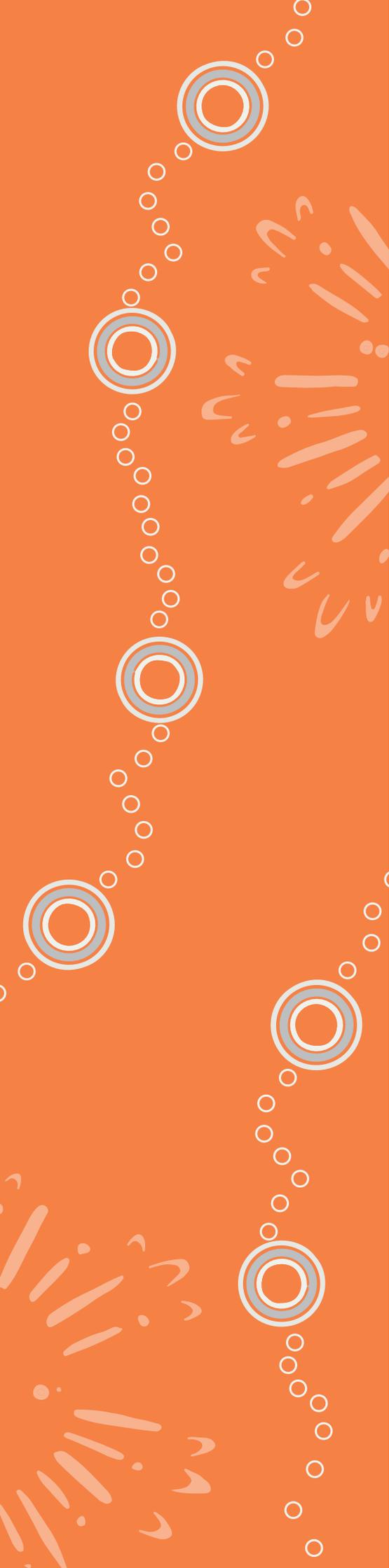


Illawarra Shoalhaven Regional Plan 2041

May 2021





Acknowledgement

Planning for the Illawarra Shoalhaven acknowledges more than 20,000 years of continuous Aboriginal connection to the land in the region.

The Illawarra Shoalhaven Regional Plan recognises that, as part of the world's oldest living culture, traditional Aboriginal and Torres Strait Islander owners and custodians of the Australian continent and adjacent islands share a unique bond to Country — a bond forged through thousands of years travelling across lands and waterways for ceremony, religion, trading and seasonal migration.

Nestled in between the coast and the Illawarra escarpment, the Illawarra Shoalhaven is of cultural and spiritual significance to the Dharawal and Dhurga speaking people.

Having both a reliance on and responsibility to the land, Aboriginal people in the Illawarra Shoalhaven have always made efficient use of the abundance of natural resources. The Five Islands, now off the coast of Port Kembla, were connected to the mainland where Aboriginal people harvested sea birds and eggs. To maintain their spiritual attachment to Sea Country, Aboriginal people set up camps along the coastline where they would fish and trade. They would camp and meet at prominent locations along the coastline, including Sandon Point and Bass Point.



Sea Wall, Port Kembla

An established community at Wreck Bay, just south of Jervis Bay, had a strong reliance on fishing, where men, women and children worked together in commercial fishing ventures using knowledge passed on by older community members. Further north at Hill 60, Aboriginal fisherman supplied local markets until the Australian Defence Force overtook the area during World War Two.

Aboriginal people would traverse further inland to utilise the mosaic of wetlands and lagoons that made up the floodplains of Lake Illawarra. Setting up camp in gunyahs (timber and bark huts) around water bodies such as Coomaditchy Lagoon and the Shoalhaven floodplains, Aboriginal people would gather crustacea, fish, tortoise and water birds, including black ducks and their eggs.

Habitats lining the Minnamurra River provided shelter for gathering, bathing and healing. The Shoalhaven and Kangaroo rivers were important travel routes for Aboriginal people, while on the banks of Bomaderry Creek Aboriginal campers shared their world with the glossy black cockatoo.

Local Aboriginal people would retreat further inland, making use of the shelter provided by the rock overhangs and caves dotted along the escarpment including the two sister mountains, Mount Keira and Mount Kembla, and the Cullunghutti and Coolangatta mountains along the Shoalhaven Plateau.

Aboriginal people maintain a strong belief that if we care for Country, it will care for us. This requires Country to be cared for throughout the process of design and development.

The NSW Government champions a Connecting with Country approach to give effect to statutory objectives that require Aboriginal culture and heritage to be sustainably managed in the built environment.

Using comprehensive and respectful approaches, planning for the Illawarra Shoalhaven can build capacity and pathways for knowledge sharing between Aboriginal and non-Aboriginal communities.

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Foreword

The Illawarra Shoalhaven is a dynamic and vibrant region that makes a crucial economic contribution to NSW. In the last two decades, the region has transformed from its traditional industrial and steel-making base into a place with an innovative service, creative and knowledge economy.

Aligned state and local government strategic planning will underpin the region's ongoing prosperity and growth. This Illawarra Shoalhaven Regional Plan represents a strategic vision and direction for how we will plan for the region's future housing, jobs, infrastructure, and a healthy environment. It is premised on a place where people have easy access to green spaces and live in connected communities.

The past 18 months in particular have shown us how our strategic planning must adapt to meet changing circumstances and needs. Planning evolves, places and circumstances change. This is why we must review and update regional plans every five years.

When the first Illawarra Shoalhaven Regional Plan was released in late 2015, it was the State's first Regional Plan. Together, we have achieved the original priorities and in reviewing the previous Regional Plan have identified new priorities for the next 5 years.

This Illawarra Shoalhaven Regional Plan resets priorities for the area and ensures continued progress and prosperity for the Illawarra Shoalhaven community for the next 20 years.

We've collaborated closely with the four local councils and consulted widely with the community and a broad array of stakeholders to develop the updated plan.



It's a Regional Plan that builds on our previous efforts for a more prosperous and resilient Illawarra Shoalhaven. This Regional Plan improves access to public spaces, enhances biodiversity and recognises the coastal, urban and rural lifestyles that people so highly value.

It has a strong focus on tourism with specific objectives to harness the region's enormous potential in many ways, including working with government agencies, councils and community groups to better connect the network of stunning coastal walks into a spectacular visitor and recreational experience.

This is also a plan that recognises opportunities for the Illawarra Shoalhaven to be a leading region in terms of responding to climate change and embracing innovation and an entrepreneurial mindset to drive sustainable growth.

Rob Stokes

Minister for Planning and Public Spaces



Introduction

The Illawarra Shoalhaven Regional Plan sets the strategic framework for the region, aiming to protect and enhance the region's assets and plan for a sustainable future. It is a 20-year land use plan prepared in accordance with section 3.3 of the *Environmental Planning and Assessment Act 1979* and applies to the local government areas of Wollongong, Shellharbour, Kiama and Shoalhaven.

It will inform councils' land use planning, inform the work of infrastructure agencies to plan for growth and change, and inform the private sector and the wider community of the NSW Government's approach to creating a connected, sustainable, innovative and vibrant Illawarra Shoalhaven.

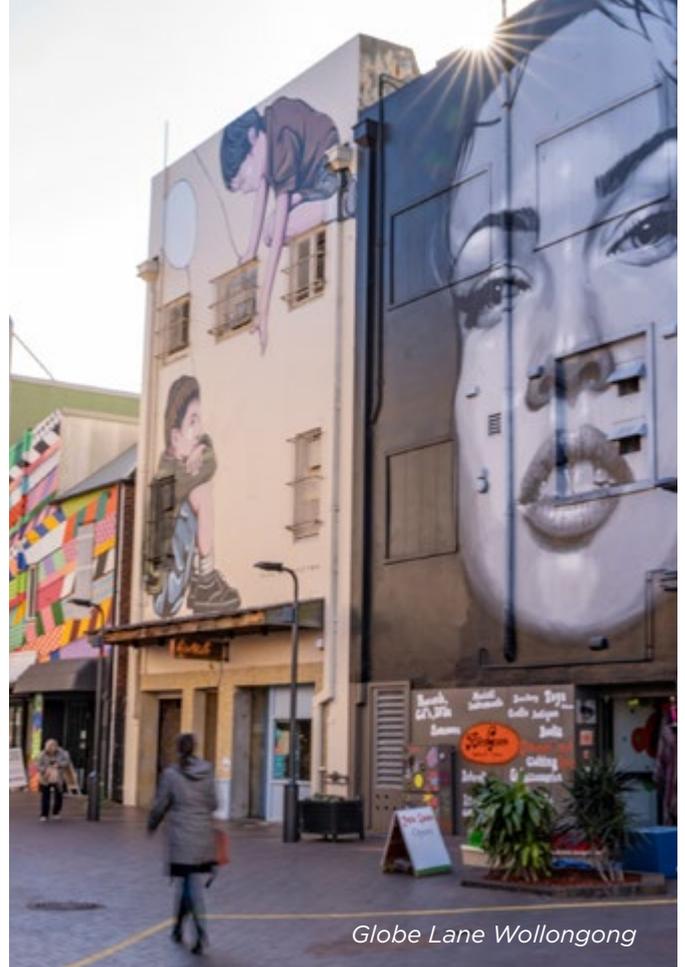
The Regional Plan represents the third iteration of strategic planning in the Illawarra Shoalhaven, which began with the *Illawarra Regional Strategy* and *South Coast Regional Strategy* in 2007.

During the preparation of this Regional Plan the region experienced drought, floods, an unprecedented bushfire season that impacted 80 per cent of Shoalhaven LGA and the COVID-19 pandemic. These events will have lasting impacts on the economy, infrastructure, social systems, the natural environment and the wellbeing of people and communities across NSW.

This Regional Plan considers these far-reaching historical moments alongside an evidence base that analyses population growth and



University of Wollongong Yarning Circle



Globe Lane Wollongong

change, the regional economy, housing and employment markets, where important environmental and resource areas are located, and natural hazards.

Resilience will be a critical component of the region's future. Strategic planning will be necessary to identify vulnerable communities and opportunities to better anticipate or even avoid disruptive challenges.

The Regional Plan takes a landscape-based approach to regional planning that embraces and protects important environmental values and their contribution to economic growth, liveability and health. It leverages the region's location and builds on the region's strengths to provide smart, efficient and reliable connections that bring residents and visitors closer to

jobs, centres, education and the natural environment.

The Regional Plan identifies 15 regionally significant precincts that will drive jobs creation, housing diversity, and vibrant communities. These places contain more than 2,300 hectares for employment, hubs for recreation, culture, housing and innovation, as well as almost 45,000 jobs, and growth areas that provide land for almost 38,000 new homes.

Collaboration has underpinned the process to review the Regional Plan and will also underpin a whole-of-government approach to strategic planning, streamline the planning process, and help to optimise opportunities for transformational change.



Kiama Coast Walk

About the Illawarra Shoalhaven

The Illawarra Shoalhaven region is the land of the Wodi Wodi, Wandandian, Yuin and Murramarang Aboriginal people. The Illawarra, Nowra, Jerrinja, Ulladulla and Batemans Bay Local Aboriginal Land Councils own local land holdings and have responsibilities for Aboriginal people living in the area.

The region's natural setting is the backdrop to a mix of coastal, urban and rural lifestyles, enabling the ultimate work-life balance. This is a natural setting to be valued, respected and carefully managed.

The region's strength comes from its communities and public spaces, seen through people's strong ties to natural and cultural environments. With the future of work changing, and as the region moves ahead following the COVID-19 pandemic, the region's communities and public spaces will be even more essential, especially as people continue to work flexibly, are more active in their local area, and visit local shops and cafes more often.

The Illawarra Shoalhaven economy contributes to the NSW economy in sectors such as education, research and innovation, advanced manufacturing, health and aged care, defence, construction, retail, professional and financial services. The region contributed \$23.9 billion to the State's economy in 2019, an increase of \$7.7 billion (47 per cent) from 2013.¹

The region is home to an international trade gateway at Port Kembla; a university with global reach in the University of Wollongong; a city of national significance in Metro Wollongong; regional cities in Nowra and Shellharbour

that drive prosperity and liveability; a visitor economy worth \$1.71 billion;² and a skilled workforce including around 23,000 residents³ who travel to Greater Sydney for work.

Reviewing the Regional Plan

Released in November 2015, the *Illawarra Shoalhaven Regional Plan 2036* was the first of nine plans across the state to be finalised. Since then, the NSW Government has worked closely with councils, other stakeholders and the community to deliver on key priority actions, which have also informed the review of the Regional Plan. Key actions delivered include:

- The development of a 20-year vision to unlock the economic benefits of marine tourism through the *NSW South Coast Marine Tourism Strategy 2019*.
- An analysis of the precincts in Metro Wollongong to identify opportunities to activate the health, education, commercial, entertainment and recreation functions.
- Improving the protection of regional environmental assets including biodiversity corridors, riparian areas and Lake Illawarra storm water management.
- Monitoring of land for housing and jobs through an online Dashboard that improves data accessibility and informs forward planning for servicing agencies.

The year 2020 has shown how strategic planning must adapt to meet changing circumstances and needs. Many communities are still reeling from the devastating bushfires and floods, and the COVID-19 pandemic has shown how the region's natural assets – its

beaches, parks, open spaces, leafy streets – are key to public life.

It is therefore crucial that land-use planning has a strong focus on sustainability and resilience. Opportunities identified within the *Shoalhaven Illawarra Enabling Regional Adaptation Report* have been incorporated into the revised Regional Plan. This has included consideration of climate change adaptation pathways with the aim of transitioning key regional systems to a more resilient future relating to settlements, transport, water, industrial transformation, energy, food and emergency management.

Amendments to the *Environmental Planning and Assessment Act 1979* in 2018 recognise the critical role that strategic planning at a regional and local level play in managing growth and change. Together with councils' local strategic planning statements, the review of regional plans across the State is allowing communities to respond to and build vibrant places that leverage their unique strengths and potential.

The Regional Plan has been prepared concurrently with Transport for NSW's *Illawarra Shoalhaven Regional Transport Plan*, a multi-modal and integrated vision for how transport planning will proactively support how land is used in the Region. Together, the Transport Plan and this Regional Plan set a coordinated 20-year vision to manage growth and change for the Illawarra Shoalhaven in the context of social, economic and environmental matters.

Key inputs to the Regional Plan have included:

- *A Regional Approach to Sustainability in the Illawarra Shoalhaven 2020* – embeds sustainability into the Regional Plan identifying regional collaborative opportunities

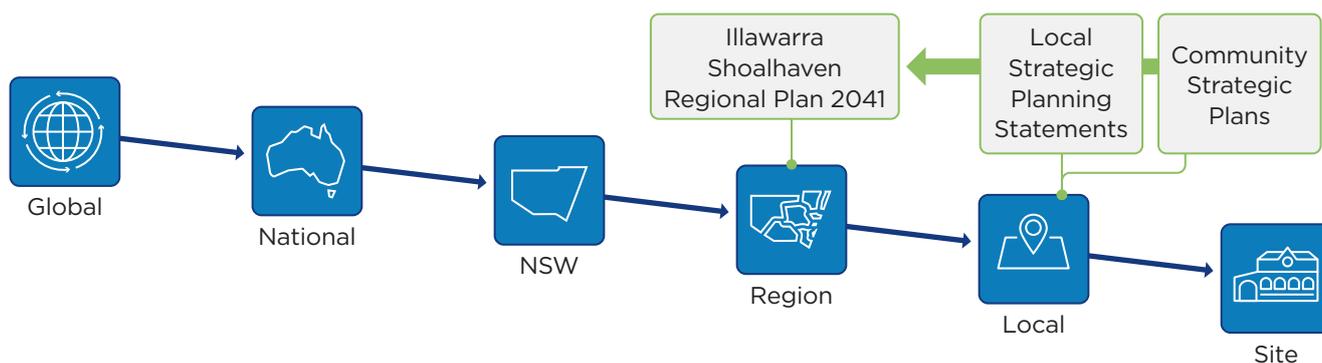
- *Public Spaces in the Illawarra Shoalhaven Region 2020* – investigates and analyses access to public spaces in the Region and identifies opportunities to improve access
- Councils' 2020 Local Strategic Planning Statements and their current Community Strategic Plans
- the NSW Government's *State Infrastructure Strategy 2018-2038*, *Future Transport 2056*, *A 20-year Economic Vision for Regional NSW*, and regional economic development strategies for Kiama, Shellharbour and Shoalhaven.

Local strategic planning statements

The legislative framework set out in the *Environmental Planning and Assessment Act 1979* provides a clear line of sight from regional planning to local delivery. The Framework includes local strategic planning statements, prepared by councils.

Local strategic planning statements respond to each area's opportunities, changes and trends, and must be consistent with the relevant regional plan and a council's Community Strategic Plan, prepared under the *Local Government Act 1993*.

This framework allows different levels of government to coordinate and realise greater efficiencies as the strategies and actions in regional plans are implemented.



Implementing the Regional Plan

Achieving the vision and objectives of the Regional Plan requires leadership and commitment; ongoing collaboration with stakeholders; and a clear delivery framework.

The Regional Plan emphasises State and local collaboration and collective responses that support growth and change. This will be achieved through formal and informal collaborative frameworks, based on a strong evidence base and coordination.

A Coordinating and Monitoring Committee will be jointly chaired by the Department of Planning, Industry and Environment and the Illawarra Shoalhaven Joint Organisation. The Committee will report to the Illawarra Shoalhaven Leadership Executive, bringing a whole-of-regional government approach to planning.

The Committee will include representatives from the four local councils, the Department of Regional NSW, Transport for NSW and NSW Health, all of which are responsible for most of the Regional Plan's objectives.

An Implementation Plan has been prepared to:

- explain the linkages between the visions, themes, objectives, actions and collaboration activities
- assign accountabilities for implementing actions
- guide Committee in its role of overseeing the delivery of the Regional Plan, and
- inform the monitoring of the Regional Plan.

Delivering the actions and strategies

Actions, strategies and collaboration activities have been identified to implement this Regional Plan.

- **Actions** describe initiatives that will be led by the Department of Planning, Industry and Environment in the next five years, with new actions identified during the next review.
- **Strategies** identify policy positions or directions implemented through strategic planning (including local strategic planning statements), local plans (including local environmental plans and development control plans) or State agency planning.
- **Collaboration activities** include important initiatives led by State agencies or local councils.

The Committee will take ownership for implementing this Regional Plan by prioritising the **actions** needed to be delivered over the next five years.

Monitoring and review

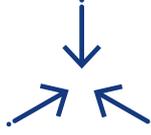
The Committee will monitor and review progress towards achieving the vision and meeting the objectives. An online dashboard will include indicators for housing, employment, communities and the environment.

The Regional Plan will be reviewed and adjusted every five years, or as necessary, to realise the vision for 2041.

Vision
An innovative, sustainable, resilient, connected, diverse and creative region.

Pages 11-12

Themes

 A productive and innovative region	 A sustainable and resilient region	 A region that values its people and places	 A smart and connected region
page 16	page 44	page 62	page 78

Summarised on pages 13-14

Objectives 1-10	Objectives 11-17	Objectives 18-24	Objectives 25-30
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Page 15

Actions
 Initiatives that are led by NSW Department of Planning, Industry and Environment that will be delivered in the next 5 years, with new actions identified during the next review.

Strategies
 Guidance for councils in preparing local strategic plans, local plans and planning proposals, as well as setting direction for state agencies to support the objectives of the plan.

Collaboration Activities
 Initiatives that are led by councils or other state agencies which supports the objectives, and which the NSW Department of Planning, Industry and Environment has a role in supporting.

Map 1: Vision map for Illawarra Shoalhaven

-  Regional boundary
-  Metropolitan city
-  Regional city
-  Strategic centre
-  Railway
-  A1/M1
-  Improved future connectivity
-  Improved coastal walk connections
-  Biodiversity corridor
-  Blue highway
-  Growth Area
-  Airport
-  Port
-  Harbour
-  Military facility
-  Hospital
-  Entertainment
-  Tertiary education
-  Innovation campus
-  National park and reserve
-  State forest



Vision

A reputation for innovation, sustainability and resilience, in 2041 the Illawarra Shoalhaven is a diverse, creative and globally connected region.

The region is a place where the escarpment meets the sea, and where a strong commitment to community drives vibrant and healthy local places. Visitors are welcomed to responsibly share and connect with the area's Aboriginal history, natural environment and heritage.

With an economy transformed, the Illawarra Shoalhaven combines proximity to Sydney with an educated workforce and an ecosystem of innovation. Collaboration and an entrepreneurial culture combine to attract investment and stimulate employment in diverse industries, from knowledge services, health, defence and the visitor economy to a manufacturing capability centred around advanced manufacturing, the Internet of Things and smart technologies.

Metro Wollongong is a city of national significance. It is a smart and vibrant city that sits within a well-loved natural setting, and examples of architectural excellence and popular green public spaces are abundant. It is home to international education and research institutions as well as a nationally significant health precinct and a hub of professional businesses with global reach.

Metro Wollongong, along with Nowra and Shellharbour are the region's civic hearts – places that provide an urban lifestyle where people can easily walk to shops, services, schools or work.

The Illawarra Shoalhaven is transitioning to a low-carbon economy. It is a global hub for clean energy, with green hydrogen production at the Port of Port Kembla, biogenic gas

and pumped hydro in the Shoalhaven, and employment precincts that capture solar power and convert waste to energy.

People in the Illawarra Shoalhaven are pioneers in resilient and sustainable living. Neighbourhoods in West Lake Illawarra and Nowra Bomaderry can be easily accessed through walking and cycling networks, and homes generate energy from local renewable sources and distributed energy technologies.

The amount of waste produced in the region is reducing through resource recovery technologies and circular economy initiatives that generate economic value from the recycling of waste streams. Water for urban purposes is managed to make best use of water sources and to protect the region's waterways, reducing the risk of flooding and keeping parks, gardens and street trees healthy.

The diversity of lifestyle choices, from city living, new urban areas, or coastal or village living, drives affordable housing options. Centres such as Corrimal, Warrawong, Oak Flats, Kiama and Milton-Ulladulla offer diverse arts, culture and heritage and the character of smaller towns and villages has been protected and enhanced.

The region is more connected physically, socially, economically, culturally and digitally. This has enabled more resilient communities, facilitated flexible working and education, and enabled people in smaller towns and villages to have the same access as people living in Metro Wollongong.

Summary of the Regional Plan



A productive and innovative region

Objective 1:

Strengthen Metro Wollongong as a connected, innovative and progressive City

Objective 2:

Grow the region's Regional Cities

Objective 3:

Grow the Port of Port Kembla as an international trade hub

Objective 4:

Activate regionally significant employment precincts to support new and innovative economic enterprises

Objective 5:

Create a diverse visitor economy

Objective 6:

Activate the region's harbours to promote the blue highway

Objective 7:

Respond to the changing nature of retail

Objective 8:

Strengthen the economic self-determination of Aboriginal communities

Objective 9:

Promote agriculture innovation, sustainability and value-add opportunities

Objective 10:

Sustainably maximise the productivity of resource lands

Regionally Significant Precincts

Regionally significant precincts are places that will be activated through collaboration between councils, State agencies and other organisations. They include employment lands, centres and growth areas where collaboration and place-based planning will create the right conditions for ongoing innovation, investment and coordination.

The Regional Plan incorporates sustainability into the planning for regionally significant precincts and will inform a sustainability framework for these areas that will identify precinct-specific opportunities for renewable energy, water cycle management, building design, green infrastructure, the circular economy, transport, smart technology and public spaces.



A sustainable and resilient region

Objective 11:

Protect important environmental assets

Objective 12:

Build resilient places and communities

Objective 13:

Increase urban tree canopy cover

Objective 14:

Enhance and connect parks, open spaces and bushland with walking and cycling paths

Objective 15:

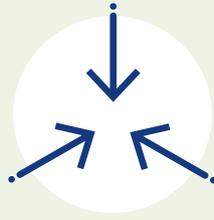
Plan for a Net Zero region by 2050

Objective 16:

Support the development of a circular economy

Objective 17:

Secure water resources



A region that values its people and places

Objective 18:

Provide housing supply in the right locations

Objective 19:

Deliver housing that is more diverse and affordable

Objective 20:

Establish a shared vision for the future of Bombo Quarry lands

Objective 21:

Respond to the changing needs of local neighbourhoods

Objective 22:

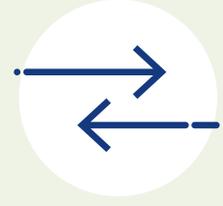
Embrace and respect the region's local character

Objective 23:

Celebrate, conserve and reuse cultural heritage

Objective 24:

Support major events, public art and cultural activities



A smart and connected region

Objective 25:

Collaborate to leverage opportunities from Western Sydney's growth

Objective 26:

Create faster rail connections between Greater Sydney, Wollongong and Nowra

Objective 27:

Protect major freight networks

Objective 28:

Create connected and accessible walking and cycling networks

Objective 29:

Utilise smart infrastructure to drive resilience, prosperity and vibrant places

Objective 30:

Prepare for mobility changes that improve connectivity and sustainability

Summary of Actions

▶ Action 1:

Develop a Metro Wollongong Health Precinct Strategy

▶ Action 2:

Develop a Nowra City Centre Strategic Roadmap to set a vision, identify actions and guide inter-agency and inter-government collaboration

▶ Action 3:

Develop precinct profiles for the regionally significant employment lands and where required, establish precinct collaboration teams to activate land for economic growth

▶ Action 4:

Develop a resilience benchmarking matrix tool to assist councils to assess their level of resilience

▶ Action 5:

Develop the Illawarra Shoalhaven Green Grid and identify priority projects for enhancement

▶ Action 6:

Develop an Illawarra Shoalhaven Sustainability Roadmap that identifies innovative initiatives which can be delivered through an ecosystem of collaboration

▶ Action 7:

Develop a sustainability framework for regionally significant precincts to promote carbon neutral sustainable growth and development

▶ Action 8:

Establish the Illawarra Shoalhaven Affordable Housing Roundtable with councils, community housing providers, NSW Government and the housing development industry to collaborate, build knowledge and identify barriers to increase the supply of affordable housing

▶ Action 9:

Develop a shared vision for the future of Bombo Quarry lands in collaboration with Kiama Municipal Council, landowners and the community

A productive and innovative region

The Illawarra Shoalhaven will leverage new and innovative economic opportunities to increase the number of jobs in knowledge services, health, research, advanced manufacturing, defence and the visitor economy.

Metro Wollongong is the heart of the Illawarra Shoalhaven region and the third largest city in NSW. It is home to one of Australia's top-ten universities and is characterised by a health and knowledge economy, a highly skilled workforce and a growing hub of businesses with global reach.

The regional cities of Shellharbour and Nowra are locations for economic productivity, housing choice and cultural activities.

The global gateway of Port Kembla is one of the State's five deep-water freight ports and connects the Illawarra Shoalhaven to the rest of the world through its export of bulk commodities and import of motor vehicles. The Port continues to support steelmaking operations within the Port Kembla Steelworks, and is a potential hub for hydrogen production.

Connectivity to the new Western Sydney International Airport will drive innovative economic opportunities and see an increase in visitors, attracted to the region's unspoilt coastline and hinterland with dramatic escarpment, clean and picturesque beaches and world-renowned national parks.

Objective 1:

Strengthen Metro Wollongong as a connected, innovative and progressive city

Metro Wollongong has attracted \$1.5 billion of projects completed or under construction in recent years. As at late 2019 there were 15 fixed cranes above the skyline, building 900 new units and over 40,000m² of commercial space. Looking ahead, there is an exciting investment pipeline of more than \$400 million in mixed use, residential and commercial projects.⁴

Metro Wollongong is a prime location for greater housing choice, particularly high density apartment living that can take advantage of the services and transport already available. Almost 2,000 new multi unit dwellings were developed in Metro Wollongong between 2014 and 2019, driven by demand from young, educated people looking to live near jobs and cultural activities; as well as students, medical interns and key health workers looking for low-cost housing; and older people who want easy access to health care and other services.

Metro Wollongong is also the cultural heart of the region. The fast-growing inner-city population has supported its cultural renaissance, with more than 110 new bars, cafes and restaurants opening since 2012.⁵ The thriving arts and evening economy scene continues to attract people to visit, socialise, eat and listen to live music.

MacCabe Park is Metro Wollongong's largest park and is located between the train station and Commercial Core. An increase to Metro Wollongong's tree canopy will help to create a green, walkable and sustainable city, while attractive and revitalised public spaces will support an active and healthy community and act as a catalyst for economic growth.

Metro Wollongong is united by the Commercial Core, Sports and Entertainment Precinct, Health Precinct, as well as the foreshore, and education and innovation activity hubs. These functions work together to integrate the economic, cultural and intellectual elements of the City and propel ongoing growth and prosperity for the entire Illawarra Shoalhaven.

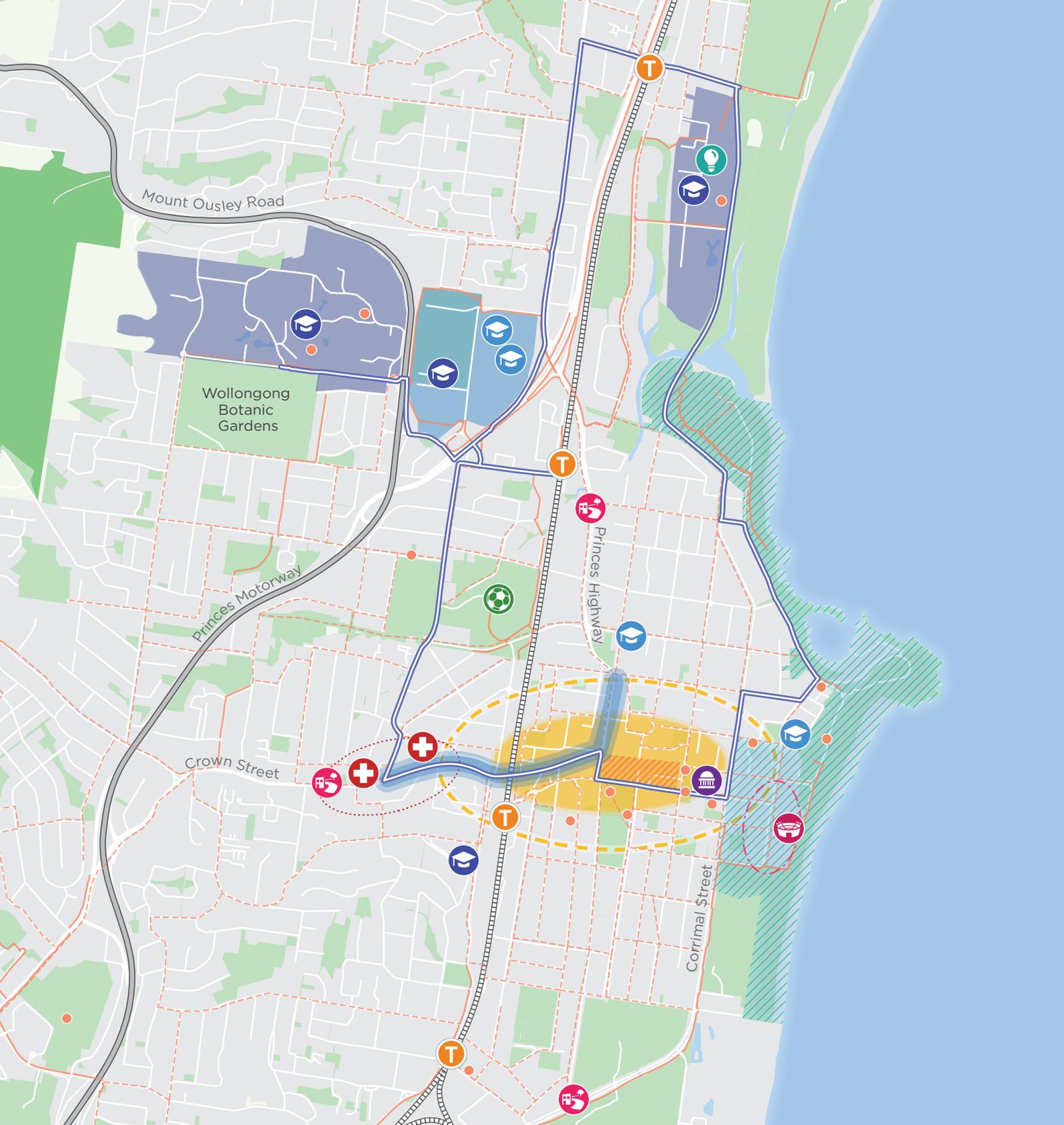


Strategy 1.1

Continue to strengthen Metro Wollongong through local strategic planning such as Wollongong City Council's *Urban Design Framework*.

Strategic planning and local plans should consider opportunities to:

- create a permeable and connected pedestrian network
- encourage a diversity of housing including affordable housing and student housing around commercial priority areas
- elevate the importance of design quality and design excellence outcomes
- utilise green infrastructure to create a green network of open spaces
- activate public domain to support investment and renewal.



Map 2: Metro Wollongong

0 0.25 0.5 1km



- | | | | |
|-----------------------------------|--------------------------------------|---------------------|--------------------------------------|
| Commercial core | West Crown and Keira Street Corridor | Train station | Cultural facility |
| Commercial frame | Railway line | Tertiary education | Beaton Park recreation hub |
| Crown Street Mall | Motorway | Secondary education | Entertainment centre and WIN stadium |
| Health precinct | Gong Shuttle bus | Innovation campus | Open space |
| Sports and entertainment precinct | Existing cycle paths | Hospital | National Park |
| Foreshore | Proposed cycle paths | City gateway | Water body |
| | | Civic cultural hub | |

Reinforce the role of Metro Wollongong's Commercial Core

The Commercial Core is the heart of Metro Wollongong. It employs almost 20,000 people⁶ and attracts businesses due to lower operating costs, a high level of amenity and access to a large talent pool.

Commercial activity is focused in and around Crown Street Mall and Burelli Street, which is a diverse place for retail, offices, tourism and cultural activities. The surrounding Commercial Frame is home to smaller-scale professional services, shared office spaces, non-government institutions, residential buildings and clusters of heritage-listed buildings including St Michael's Cathedral, a Victorian Gothic sandstone building from 1859.

Attracting national professional and knowledge service headquarters to Metro Wollongong and prioritising commercial uses in parts of the Commercial Core will support investment in A-Grade office space development. Demand for high quality office space is growing with 28,000 square metres of new A-grade office space expected in Metro Wollongong in the short term.⁷

The balance of meeting commercial demands in an area also subject to residential demand requires a defined and strengthened Commercial Core that includes priority commercial areas as a clear signal to investors as well as public domain improvements and streamlined planning processes.

Providing flexible and modern office spaces that cater to the changing work habits of co-working and start-up culture will respond to and stimulate Metro Wollongong's commercial offering post COVID-19. Activation and flexibility will require collaboration, innovation, creativity and an entrepreneurial culture.



Strategy 1.2

Continue to strengthen Metro Wollongong's commercial function through local strategic planning such as Wollongong City Centre Planning Review.

Strategic planning and local plans should consider opportunities to:

- prioritise jobs growth and a resilient Commercial Core by safeguarding land for commercial, job-generating development
- strengthen and simplify planning controls to promote a diversity of buildings that respond to people and place, define the city's skyline and create streets that are scaled for people
- develop active city streets that retain local character and support flexibility to the changing retail environment
- encourage the temporary use of vacant properties to help with street activation.

Enhance the growth potential of the Health Precinct

Health and medical services account for 17 per cent of employment in the Illawarra Shoalhaven,⁸ with the health and medical facilities in Metro Wollongong playing a strong role.

The Health Precinct is anchored by Wollongong Public Hospital, the Illawarra Shoalhaven's major tertiary referral and teaching hospital. It is supported by a collection of medical suites, laboratories, training and rehabilitation centres and the Wollongong Private Hospital.

The hospitals have close ties with the University of Wollongong and the Illawarra Health and Medical Research Institute. Collaboration is facilitated through graduate programs connected to University of Wollongong's Faculty of Science, Medicine and Health.

Transforming the Health Precinct from a collection of health and medical related uses into a nationally significant health precinct will support prosperity and attract private sector investment and business.

A Metro Wollongong Health Precinct Strategy will be developed to consider and identify:

- growth needs of the Wollongong Public Hospital and potential opportunity sites for expansion
- opportunities for a central meeting place that incorporates green infrastructure developed through place-making and collaboration and designed to help people move around easily
- improving the safety and amenity of connections between the Health Precinct, Wollongong Train Station and the Commercial Core that balances pedestrian movements with busy traffic on Crown Street and its short setbacks, inactive frontages and a lack of vegetation
- incentivising a mix of health and medical uses and higher density living
- future opportunities for the health and medical industry, particularly around innovative approaches that can be leveraged from Metro Wollongong's research capabilities.

Action 1:

Develop a Metro Wollongong Health Precinct Strategy.



Revitalise the Sports and Entertainment Precinct and activate the foreshore

The Sports and Entertainment Precinct is home to major entertainment and recreation facilities including the Wollongong Entertainment Centre (WEC) and WIN Stadium. Thousands of visitors attend a range of events each year, including sport, performances and functions. The WEC is the Illawarra Shoalhaven's largest indoor sporting and entertainment arena.

The Sports and Entertainment Precinct connects the Wollongong foreshore to the arts, cultural and civic functions of Eastern Crown and Burelli Streets, which include the Illawarra Performing Arts Centre, Wollongong Town Hall, Wollongong Art Gallery and Wollongong Library.

The Precinct brings activity and vibrancy to the foreshore through to Wollongong Harbour. Better connections from the Commercial Core to the Sports and Entertainment Precinct and the foreshore will visually and physically connect the beach to the city.

A revitalised and activated Sports and Entertainment Precinct and foreshore area has momentous potential to transform into a first-choice multipurpose business, entertainment, cultural and sporting hub that integrates with the natural environment and green spaces.



Collaboration Activity 1

Work with Venues NSW, Wollongong City Council and Department of Regional NSW on the revitalisation and activation of the Metro Wollongong Sports and Entertainment Precinct and foreshore.



Strategy 1.3

Continue to revitalise and activate the Sports and Entertainment Precinct and foreshore in local strategic planning and local plans such as Wollongong City Council's *Urban Design Framework* and precinct planning in collaboration with state agencies.

Strategic planning and local plans should consider opportunities to:

- improve the visual and physical access to the foreshore, including improving the pedestrian interface with the WEC, WIN Stadium, the beach and Lang Park
- encourage broader uses of the Precinct during times outside of events
- better utilise the WEC and WIN Stadium
- improve access to public and active transport networks including links to Wollongong Train Station and event transport
- embrace the location's environmental setting by protecting key views, improving and activating public spaces and managing exposure to climate hazards.

Grow Metro Wollongong's education, innovation and research capabilities

The activity hub of education and innovation in Metro Wollongong focuses on the University of Wollongong, which made a \$1.4 billion contribution to the state in 2018;⁹ two TAFE NSW campuses; and the Innovation Campus, a \$600 million precinct that encourages innovation and research, and is home to iAccelerate, a business incubator and accelerator.

Almost 26,000 students study at the University of Wollongong in subjects as varied as engineering, information sciences, medicine, health, law and business.¹⁰ University of Wollongong is ranked in the top one per cent in the world of universities for the quality of graduates in the 2019 QS Graduate Employability Rankings.



University of Wollongong

The Wollongong Innovation Campus is the largest master planned education, research and related enterprise precinct in Regional NSW. As host of the iAccelerate start-up hub and business accelerator it is a focus for the growing ecosystem of innovative enterprises across the region. The Campus is approaching its first 20 years of operation and the University will be refreshing the masterplan to ensure the Campus and region is well positioned to pursue emerging opportunities.

University campuses can act as catalysts for business growth, particularly when located in a city centre alongside the businesses who are potential future employers and research collaborators. A university presence in the Commercial Core would add to the ongoing revitalisation and vibrancy of Metro Wollongong.

The TAFE site at West Wollongong presents opportunities to activate the city centre education offering, given its location between the Commercial Core and the Health Precinct alongside Wollongong Train Station.

The University of Wollongong's SMART Infrastructure Facility can promote opportunities for Metro Wollongong to be a smart city. This includes a shared Wi-Fi and Internet of Things network and using smart

city approaches to help authorities and town planners understand how resources are used in cities as well as how traffic and commuters move around the area.

Strategy 1.4

Continue to expand the education, innovation and research capabilities of Metro Wollongong.

Strategic planning should consider opportunities to:

- encourage collaboration between education and research institutions to foster knowledge sharing and innovation
- encourage the attraction of an additional university presence in the Commercial Core or Commercial Frame
- foster opportunities to develop and enable smart city approaches throughout Metro Wollongong.
- review the endorsed Master Plan for the Wollongong Innovation Campus

Collaboration Activity 2

Engage with University of Wollongong as it leads a review and refresh of the Innovation Campus Masterplan.



Improve amenity and connectivity for the people of Metro Wollongong

Connecting the individual functions of Metro Wollongong is central to its national competitiveness. This requires integration of public transport with walking and cycling networks and enhancing first impressions on arrival into Metro Wollongong.

The Commercial Core and the hospitals are connected to the broader region by Wollongong Train Station and the 'Gong Shuttle' bus that services Metro Wollongong.

Arrival into Metro Wollongong can be confusing and underwhelming. A revitalised street-level train station entry and exit onto Crown Street and at Lowden Square could welcome people to Wollongong and catalyse urban renewal.

The West Crown and Keira Street corridor are busy places with many pedestrians and traffic. It is not a place for visitors or locals to relax and dwell, yet is the gateway to the commercial and civic heart and the place where many visitors come into the Commercial Core. The arrival experience for visitors could be enhanced and

could help to create a safe people-oriented walking environment.

Collaboration and alignment of transport planning can create an integrated transport environment that considers pedestrians, cycling, public transport, freight and car parking.



Collaboration Activity 3

Work with Transport for NSW and Wollongong City Council on a Place-based Transport Plan for Wollongong



Strategy 1.5

Continue to strengthen connectivity in Metro Wollongong in local strategic planning and local plans such as Council's *Urban Design Framework*, *Pedestrian Plan* and *Access and Movement for People Strategy*.

Strategic planning and local plans should consider opportunities to:

- collaborate between Council and state government agencies
- activate entrances to Wollongong Train Station and improve place-making at Lowden Square and on Crown Street
- balance the needs of pedestrians and vehicle traffic through the West Crown and Keira Street corridor to create a vibrant and iconic intersection
- promote walking and cycling through enhancements such as improved wayfinding, amenities and safety
- promote the redevelopment and increased densities within walking distance to Wollongong Train Station
- integrate bus services with other modes including park and ride facilities, and opportunities for car, bike and scooter sharing services
- consider opportunities for innovative mobility changes including electric vehicles and autonomous bus systems.

The Regional Plan supports regionally significant centres by:

- developing a Metro Wollongong Health Precinct Strategy
- establishing a vision and strategic roadmap to activate Nowra City Centre
- working with Venues NSW, Wollongong City Council and Department of Regional NSW to revitalise the Wollongong Sports and Entertainment Precinct and foreshore
- working with Transport for NSW and Wollongong City Council on a Place-based Transport Plan for Wollongong.
- identifying and removing barriers to housing supply in Kiama and Milton Ulladulla
- enhancing Shellharbour City Centre to facilitate a diversity of jobs, greater activity and better access to public spaces.



Shoalhaven District Memorial Hospital

Objective 2:

Grow the region's regional cities

The regional cities of Shellharbour and Nowra support the vision for the Illawarra Shoalhaven as a focal point for business, government and culture; a gathering place for civic events, community activities and social gatherings; and a destination for visitors.

Both regional cities are on the doorstep of the regionally significant growth areas of West Lake Illawarra and Nowra Bomaderry. With a combined capacity for 37,600 lots,¹¹ these areas represent a collection of the largest urban release areas in regional NSW. New residents living in these areas will use the regional cities for work, health and education services, and recreational pursuits.

Growth of regional cities may contribute to the achievement of priorities in the Regional Youth Framework, in particular enabling better access to service without traveling long distances.

Collaborative partnerships and infrastructure investments will help to make Shellharbour and Nowra connected communities within vibrant, active spaces.

Activate and transform Nowra City Centre

Nowra City Centre is a regional city and one of the regionally significant centres. As the gateway to the South Coast that welcomes 5 million visitors each year,¹² Nowra is home to 10,000 people and 12,800 people live in Bomaderry and North Nowra. The City Centre supports 7,500 jobs with the largest employment sectors being health care, retail and public administration.¹³

Demand for apartment living is increasing in Nowra City Centre, with approvals being recorded for the first time in 2017. This provides much-needed housing choice that is often more affordable. Encouraging more people



to live in the City Centre creates vibrancy and activity and means people live closer to where they work. With this comes a need to renew and revitalise the public domain, create better access to open space and cultural facilities, and bolster the urban lifestyle including a night-time economy.

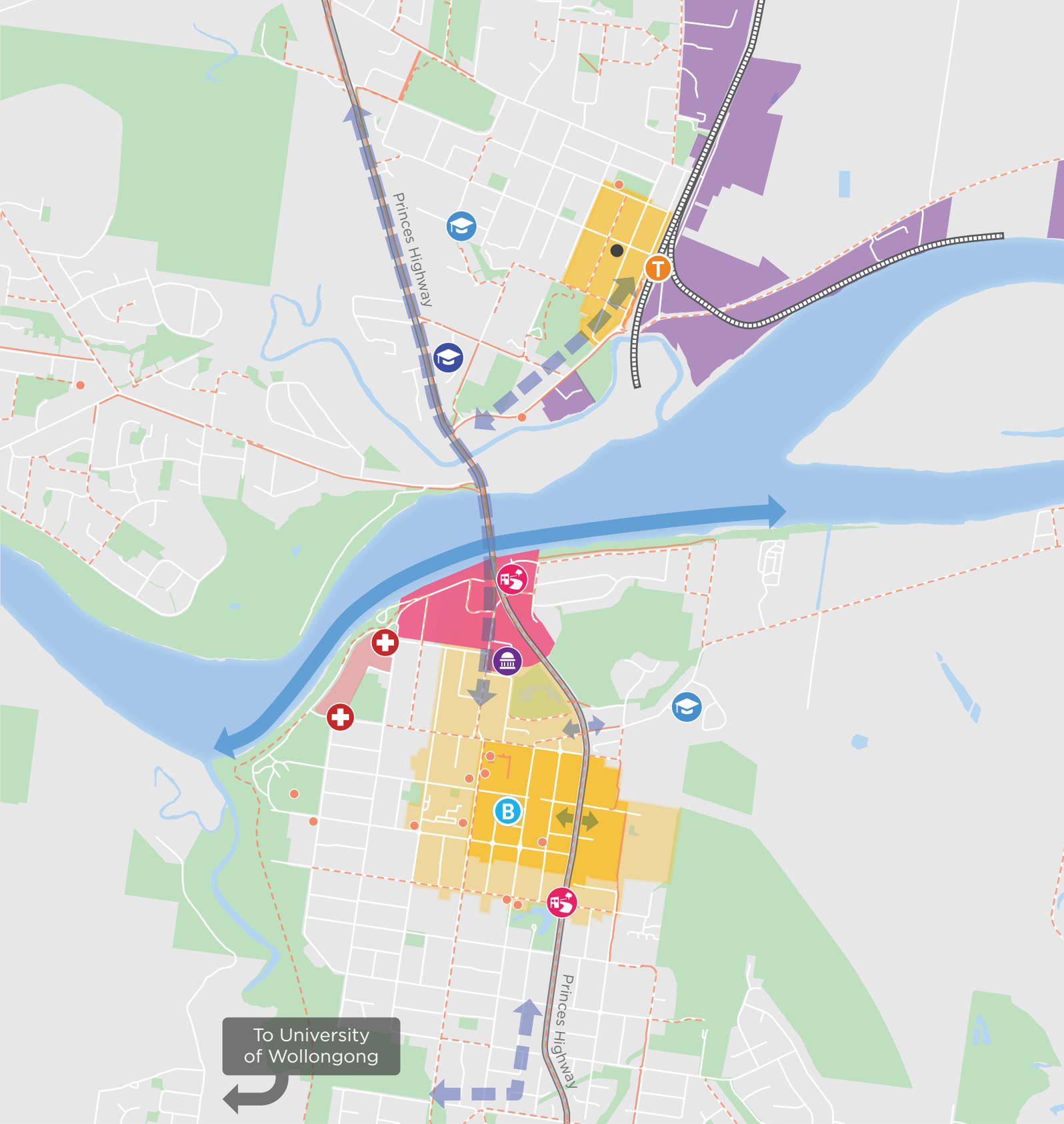
Nowra City Centre offers a diversity of functions and the untapped asset of the Shoalhaven River. Distinct hubs of activity include:

- health and medical services focused on Shoalhaven District Memorial Hospital
- entertainment, cultural and civic functions at the Shoalhaven Entertainment Centre and Council Administration Building
- business, retail and services in the commercial area
- the Riverfront Precinct, which could offer entertainment and leisure activities.

With the spectacular Shoalhaven River so close to the City Centre, better connections between the natural and built environment could create a vibrant riverfront entertainment

Action 2:

Develop a Nowra City Centre Strategic Roadmap to set a vision, identify actions and guide inter-agency and inter-government collaboration.



Map 3: Nowra City Centre



- Regional open space - riverfront
- Bomaderry
- Employment land
- Riverfront precinct
- Health precinct
- Commercial
- Commercial core

- Existing cycle paths
- Proposed cycle paths
- Railway line
- Improved connectivity
- Train station
- Bus terminal
- City gateways

- Civic hub
- Secondary education
- Tertiary education
- Health facilities
- Cultural facilities
- Open space
- Water body

Objective 2: Grow the region's regional cities

and leisure precinct. This would enhance open space, improve connections, increase safety and provide a catalyst for investment.

Council recognised this with the masterplan for the *Nowra Riverfront Entertainment and Leisure Precinct* and the NSW Government will work with Council on its implementation. The new Nowra Bridge will improve access for pedestrians and cyclists to use the Riverfront Precinct as a destination and to move through and connect with adjacent precincts.

The City Centre's functions are supported by rail access at Bomaderry, which also has a town centre that provides employment and housing diversity to complement Nowra City Centre.

The Shoalhaven Campus of the University of Wollongong is just three kilometres from the commercial area. A \$2 million joint Australian Government and University of Wollongong initiative to establish an advanced manufacturing industry hub in Nowra will provide a collaborative environment for students, industry specialists and entrepreneurs and position the Shoalhaven at the forefront of advanced manufacturing. Opportunities to attract an additional education presence will produce a greater diversity of offerings.

Plans are in place to grow and improve the Shoalhaven District Memorial Hospital. NSW Government investment of \$438 million in the hospital provides an opportunity for complementary land uses that support the health and medical offering.

Leveraging this activity through collaboration between the NSW Government, Council, health and education institutions, and the private sector will attract investment and economic development to achieve Nowra City Centre's growth potential.

Strategy 2.1

Activate Nowra City Centre.

Strategic planning and local plans should consider opportunities to:

- leverage investments in Nowra Bridge, Riverfront Precinct and Shoalhaven District Memorial Hospital
- improve connections between the Nowra Bridge, Riverfront Precinct, Hospital and the commercial area
- identify clear planning and approval pathways and remove planning barriers to increase residential development
- guide decision-making around infrastructure and services including public domain improvements, green infrastructure, open space and walking and cycling connections
- understand Shoalhaven District Memorial Hospital's opportunities for expansion or complementary surrounding land uses.

Collaboration Activity 4

Work with Transport for NSW and Shoalhaven City Council on a Place-based Transport Plan for Nowra City Centre.

Collaboration Activity 5

Work with Shoalhaven City Council, Department of Regional NSW, Transport for NSW, Department of Health and other relevant stakeholders to drive the revitalisation of the Nowra Riverfront and assist in fast-tracking development of the precinct





Map 4: Shellharbour City Centre

0 125 250 500m



- | | | |
|---|--|---|
|  Key site |  Existing cycle paths |  Health facilities |
|  Commercial area |  Railway line |  Civic hub |
|  Seniors living area |  Train station |  Cultural facilities |
|  Improved connectivity |  Tertiary education |  Open space |
| |  Secondary education |  Water body |

Enhance the diversity and strength of Shellharbour City Centre

Shellharbour City Centre is a regional city that offers cafes, restaurants, office space, shops and education, medical, dental, banking and civic services. The City Centre will become more important as people move into the West Lake Illawarra Growth Area.

At the heart of the City Centre is the \$60 million Shellharbour Civic Centre. A five-star Green Star building, it includes a library, 350-seat auditorium, a 2,000m² civic square and green space for community events. Creating accessible, quality open space throughout the City Centre, increasing tree canopy cover coupled with making improvements to the public domain will build on this investment and create more active, attractive areas.

The City Centre is framed by low density residential and seniors housing. Demand for high density living is increasing.

The Shellharbour TAFE provides opportunities for residents to leverage tertiary education offerings. The State and Federal Government announcement of \$722 million to redevelop Shellharbour Hospital on a new site creates an opportunity to identify future uses for the current hospital site that contribute to the diversity of Shellharbour City Centre.

With over 200 shops in the Stockland Shopping Centre, the City Centre draws visitors from within and outside the region. The City Centre supports around 4,500 jobs; of these, 36 per cent are in retail, 18 per cent in health care and 10 per cent in accommodation and food services.¹⁴

The e-commerce revolution and changing behaviours from COVID-19 are reshaping consumer expectations and shifting the function of retail toward more engaging, diverse and entertaining experiences. This presents opportunities to explore a diversity of offerings such as smart work hubs and a night-time economy.

Good urban design, public domain improvements and connectivity will encourage people to spend time in the City Centre. People tend to travel there by car or bus; Oak Flats Train Station is three kilometres away. Improved walking and cycling paths in the City Centre and across New Lake Entrance Road will better connect the civic and retail hub with health and education areas.

Shellharbour City Centre will be a more diverse economic environment with planning that leverages identified key sites to create a mixed-use precinct where people can live, shop and work all within walking distance.



Strategy 2.2

Enhance the diversity and strength of Shellharbour City Centre.

Strategic planning and local plans should consider opportunities to:

- facilitate higher density mixed use development with quality connected open space and increased tree canopy
- explore opportunities to support a night-time economy and smart work hubs
- improve access and movement between the centre's functions and destinations
- improve connectivity into Shellharbour City Centre from surrounding suburbs through better pedestrian, cycle and public transport connections including from Oak Flats Train Station
- leverage future investment in health and education services
- facilitate diversification and growth in employment opportunities.



Strategy 2.3

Health district planning should consider opportunities for the future use of the existing Shellharbour Hospital site and improved connections to adjoining areas.

Objective 3: *Grow the Port of Port Kembla as an international trade hub*

The Port of Port Kembla directly and indirectly supports more than 3,500 jobs and contributes \$543 million to the regional economy each year.¹⁵ The diverse commodity base of the Port today reflects the growth of the region and its capability to service the growing South West Sydney market.

The Port is the only port in NSW receiving motor vehicles (450,000 imports in 2019¹⁶). It exports coal and grain and supports the carriage of iron ore and steel and associated products. It is the principal grain export port for producers in southern and south-western NSW and increasingly imports construction materials.

Hydrogen can be used in steel making, as a fuel for trains and zero emissions vehicles and can be stored physically as a gas or liquid. The Port's world-class research ecosystem,

accessibility to global markets, industrial land and a large skilled labour base positions it as a hub for hydrogen production.

It offers 30 years of expertise in hydrogen production, an existing customer base in electricity generation, and industry, transport and gas networks. Its strategic location makes hydrogen opportunities possible with road, rail and pipeline connections to 80 per cent of Australia's population and industry. A hydrogen hub at Port Kembla could create new highly paid and skilled jobs in advanced manufacturing, services, research and development.

The NSW Ports' 30 Year Master Plan *Navigating the Future* identifies Port Kembla as a home to NSW's second container port to cater for future trade volumes as Port Botany reaches capacity. With demand for residential development around the Port increasing, this could conflict with current and future heavy industry uses due to noise, air, dust, odour and traffic emissions as well as visual amenity and health and safety concerns.



Objective 3: *Grow the Port of Port Kembla as an international trade hub*

Increased development within the Port and in surrounding areas could constrain the Port's future operating capacity and efficiency if not managed appropriately. Development along key access routes such as Five Islands Road, Springhill Road, and Masters Road could also have a detrimental impact to the Port's functioning.

Longer-term expansion of the Port requires the option of a new freight rail connection to Sydney via the Maldon-Dombarton corridor. This will support the expanding resources sector in the Illawarra Shoalhaven by providing alternative access to Port Kembla; enable Port Kembla to accommodate overflow from Port Botany's container business; and provide a more reliable link between the south west and western coal mines and the rest of the eastern seaboard.

 **Strategy 3.1**

Protect Port Kembla as an international gateway for freight and logistics.

Strategic planning and local plans should consider opportunities to:

- reduce land use conflicts from adjoining land uses including residential, commercial development and infrastructure use and, where appropriate, include buffer measures to minimise the impact of development on the efficient functioning of the Port and the freight industry
- consider the suitability of high traffic-generating developments, such as largescale retail and high density residential, on roads that service the Port to reduce conflicts with dangerous goods vehicles.

 **Strategy 3.2**

Regional economic development and strategic plans should consider the development of the Port as a green hydrogen hub to create economic and jobs growth in the region.



Objective 4:

Activate regionally significant employment precincts to support new and innovative economic enterprises

3,069ha

Land zoned for employment in Illawarra Shoalhaven

664ha

Land zoned and undeveloped in Illawarra Shoalhaven

315ha

Land zoned and serviced in Illawarra Shoalhaven

Regionally significant employment precincts will support jobs growth and development, and generate significant economic benefits for the community. They are supported by other industrial areas such as those in Ulladulla and Unanderra.

Retaining and managing employment land and creating flexible planning and development controls will respond to new opportunities and technologies, including catalytic investments. This means a shift from traditional industrial and manufacturing into advanced and smart manufacturing, artificial intelligence and robotics.

E-commerce is increasing demand for warehouse and logistic properties such as automated warehousing. This requires an efficient supply chain with new industrial warehouses close to major population centres.

The availability of employment lands depends on servicing, location and size, and constraints such as flooding, bushfire and the location of biodiversity.

Collaborative action in regionally significant employment land will build on each Council's Regional Economic Development Strategy to develop precinct profiles that identify each area's:

- future role
- land requirements to support targeted industries
- infrastructure, servicing and water requirements

Action 3:

Develop precinct profiles for the regionally significant employment lands and where required, establish precinct collaboration teams to activate land for economic growth.

Strategy 4.1

Support new and innovative economic enterprises.

Strategic planning and local plans should consider opportunities to:

- retain and manage regionally significant employment lands and safeguard them from competing pressures
- provide flexibility in local planning controls
- align infrastructure to support the rollout of employment land in the region.

Strategy 4.2

Monitor the take up and availability of employment land through the Employment Lands Development Monitor.

- existing land constraints
- enabling and simplified planning controls
- potential planning approvals pathways to support simplification.

Precinct profiles will identify stakeholders and, where required, a precinct collaboration team to facilitate a whole-of-government approach to activate employment lands, coordinate infrastructure planning and delivery and consider how underutilised sites can be used for new employment generating opportunities.

Map 5: Regionally Significant Employment Lands

1 Port Kembla

The Port directly and indirectly supports over 3,500 jobs and contributes \$543 million to the regional economy each year. The Port has accessibility to global markets, heavy industrial land and a large skilled labour base supporting its position as a future hub for hydrogen production

2 West Dapto Employment Lands

Approximately 217 hectares, the West Dapto Employment Land is strategically located close to the future communities in the West Dapto urban release area with good transport links and free from land use conflicts.

3 Tallawarra Employment Lands

The Tallawarra Employment Land has the potential to support new port related businesses, light industrial and commercial operations.

4 Shellharbour Airport Employment Precinct

A vibrant business hub leveraging the operations at Shellharbour Airport which can lead regional economic development, tourism and employment.

5 Shell Cove Business and Technology Park

This 9-hectare site alongside the Shellharbour Marina has the potential to leverage off the significant investment being made through the Marina development.

6 South Nowra Employment Precinct

This precinct employs over 2,300 people and includes the Flinders Estate and the South Nowra industrial lands. The South Nowra industrial lands comprises 110 hectares with potential to accommodate up to 180 new industrial lots.

7 Albatross Aviation and Technology Park

Located alongside the HMAS Albatross naval air station, this 35-hectare precinct currently supports a cluster of electronics, IT, logistics and aviation businesses that is expected to support 1,500 jobs.



- Metropolitan city
- Regional city
- Strategic centre
- Railway - Shared
- Railway - Freight
- Maldon-Dombarton rail corridor
- A1/M1
- Employment land
- National park and reserve
- State forest

0 10 20 km



Grow the defence and advanced manufacturing industries

The Illawarra Shoalhaven provides innovative defence technology and services to the Australian and global defence industries, anchored by Port Kembla, HMAS Albatross, HMAS Creswell and a growing light aeronautics and simulation training industry. The defence sector in the region employs a highly skilled workforce of over 1,900 people and contributes more than \$500 million to the regional economy.¹⁷

The Shoalhaven Defence Industry Group and Invest Wollongong are primary stakeholder networks that support defence and advanced manufacturing industries in Illawarra Shoalhaven. Industry actively engages with government on skills development initiatives such as STEMship and STEM Industry School Partnerships, which produce entry level skilled workers and build the skilled future workforce to maintain and grow the region's defence and advanced manufacturing sector.

Illawarra Shoalhaven is home to advanced manufacturers who successfully compete for domestic and international business. These companies leverage the region's access to major domestic and international markets through extensive road, rail and air links, Port Kembla,

and industrial zoned land which allows for 24/7 operations and niche specialisations in food, nutraceuticals and chemicals.

The University of Wollongong works with manufacturing companies to adopt cutting-edge technology and practice in areas such as robotics, automation and advanced materials. It is actively increasing and improving programs that link researchers with manufacturing businesses that can commercialise new products and technologies.



Strategy 4.3

Support defence and advanced manufacturing industries.

Strategic planning and local plans should consider opportunities to:

- protect the airspace around defence facilities consistent with the current Australian Noise Exposure Forecast mapping in local environmental plans
- provide space and co-location opportunities for electronic, information technology, logistics, and aviation and defence support industries in employment precincts such as the Albatross Aviation and Technology Precinct and the South Nowra Industrial Lands.



Shellharbour Airport

Objective 4: Activate regionally significant employment precincts to support new and innovative economic enterprises

Support the growth of Shellharbour Airport

Shellharbour Airport is a licensed airport, owned and operated by Shellharbour City Council. The catchment area for the airport extends south to Nowra, west to Bowral and north to the southern suburbs of Sydney. Its location provides good air, road and rail connectivity to Greater Sydney providing a viable alternative to Bankstown for aviation-related industries.

The airport is home to tourism operators, a light aeronautics industry and emergency services including the NSW Rural Fire Service Regional Control Centre, the NSW Fire Brigade training facility, the NSW Ambulance helicopter rescue service, and the Australian Aerial Patrol search and rescue.

The NSW Government recognises the potential of the Shellharbour Airport and is investing \$16 million to transform the airport area into a vibrant business hub that will support regional economic development, tourism and employment.

Investment will fund the construction of a new passenger terminal building, upgrades to airport infrastructure including runways, taxiways, and short and long-term carparks. Importantly, the investment will open up more than six hectares of land for aviation-related industrial uses at the aviation business park.

Strategy 4.4

Continue to support the growth of Shellharbour Airport through Shellharbour City Council's *Airport Strategic Business Plan*.

Strategic planning and local plans should consider opportunities to:

- appropriately manage and protect Shellharbour Airport's land-use and airspace to support aviation operations (including regular public transport) and related business
- activate employment lands surrounding the airport with flexible planning controls.



The Regional Plan supports regionally significant employment lands by:

- developing profiles that identify future role, land and infrastructure requirements, and a simplified planning process to activate investment
- establishing collaboration teams, where required, to coordinate a whole-of-government approach to activation
- supporting the development of Port Kembla as an international trade hub, NSW's second container port and emerging hydrogen hub to grow the local economy and number of jobs
- supporting new and innovative economic enterprises
- monitoring the take up and availability of employment land to ensure an ongoing supply.

Objective 5: *Create a diverse visitor economy*

Almost 12 million visitors come to the Illawarra Shoalhaven each year, representing eight per cent of total visitors to NSW.¹⁸ Natural features, a vibrant arts scene, food and beverage trails, characterful towns and historic villages and a calendar of music, sporting and cultural events are key attractors.

Increasing visitation and growing expenditure requires complementary products and experiences, including eco-accommodation, nature-based and cultural experiences, food and wine (including agri-tourism) experiences, adventure activities, and events.

National parks are home to important landscapes, plants and animals, along with the heritage that holds the stories of Aboriginal culture and the built structures dating back to colonial times. The region includes the Coast Track, a 26-kilometre track through the Royal National Park from Bundeena to Otford and the Kiama Coastal Walk a 22 -kilometre track from Kiama to Werri Beach. The new Murramarang South Coast Walk will offer a 48-kilometre multi-day walking track in Murramarang National Park.

The Illawarra Shoalhaven Joint Organisation is developing a regional cycling strategy to build on the success of securing the 2022 UCI Road World Championships event in Wollongong. This event is expected to attract 300,000 spectators, 500 media outlets and a global viewing audience of more than 200 million people. It will directly deliver up to \$100 million in tourism spending.¹⁹



Collaboration Activity 6

Work with councils, TNSW, NPWS, DRNSW, Destination NSW and community groups to identify opportunities to improve connections between existing coastal walks throughout the region.



Strategy 5.1

Create an environment for a diverse visitor economy.

Strategic planning and local plans should consider opportunities to:

- enhance the amenity, vibrancy and safety of centres and township precincts
- create green and open spaces that are accessible and well connected and enhance existing green infrastructure in tourist and recreation facilities
- support the development of places for artistic and cultural activities
- protect heritage, biodiversity and agriculture to enhance cultural tourism, agri-tourism and eco-tourism
- support appropriate growth of the night-time economy
- provide flexibility in planning controls to allow sustainable agritourism and ecotourism
- improve public access and connection to heritage through innovative interpretation
- incorporate transport planning with a focus on active transport modes to connect visitors to key destinations
- provide water services to meet the needs of visitors.



Strategy 5.2

Support a diverse visitor economy in national parks through collaboration between National Parks and Wildlife Service, Destination NSW, Destination Networks, councils and local tourism organisations to encourage and welcome visitors.

The region's visitor economy requires a focus on a pipeline of skilled workers and higher tourism yield through high-end product development and investment attraction. The IllawarraYES program focuses on building entry level employment pathways for young people, comprised of vocational training, employability skills and work experience as well as on-the-job mentoring and support. It aligns with key regional industries including hospitality and tourism, as well as building and construction, manufacturing and aged care.

Objective 6:

Activate the region's harbours to promote a blue highway

Marine tourism is defined as activities based in or near the marine environment, including land and water-based activities in coastal areas. The Port of Port Kembla is one of nine cruise-ready ports identified in Destination NSW's Blue Highway, a strategy to attract new cruise ship arrivals along the coast.

The Illawarra Shoalhaven offers many opportunities to leverage the blue highway to increase the economic contribution of marine tourism, further creating regional job opportunities. The *NSW South Coast Marine Tourism Strategy* is a 20-year vision to realise the economic benefits of marine tourism that describes how government and industry can work together to develop, market and leverage marine tourism opportunities.

In addition to Shell Cove's new 270-berth Shellharbour Marina development, better coastal connectivity, activated harbours and the right infrastructure will unlock the opportunities of the blue highway and connect to marine parks at Jervis Bay and Batemans Bay.

The *Wollongong Harbour Master Plan* will consider leisure and tourism potential. The *Kiama Harbour Revitalisation Framework* will guide investment in Kiama Harbour and improve the marine experience for maritime users and the broader community. Ulladulla Harbour, Greenwell Point, and Lake Illawarra also present opportunities for marine tourism.



Strategy 6.1

Activate the region's harbour and ports as well as their related commercial areas in strategic planning and local plans.



Kiama Coast Walk

Objective 7:

Respond to the changing nature of retail

The retail sector is the Illawarra Shoalhaven's second largest sector of employment, providing almost 17,000 jobs in 2018.²⁰

Changing consumer behaviour is seeing an increase in e-commerce and a desire for innovative experiences. Retailers are reviewing store formats, improving their online presence and in some cases reducing their floor space.

While physical shop fronts will remain important, their functions and purpose will change depending on market capacity to adopt new technology and digital platforms. It will be important to understand how the market is responding to these changing technologies and what this means for floor space demand overall, especially in places with significant retail offering such as Metro Wollongong and Shellharbour City Centre.

Proposals for new retail centres should demonstrate how they:

- respond to retail supply and demand, innovation and digital trends in the retail sector
- maximise the use of existing infrastructure (including public transport and community facilities) commensurate with the scale of the proposal
- enhance public areas.

Council reviews of local retail approaches should consider measures that diversify retail-focused centres to provide a diverse mix of uses, and the impact of technological change on warehousing and distribution.

Retail studies should align with town centre studies that promote public domain design measures to enhance centre activation and vibrant street life.

Strategy 7.1

Respond to the changing nature of retail. Strategic planning and local plan should consider opportunities to:

- provide flexibility and facilitate a broad range of commercial, business and retail uses within centres
- focus future commercial and retail activity in existing commercial centres, unless there is no other suitable site within existing centres, there is a demonstrated need, or there is positive social and economic benefit to locate activity elsewhere.



Objective 8:

Strengthen the economic self-determination of Aboriginal communities

OCHRE (Opportunity, Choice, Healing, Responsibility, Empowerment) is the NSW Government's overarching policy framework for working with Aboriginal communities. It outlines a commitment to work in genuine partnership with Aboriginal people to support strong communities through education, economic development and culture.

Local Aboriginal Land Councils (LALCs) play a central role in the organisational structure of the land rights network. The objectives of each LALC are to improve, protect and foster the best interests of all Aboriginal persons within the LALC's area and other persons who are members of the Council.

Given LALCs have a defined role in land management, the Regional Plan commits to working collaboratively with each LALC to build capacity for shared knowledge, constructive relationships, and meaningful approaches to strengthen economic self-determination.

Facilitate Aboriginal land use and development

The region's LALCs are well positioned to activate their significant land holdings to better utilise the economic potential of Aboriginal land holdings through land management and activation.

Since early 2019, the NSW Department of Planning, Industry and Environment has offered to conduct a strategic assessment of land held by LALCs in NSW to identify priority sites for further investigation of economic opportunities. Planning Analysis Reports for LALCs in NSW contain essential information about landholdings, including mapping, aerial photos, key planning constraints, and general information about the suitability of land for development. This represents an important precursor to LALCs being able to make use of the planning system. Other work being undertaken to protect and recognise Aboriginal lands includes for example State and regional water strategies.

The NSW Government is committed to the prompt, equitable and efficient resolution of Aboriginal Land Claims on Crown land. Many parcels of Crown Land cannot be used due to uncertainty about ownership and control. Resolving this uncertainty will benefit Aboriginal and non-Aboriginal landowners and occupiers and pave the way for strategic and collaborative opportunities.

Local Aboriginal Land Councils

- Illawarra
- Nowra
- Ulladulla
- Jerrinja
- Batemans Bay



Build capacity for shared knowledge of Local Aboriginal Land Council aspirations in the planning system

Across NSW and the Illawarra Shoalhaven region, individual LALCs have varying levels of knowledge about the NSW planning system and development processes. This can influence the extent to which LALCs can make informed decisions about the future use of their land.

Similarly, State agencies and councils have varying levels of knowledge about LALCs' land ownership, development aspirations and roles and responsibilities.

Building the capacity for shared knowledge about Aboriginal land will create more effective relationships between LALCs, State agencies and councils.

The State Environmental Planning Policy (Aboriginal Land) 2019 (Aboriginal Land SEPP) and associated planning measures seeks to provide LALCs with greater certainty in developing their landholdings.

For land where the Aboriginal Land SEPP applies, LALCs can utilise an alternative pathway for rezoning proposals. Development Delivery Plans – strategic plans for priority LALC land – can then be considered during the assessment of planning proposals and development applications.

Strategy 8.1

Support and partner with Aboriginal communities to identify opportunities to activate land including the biodiversity offset market to drive economic prosperity, training and employment for Aboriginal communities.

Strategy 8.2

DPIE Planning continues to offer the preparation of a strategic assessment of the landholdings of LALCs.

Strategy 8.3

Prioritise the processing of unresolved Aboriginal Land Claims on Crown land.

Strategy 8.4

Provide opportunities for the region's LALCs to interact with and utilise the NSW planning system and the planning pathways available to achieve development aspirations.

Objective 9: *Promote agriculture innovation, sustainability and value-add opportunities*

The Illawarra Shoalhaven's agriculture production is estimated to contribute over \$104.2 million to the regional economy.²¹ The dairy industry contributes 11 per cent of NSW's milk production and is worth over \$66 million.²² Other rural enterprises include organic produce, beef, cut flowers, and fruit. The region supports 50 hectares of aquaculture leases and has 11 active oyster farms.

Local production responds to climate change by increasing food security and reducing food mileage. Demand for land for urban purposes puts pressure on agricultural productivity, so as the population grows, agricultural land must be protected and land use conflicts minimised.

Agricultural land, particularly in areas such as Jamberoo, Gerringong, Berry, Kiama and Kangaroo Valley, attracts both residents and visitors. Agritourism and small-scale agricultural development can support the recovery and resilience of farm businesses in regional economies and represent a diverse and unique tourism offering, including food and wine trails, farm stays, farmers markets, and farm gate experiences.

The region has easy access to international markets via Port Kembla, Port Botany, Sydney Airport and Canberra Airport. This enables value-added activities such as boutique food and beverages. Products such as oysters and dairy are already being exported to South East Asia.

Transformative change in the agriculture sector will contribute to zero waste, carbon neutrality and improve producers' ability to grow niche markets and sell high value products. Digital technology and biotechnology create greater efficiencies by improving the productivity and quality of produce and enhancing sustainable farm management practices. Resilience to pests and diseases will also be increasingly important.

The NSW Department of Primary Industries (DPI) is undertaking a mapping project to identify important agricultural land across NSW. Once finalised, councils will consider these maps in local strategic planning and local plans.

DPI has developed agricultural profiles for the Illawarra Shoalhaven region that provides an overview of agriculture including details of the top five agricultural industries operating in the region, secondary industries that support and rely on those agricultural industries and challenges and opportunities that are collectively faced by agricultural industries. These profiles, together with any mapping identifying land suitable for agriculture and any policy released by DPI on agricultural land use will assist in planning for agriculture in local strategic planning and local plans.

Strategy 9.1

Promote agriculture and aquaculture innovation, sustainability and value-add opportunities such as agritourism.

Strategic planning and local plans should consider opportunities to:

- protect identified important agricultural land and industries from other land uses, land use conflict and fragmentation
- protect assets and infrastructure such as freight and logistics facilities from land use conflict and the encroachment of incompatible land use to facilitate investment in the agricultural supply chain
- minimise the impacts of development on aquatic habitats in aquacultural estuaries
- manage water availability and protect water sources.

Strategy 9.2

Enable new rural residential development only where it has been identified in a local strategic plan, prepared by council and endorsed by the Department of Planning, Industry and Environment.

Map 6: Resources map for Illawarra-Shoalhaven

-  Regional boundary
-  Metropolitan city
-  Regional city
-  Strategic centre
-  Railway
-  A1/M1
-  Airport
-  Port
-  Harbour
-  Biophysical strategic agricultural land
-  Sydney drinking water catchment
-  Fisheries
-  Marine park
-  Mineral Resource
-  Coal Mine
-  National park and reserve
-  State forest
-  Water body
-  Urban area



Objective 10:

Sustainably maximise the productivity of resource lands

The Illawarra Shoalhaven has a strong history of mining and extraction activity, dating back 200 years when coal deposits were first discovered around Coalcliff. These natural resources continue to make an economic and cultural contribution to the region and to Sydney.

The region lies partly within the Southern Coalfield that provides the only hard coking coal in NSW and is in high demand for steel production around the world. As the region grows, the continued extraction of resource lands should remain a priority.

Coal mining is largely concentrated in the western and northern parts of the Wollongong LGA. There are five colliery holdings (all underground), two with planning approvals beyond 2030.

More than 84 per cent of the region's petroleum and gas resource is covered by either the NSW Government's two kilometre coal seam gas (CSG) residential exclusion zone, the Sydney Catchment Authority special and controlled areas, and/or national parks. Given these existing constraints, land use proposals that have the potential to further sterilise the available coal, CSG and/or petroleum resources should be carefully considered and justified.

The region also has valuable hard rock resource lands such as the Dunmore – Shellharbour Hills and Kiama areas, as well as scattered quarries in Shoalhaven LGA, and sand and gravel resources from alluvial deposits along the Shoalhaven River. These areas also contain significant native vegetation including State and nationally listed threatened species and endangered ecological communities.

Strategy 10.1

Consider the ongoing operation of existing mining and resource extraction and future development of known resources.

Strategic planning and local plans should consider opportunities to:

- protect areas of mineral and energy resources potential
- protect infrastructure that facilitates mining industries, such as road and rail freight routes, from development that could affect current or future extraction
- address water resource constraints and impacts.

Strategy 10.2

Consider opportunities for strategic biodiversity conservation measures around known hard rock resource lands to protect environmental values and provide certainty for extraction activities.

A sustainable and resilient region

The Illawarra Shoalhaven's regionally significant landscapes and natural assets create an enviable lifestyle for residents and visitors.

Beaches, parks, gardens and sports fields, leafy streets, libraries, museums and galleries, are all key to public life. The safety and wellbeing of people and the coastal and rural lifestyles on offer are maximised by integrating land use planning with planning for natural and urban hazards, resilience, open space and waterway health.

There is a growing risk of climate-related impacts on the region's people, cultural, natural and economic systems and the built environment. All levels of government, the community, businesses and industry must work together to build resilience to climate change and identify workable adaptation and mitigation measures.

The *Shoalhaven Illawarra Enabling Regional Adaptation* project identifies how climate change may affect local communities and identifies responses. Councils are already building this work into their strategic planning and other processes and the NSW Government will continue to work with councils on opportunities to further build pathways to build resilience, reduce vulnerabilities, and support initiatives that can transform the region.

The NSW Government has invested more than \$45 million to assist the Shoalhaven community and businesses to recover following devastating bushfires over the 2019-20 summer. Resilience NSW has been established to drive world-leading disaster preparedness and recovery for the NSW community.

The Illawarra Shoalhaven will be a leading region in sustainability. Collaborative approaches can assist reduce emissions, support clean air, promote a circular economy and low emissions transport. This can position the region as a hub for clean energy that uses water resources efficiently with an increased urban tree canopy cover.



Macquarie Pass

National parks and the Sydney Drinking Water Catchment are significant landscapes:

43%

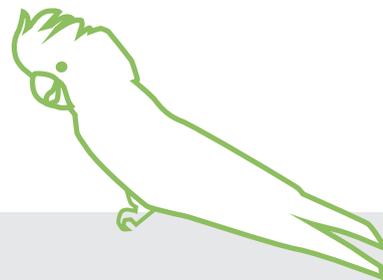
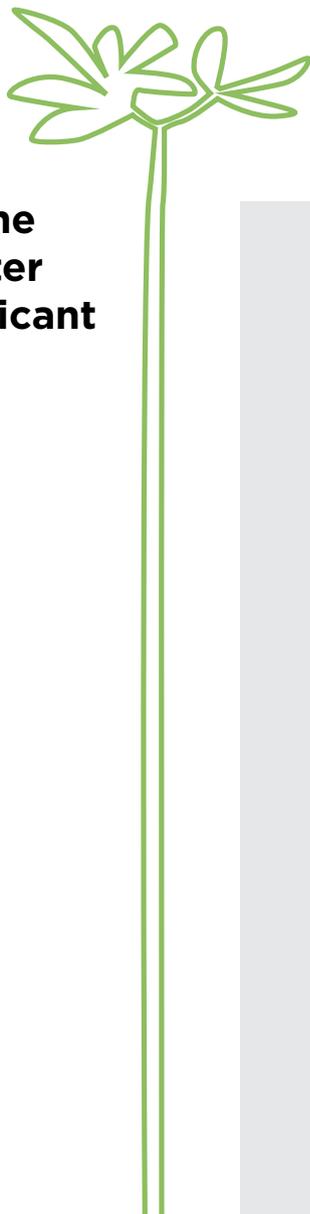
of the region
(250,000 hectares)

has high environmental value or forms part of a biodiversity corridor.

The region is home to an estimated

1,800

native plant species, including over 60 threatened plant species.



Criteria for mapping high environmental value lands

Lands mapped as high environmental value are identified in the Environmental Values map and include:

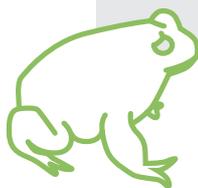
- sensitive biodiversity²³
- native vegetation of high conservation value, including vegetation types that have been over-cleared or occur within over-cleared landscapes and threatened ecological communities
- key habitat of threatened species
- important wetlands, coastal lakes and estuaries
- areas of geological significance.

High environmental value data is available through the SEED Portal. SEED is the NSW Government's central resource for Sharing and Enabling Environmental Data and can be found at <https://www.seed.nsw.gov.au/>

Surveys have identified:

over
100

threatened animal species

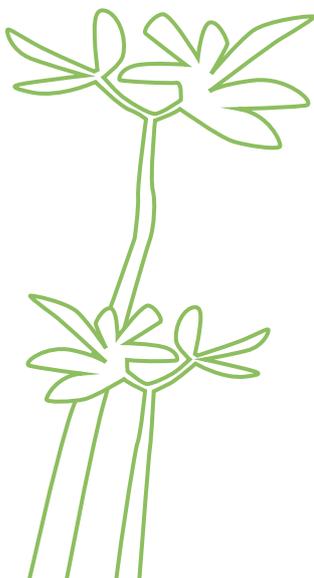


19,120

hectares of wetlands.

26

endangered ecological communities



Map 7: Environmental Values for Illawarra-Shoalhaven

-  Regional boundary
-  Metropolitan city
-  Regional city
-  Strategic centre
-  Railway
-  A1/M1
-  High Environmental Value
-  National park and reserve
-  State forest
-  Sydney drinking water catchment
-  Marine park
-  Biodiversity corridor
-  Water body



Disclaimer:
 This map is recommended for use at a regional planning level and gives an indication of relative biodiversity values at this scale. While this data may provide an indication of relative biodiversity significance at the local level, users should be aware that the data has limitations including those of scale and positional accuracy of attributes. The environmental values on the map is an amalgam of available data at the time of preparation. It is envisaged that the map will continue to evolve as ongoing work and identified mapping actions in the Plan are progressed.



Objective 11:

Protect important environmental assets

The region's environmental values are mapped as High Environmental Value land and include a network of biodiversity corridors. Important biodiversity corridors cross the region with the north-south corridors the most notable, however, a number of east-west corridors exist as well. These areas drive ecological diversity and connections and make the region a great place to live and visit. Environmental values are protected in national parks and other conservation areas, marine parks, dedicated Crown land and the Sydney Drinking Water Catchment lands.

The 'avoid, minimise and offset' hierarchy will be applied to areas identified for new or more intensive development. This requires development to avoid areas of validated high environmental value and consider appropriate offsets or other mitigation measures for unavoidable impacts.

Where it is not possible to avoid impacts, councils must consider how impacts can be managed or offset through planning controls or other environmental management mechanisms.

Land at Seven Mile Beach, Gerroa has both a potential sand resource and high conservation value. The land supports an array of flora and fauna, including endangered ecological communities, numerous threatened species and areas mapped as coastal wetlands, littoral rainforests and coastal environment areas under *State Environmental Planning Policy (Coastal Management) 2018*.



The land has also been identified as an important regional corridor between Seven Mile Beach and Barren Grounds Nature Reserve and has been mapped as part of the Berry Corridor – one of 10 priority corridors identified in the region. Extraction would have considerable impact on this sensitive habitat and ecological link.

Strategy 11.1

Protect, maintain or restore important environmental assets.

Strategic planning and local plans should consider opportunities to:

- recognise the validated high environmental value lands in local environmental plans
- minimise potential impacts arising from development on areas of high environmental value and implement the 'avoid, minimise and offset' hierarchy
- consistently manage riparian corridors through strategic conservation planning initiatives that accommodate natural physical processes and integrate water sensitive urban design principles.



Macquarie Pass

Connect biodiversity corridors

The *Illawarra Biodiversity Strategy 2011* and the *South Coast Regional Conservation Plan* identify regional biodiversity corridors running south from the Woronora Special Area, along the escarpment connecting to the corridor around Jervis Bay and further south to Ulladulla. These corridors include important east-west links between coastal parks and forests, and the hinterland. Maintaining and improving these corridors will protect and enhance the ecology of the region and the movement of plants and animals.

Added pressures to the natural environment due to climate change can have a physical impact on biodiversity. After the 2019-20 bushfire season, ecological experts believe that some endangered species may have been driven to extinction. It is imperative to build resilience into the region's existing biodiversity areas, as areas of higher biodiversity are more able to adapt and respond to changes and disturbances.

There are plans in place by councils to update the *Illawarra Biodiversity Strategy* and associated *Action Plan 2011* to incorporate the Shoalhaven LGA. This collaborative approach will:

- link biodiversity corridors and secure habitat links across the region
- validate biodiversity and corridor mapping
- help to identify and improve understanding of environmental values, particularly in the Shoalhaven.

These activities must consider climate change and the impacts on climate refugia - the areas where species can retreat to and persist in when environmental conditions change. The NSW Government will provide advice to councils on how best to use this data if required.

Strategy 11.2

Protect and enhance the function and resilience of biodiversity corridors in strategic planning and local environmental plans.

Strategy 11.3

Consider the needs of climate refugia for threatened and dominant species in strategic planning including biodiversity and conservation planning.

Identify and conserve biodiversity values when planning new communities

Terrestrial biodiversity assets must be protected in the regionally significant growth areas and other development areas that may arise. Understanding the general degree of biodiversity loss upfront will avoid or minimise impacts – for example, by locating new development away from areas of high conservation value.

Any new housing communities in the Shoalhaven must be developed in a way that protects environmental values while being resilient to hazards such as bushfire and flooding. Shoalhaven City Council is considering future dwelling supply and the potential of strategic land for housing; this process will consider areas of high environmental value through a strategic conservation plan that includes biodiversity mapping to confirm and protect areas of high environmental value and appropriate land use zones and controls to manage development.

In West Dapto, the NSW Government is working with Wollongong City Council on options to protect biodiversity in the release area and streamline the development process. This involves prioritising the protection of high environmental value areas for conservation, connecting habitat areas and providing complementary land uses alongside conservation sites to improve and protect the area's ecological function and resilience.



Strategy 11.4

Protect biodiversity values in urban release areas.

Strategic planning and local plans should consider opportunities to:

- incorporate validated and up-to-date environmental data
- Investigate strategic biodiversity conservation opportunities.

Secure the health of the region's waterways and coast

The planning and management of coastal settlements and waterways requires an integrated and strategic consideration of environmental, social, cultural and economic values and risk.

The NSW coastal management framework guides the management of the region's sensitive coastal lakes and estuaries that are susceptible to the impacts of land use development (refer Table 1). For example, the catchment of Lake Wollumboola is considered unsuitable for urban development as the lake is a sensitive, intermittently closing and opening lake with very high conservation values.

Wollongong City and Shellharbour City councils have prepared and had their *Lake Illawarra Coastal Management Program 2020-2030* certified. This outlines the strategic direction and specific actions that will be implemented over the next 10 years to protect the health of Lake Illawarra.

Sustainable management of the NSW marine estate is supported by the *Marine Estate Management Act 2014*, Marine Estate Management Authority and *Marine Estate Management Strategy (2018-2028)*. The Strategy aims to reduce major threats to the marine estate and provide for a range of uses and associated community benefits.

The NSW Government's *Risk-Based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions* supports and manages potential water quality impacts. The framework follows the risk-based methodology in the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* and focuses on management targets for estuary health. This framework should be applied to all coastal lakes and estuaries with sensitive estuaries prioritised.

Water Sensitive Urban Design can assist in the protection of the coastal estuarine environment on which tourism and fisheries rely on.



Strategy 11.5

Protect coastal lakes and estuaries by implementing the NSW Government’s Risk-Based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions, with sensitive coastal lakes and estuaries prioritised.

Strategic planning and local plans should support improved water quality and ecological function.

Strategy 11.6

Align local plans with any certified Coastal Zone Management Plan or certified Coastal Management Program.

NSW Coastal Management Framework

This framework provides statutory direction for sustainably managing the NSW Coastal zone including guidance for managing coastal hazards, protecting natural coastal environments and the strategic use of coastal lands for infrastructure and development. The NSW Coastal Management Framework acknowledges that coastal hazards are expected to be exacerbated by climate change whilst recognising the contemporary risks and challenges for the region’s coastline and coastal settlements that natural hazards present, in the context of an increasing population and housing and infrastructure demand. The framework provides financial assistance to councils to prepare and implement Coastal Management Programs.

The NSW Coastal Management Framework comprises the *Coastal Management Act 2016*, the State Environmental Planning Policy (Coastal Management) 2018 and the NSW Coastal Management Manual. The *Coastal Management Act 2016* also facilitates the integrated management of the coastal zone and NSW Marine Estate.

Table 1

LGA	Sensitive Estuary
Wollongong	Towradgi Creek, Fairy Creek, Lake Illawarra, Bellambi Gully, Bellambi Lake
Shellharbour	Lake Illawarra, Elliot Lake
Kiama	Spring Creek, Werri Lagoon
Shoalhaven	Lake Wollumboola, Shoalhaven River, Durras Lake, Tabourie Lake, Wowly Gully, Willinga Lake, Swan Lake, Narrawallee Inlet, Captains Beach Lagoon, Butlers Creek, Nerrindillah Creek, St Georges Basin, Moona Moona Creek, Berrara Creek, Meroo Lake, Termeil Lake, Currarong Creek

Objective 12: *Build resilient places and communities*

The NSW Government supports building more resilient places and communities across NSW.

To build resilient places and communities, shocks and stresses should be considered holistically, including from a people centred, cultural, economic, built form and environmental perspective.

Communities need the skills and knowledge to effectively deal with shocks and stresses and to ensure they are better placed to resist, absorb, accommodate and recover from place-based risks that they may experience.

Episodic shocks are sudden, short term events that threaten places and communities, and include natural hazards such as heatwaves, bush fires, flooding, storms or infrastructure failure.

Chronic stresses are slower moving challenges that diminish a place, community or local environment over time, or on a cyclical basis. These include a changing climate, air and noise pollution, land contamination, food or water shortages, economic downturn, lack of affordable housing and pandemics.

Building resilience into planning enables the community, visitors and businesses to better understand and prepare for a range of shocks and stresses, including but not limited to

climate change vulnerabilities and natural disasters. Shocks and stresses can include both natural and urban hazards such as air pollution, noise pollution, land contamination and social stresses such as housing affordability and other locally identified place based risks.

At the heart of the Illawarra Shoalhaven's resilience is its diversity: a diverse economic ecosystem; a diversity of quality open, green and public spaces; and a range of housing options to support a diverse community at different stages of life and across the age spectrum.

Hazards can disrupt road and rail networks and interrupt access to essential services including water, sewerage, power, telecommunications and digital connectivity, as was seen on the south coast in the 2019-20 bushfires. Residents, tourists, towns and communities can become isolated for extended periods. Visiting tourists may not be aware of the dangers and emergency procedures. Increased heat, drought and bushfire events associated with climate change are expected to result in more frequent and severe air pollution episodes and increased health risks.

The planning system can improve resilience by supporting the creation of more resilient places and communities. A resilience benchmarking matrix tool will assist councils to increase their resilience to shocks and stresses and identify where they can increase their communities resilience to shocks and stresses within the



land use planning system. Councils can also actively engage with the community to understand local risks (shocks and stresses), vulnerabilities and capabilities, providing information that is transparent and shared to develop resilience and adaptation plans.

 **Action 4:**

Develop a resilience benchmarking matrix tool to assist councils to assess their level of resilience.

 **Strategy 12.1**

Resilience and adaptation plans should consider opportunities to:

- encourage sustainable and resilient building design and materials including the use of renewable energy
- promote economic diversity and prosperity, improving liveability and strengthening the health, wellbeing and social cohesion of a place
- integrate emergency management and recovery needs into new and existing urban areas including evacuation planning, safe access and egress for emergency services personnel, buffer areas, building back better, whole-of-life cycle maintenance and operation costs for critical infrastructure for emergency management
- recognise the benefits of social connectivity and social cohesion to community resilience.

Reduce exposure to natural hazards

Major hazards due to bushfires, catchment flooding and coastal processes are expected to be exacerbated by climate change including increasing likelihood of catastrophic bushfire conditions, changes to flood-producing rainfall and sea level rise.

Many waterways drain from the escarpment to the ocean through low-lying coastal floodplains, major river systems and lakes. It is estimated that 1 in every 10 residential urban properties in the Illawarra Shoalhaven is vulnerable to flooding.

Management of coastal areas must protect homes and infrastructure, as well as the natural shorelines and beaches. Areas are naturally prone to flooding due to the region's location between the ocean and the escarpment where water flows towards the sea. Councils regularly prepare flood studies, floodplain risk management plans, and coastal management plans to manage these risks and the NSW Government will continue to support these processes through its Coastal Management Program and Floodplain Risk Management Program.

Following the 2019-2020 bush fire season, and the ongoing risk to life, property and the environment, strategic bush fire planning is essential. Councils can use the *Planning for Bushfire Protection Guideline 2019* to ensure bush fire management principles are given appropriate consideration at the strategic planning stage. The NSW Government is giving consideration to the recommendations of *NSW Bushfire Inquiry Report (July 2019)* which recommends a shift to a strategic approach to planning for bushfire similar to the management of flood prone land in NSW.



Belmore Basin

Strategy 12.2

Reduce exposure to bushfire and natural hazards.

Strategic planning and local plans should consider:

- the proximity of new development, including urban release areas, in relation to areas of high bushfire risk, flooding hazards or coastal erosion/inundation to protect the community from natural hazards
- preparing, reviewing and implementing floodplain risk management plans in existing and new growth areas to improve community resilience to the impacts of flooding and to enable flood constraints to be incorporated into planning processes early for new development.

Strategy 12.3

Reduce the region's exposure to natural coastal hazards through implementing the NSW Government's Coastal Management Framework.

Strategic planning and local plans should consider opportunities to:

- transition existing certified coastal zone management plans to coastal management programs
- implement and review certified coastal management programs to enable the sustainable use of coastal land for infrastructure and development and to improve the resilience of the region's coastal settlements to existing and future coastal hazards
- ensure areas identified for development are consistent with limitations and agreed long-term management strategies in any certified coastal zone management plan or certified coastal management program
- enable effective consideration of coastal hazards including consideration of climate change, with any certified coastal zone management plan or certified coastal management program.

Objective 13:

Increase urban tree canopy cover

The urban tree canopy includes trees along streets, in parks and other public spaces, and on privately owned land including front and backyards. Planning for more trees in urban areas encourages people to walk and cycle, improves the comfort and attractiveness of the network, diminishes traffic noise, screens unwanted views and can have positive economic impacts. Tree canopy also influences the climate by transpiring water, changing wind speeds, shading surfaces, and modifying the heat absorbed by urban surfaces.

A 2020 audit of the region's urban tree canopy (including land zoned for residential, business, industrial, village or tourist purposes) revealed that Shoalhaven has the highest average level of urban tree canopy cover with 32 per cent.²⁴

As urban areas become denser, extending urban tree canopy is an effective way to improve amenity including the soundscape of an area and manage the impacts of extreme heat. Urban heat mapping by the NSW Government will support decision-making around extreme heat mitigation strategies.

Councils should consider the Government Architect NSW's Greener Places Framework and design guidance when preparing or updating urban tree canopy plans. *The Urban Green Cover in NSW Technical Guidelines* provide practical information for planning and expanding urban tree canopy and green ground cover. Wollongong City Council has adopted an *Urban Greening Strategy 2017-2037*, while Shellharbour, Shoalhaven and Kiama councils have committed to developing one. Wollongong City Council set a target to increase the urban

70% of total Region is covered by tree canopy

23% of total urban areas in the Region is covered by tree canopy



Strategy 13.1

Foster opportunities to increase urban tree canopy coverage in urban areas.

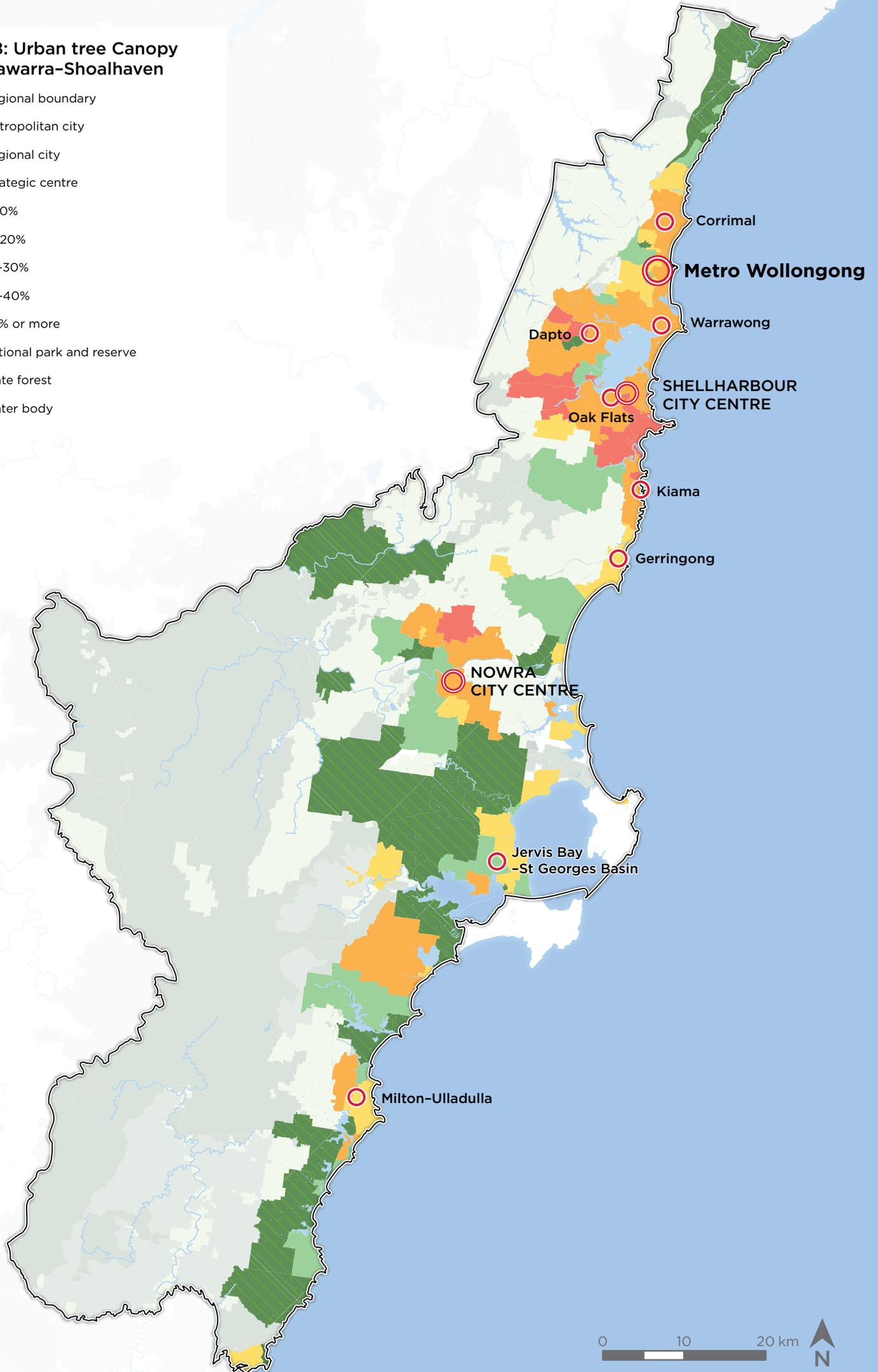
Strategic planning and local plans should consider opportunities to develop long-term urban tree canopy targets accounting for local characteristics and community expectations.

tree canopy cover to 35 per cent. The optimal tree canopy for areas will vary depending on local climates and land use patterns. There are many benefits to increasing the number of trees of a wide variety of species including biodiversity outcomes. Consideration should be given to using local endemic species that are well suited to topography, climate and soils as well as non-native species.

Challenges to extending urban tree canopy include the lack of sufficient space within existing street corridors, the need to reduce bushfire hazards, competition for space with other infrastructure both above and below the ground and water supply.

Map 8: Urban tree Canopy for Illawarra-Shoalhaven

-  Regional boundary
-  Metropolitan city
-  Regional city
-  Strategic centre
-  0-10%
-  10-20%
-  20-30%
-  30-40%
-  40% or more
-  National park and reserve
-  State forest
-  Water body



Objective 14: *Enhance and connect parks, open spaces and bushland with walking and cycling paths*

Objective 14:

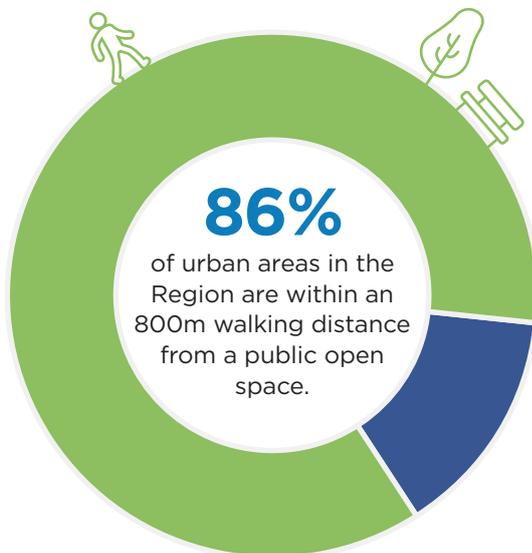
Enhance and connect parks, open spaces and bushland with walking and cycling paths

Public spaces include parks, green spaces, plazas, libraries and museums.

The NSW Premier set a priority to increase the proportion of homes in urban areas within a 10-minute walk of public space by 10 per cent by 2023. These connections with public space are especially important in growing areas like Metro Wollongong, Shellharbour City Centre and Nowra City Centre.

A 2020 audit of public spaces in the Illawarra Shoalhaven found that 86 per cent of urban areas (excluding industrial areas) are within 10 minutes (or 800m walking distance) from public space.

Urban release areas will need a sufficient quantity of quality open spaces, and councils should aim to preserve, enhance and manage open space access. In existing urban areas, better landscaping, more durable and high-quality facilities, better lighting or multi-use playing fields and courts can allow more people to use open spaces more often.



This calculation excludes Heavy industrial areas (IN3 & IN4) from the urban area.

Strategy 14.1

Enhance and increase access to public spaces. Strategic planning and local plans should consider opportunities to:

- plan for urban release areas to supply a sufficient quantity and quality of new accessible open space
- explore new public space in accordance with the Government Architect NSW's *Greener Places and Better Places* guidance, and with consideration of the *Designing with Country* discussion paper, *Streets as Shared Spaces* program, and *Everyone Can Play*
- require large urban renewal initiatives to demonstrate how the quantity of, or access to, high quality and diverse local public space is maintained or improved.

Action 5:

Develop the Illawarra Shoalhaven Green Grid and identify priority projects for enhancement.

Using existing public space assets wisely, and sharing them more broadly, is one response to address demand for open space. Open spaces within school grounds could be shared by the wider community outside of school hours.

The Illawarra Escarpment is the dominant landform of the Illawarra region and is listed as a 'Scenic Landscape of Statewide Significance' on the Register of the National Trust of Australia (NSW). Providing tourism and recreational experiences, it is a highly valued and in demand public space for visitors and residents alike. The area contains landscape features of spiritual significance to the Aboriginal community and opportunities for enhanced use of the Illawarra Escarpment requires access in a controlled and managed way to ensure its continued protection.

An Illawarra Shoalhaven Green Grid will provide a spatial understanding of the network of open spaces in the region and how to improve and better connect them. This will allow the NSW Government and councils to identify long-term and large-scale open space priorities.

Objective 15:

Plan for a Net Zero region by 2050

The NSW Government is committed to achieving net zero emissions by 2050 and has released *Net Zero Plan Stage 1: 2020-2030* which sets out how it will meet the first stage of this objective over the next decade.

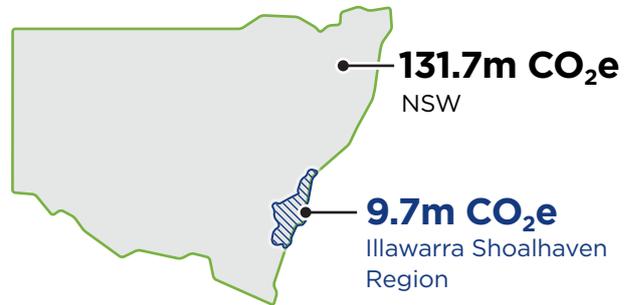
In the Illawarra Shoalhaven, the energy and transport sectors contribute the bulk of emissions due to the region's energy-intensive industrial processes such as steelworks and manufacturing, and the increased movements of people and goods as the population increases.

The *Electricity Infrastructure Investment Act 2020* committed NSW to develop five renewable energy zones, including one in the Illawarra Shoalhaven region. In the early stages of feasibility and planning the NSW Government will engage closely with the local community and stakeholders on the design and delivery of these Renewable Energy Zones.

All four councils participate in the Cities Power Partnership, which provides a platform for collaborative projects and knowledge sharing to combat climate change. Wollongong City Council joined the international Global Covenant of Mayors for Climate and Energy and set a target of net zero emissions by 2050 for the LGA and a target of net zero emissions by 2030 for its own operations.

An Illawarra Shoalhaven Sustainability Roadmap will set a framework of collaboration to drive energy efficiency, reduce emissions, encourage the use of renewable energy and position the region as a leader in innovation and sustainability. It will identify collaboration initiatives and set out a path for stakeholders to show leadership and enact change.

CO₂ emissions for 2018



Collaboration Activity 7

Work with the Energy Corporation of NSW, the Renewable Energy Sector Board, councils, Aboriginal and community stakeholders to develop the Illawarra Renewable Energy Zone.



Action 6:

Develop an Illawarra Shoalhaven Sustainability Roadmap that identifies innovative initiatives that can be delivered through an ecosystem of collaboration.



Strategy 15.1

Strategic planning and local plans should consider opportunities to encourage initiatives that reduce emissions.



Hanging Rock Lookout

Drive energy efficient buildings and precincts

Reduced emissions and energy efficiency will come with better building design, low-emission building materials, integrated renewable energy systems and a precinct-approach to sustainability.

Buildings can be designed to be more energy efficient and reduce costs for owners. Extending these design principles beyond individual buildings and applying low carbon initiatives to regionally significant precincts can showcase the effectiveness of low carbon thinking, such as:

- integrated green infrastructure planning
- low carbon infrastructure for new development or retrofitting as part of infill redevelopment, including rooftop solar, light coloured roofs to reduce heat, heat resistant materials, electric vehicle charging points, or the use of virtual power plants, microgrids, and integrated water cycle management
- urban greening to reduce residential energy demand by providing shading and passive cooling.

A virtual power plant is a distributed energy management system that aggregates standalone assets (like commercial buildings and industrial facilities) and distributed energy systems (such as ground and rooftop solar power, battery storage and bio-energy),

and connects these systems in a virtual environment. The aggregated assets, energy demand, renewable energy systems and buying power can be utilised to access existing licensed energy markets to buy, sell and share energy using the virtually connected assets.

The uptake of solar photovoltaic systems has increased for both residential and industrial buildings with current uptake representing 16-21 per cent across the region.²⁵ There is an opportunity to maximise solar photovoltaic within the regionally significant employment lands, as well as lands used for car yards. This could provide both renewable energy to the businesses while also facilitating a virtual power plant and supplying renewable energy elsewhere.

Action 7:

Develop a sustainability framework for regionally significant precincts to promote carbon neutral sustainable growth and development.

Strategy 15.2

Strategic planning and local plans should consider opportunities to encourage energy efficient building design for residential, commercial and industrial areas.

Position the region as a hub for clean energy

The Illawarra Shoalhaven is emerging as a global hub for clean energy as it transitions away from a dependence on fossil fuels. Yet, many industries still rely heavily on fossil fuel. This brings opportunities to explore renewable energy sources including:

- **Biogenic gas** – Created from the decomposition of organic matter such as sewage, biogenic gas generates power at the Wollongong wastewater treatment plant. In Shoalhaven, Innovative Energy is trialling a waste to energy plant from dairy manure. The proposal includes 18 dairy farms connected via a shared manure waste pipeline that can be used as a supply line back to the farms to supply treated water and residual solids which can be used as fertiliser. It will also have a virtual power plant where farmers will be supplied electricity at no cost based on the amount of manure generated and supplied to the plant.
- **Pumped Hydro** – The *NSW Pumped Hydro Roadmap 2018* identified several sites with potential for pumped hydro including the Shoalhaven Hydro Pump Storage power plant in Kangaroo Valley. Further investigation into the feasibility of the sites is required to ascertain the barriers and opportunities for each site, in consultation with industry and relevant government agencies.
- **Hydrogen** – Hydrogen production, utilisation and export could maximise Australia's energy resources and transition to a low carbon economy. Hydrogen has zero carbon emissions when consumed, and if created with renewable energy can be a zero-emission energy source. The proposed hydrogen production facility at Port Kembla, estimated to be worth more than \$500 million, could complement opportunities for smaller scale hydrogen plants that couple with industrial and agricultural processes that use hydrogen.



Strategy 15.3

Promote opportunities for clean energy in the region including pumped hydro, hydrogen and biogenic gas.

Utilise land and waterways to reduce emissions

Many types of trees, agricultural land and waterways have climate change mitigation benefits through carbon sequestration that captures and stores carbon. Landowners and managers could participate in growing carbon markets by establishing carbon offsets on private, public or Aboriginal managed lands.

In an agricultural setting land can be managed to maximise biomass production and biomass return in a profitable and sustainable way through various agricultural practices.

Blue carbon sequestration is the removal of carbon dioxide from the atmosphere by vegetation in waterways and oceans primarily by mangroves, salt marshes, seaweed and seagrasses. Vegetated coastal ecosystems act as highly efficient carbon sinks.



Strategy 15.4

Explore opportunities where carbon sequestration using estuarine ecosystems could be used for estuary riverbank restoration and/or be included in coastal management programs.



Strategy 15.5

Explore opportunities for using agricultural land to sequester carbon in vegetation and soils, and to grow biomass for bioenergy.

Objective 16: *Support the development of a circular economy*

The NSW Government supports a transition to a circular economy which brings opportunities for new industries and employment. The region can benefit economically, socially and environmentally from waste resources by reusing, repairing, sharing and recycling waste.

Resource optimisation is a priority for the Illawarra Shoalhaven's councils, which are developing strategies to reduce waste to landfill and improve waste management. The Illawarra Shoalhaven Joint Organisation coordinates the *Regional Waste Avoidance and Resource Recovery Strategy 2017-2021* on behalf of the four councils. This aims to provide a coordinated approach to waste and landfill and improve waste management across the region.

The Joint Organisation, in partnership with the University of Wollongong, has identified that a significant amount of wood panels and related materials such as MDF, particleboard and mixed sawdust goes to landfill. Work is continuing to understand the economic opportunities for reusing these materials and to reduce waste.

The high levels of industrial activity in the Illawarra Shoalhaven presents a huge opportunity to develop a circular economy with further work required to better understand the

feasibility of industrial symbiosis to maximise efficiencies, share resources and materials, re-use and recycle water, reduce operating costs and improve environmental outcomes.

At the precinct level, opportunities exist for the re-use of by-products of businesses to be used as a resource for others to minimise waste and transport of waste to landfill.

The NSW Government is developing a 20-Year Waste Strategy for NSW and has produced a Circular Economy policy statement *Too Good to Waste* to help guide government decisions and provide principles to guide resource use and management. The 20-year Waste Strategy will provide a long-term strategic focus where communities, industry and all levels of government work together to build resilient services and markets for waste resources with a focus on sustainability, reliability and affordability.

Waste from natural disasters is an emerging issue given the increased frequency of events such as bushfires. This is both a challenge for waste management but also an opportunity for better waste capture and processing.



Strategy 16.1

Strategic planning and waste management strategies should consider supporting development of a circular economy and opportunities for industrial symbiosis.

Objective 17: Secure water resources

The region's water supply is sourced primarily from Avon Dam and Tallowa Dam. Maintaining and improving water quality and supply is always a priority and water quality is primarily managed by restricting access to water catchment areas, with about 20 per cent of the region within the Sydney Drinking Water Catchment Area.

The NSW Government is preparing water strategies including a State Water Strategy, the Greater Sydney Water Strategy (which includes Wollongong, Shellharbour and Kiama), and regional water strategies. The Greater Sydney Water Strategy will establish overarching directions for managing water resources and services to ensure future water security, reliability and resilience, and address long-term challenges such as greater climate variability and population changes. Shoalhaven will form part of the South Coast Regional Water Strategy.

Given the changing climate, extended periods of drought, and that much of the region has a single water supply, the NSW Government is looking into additional supply options including the possibility of a local desalination plant.

Many industries including coal mining and coal seam gas extraction can affect water supply, security and infrastructure, and the ecological integrity of the Sydney Drinking Water Catchment Special Areas. These risks must be carefully managed through assessment, management and regulation that is informed by best available science.

Development within the Sydney Drinking Water Catchment Area is strictly controlled under the *Water NSW Act 2014* and *Water NSW Regulation 2020*. Parts of the Illawarra Shoalhaven include the declared Metropolitan, Woronora and Shoalhaven Special Areas to

protect water quality and ecological integrity of the innermost catchment areas around water supply reservoir.

Innovative and sustainable approaches can mean increased use of recycled water in new developments or for irrigation. Shoalhaven Water's Reclaimed Water Management Scheme is one of the largest and more complex water recycling schemes by a regional water utility. It supplies high quality irrigated water to farmers to improve their sustainability and provides water to irrigate local sporting facilities and golf courses.

Water sensitive urban design is a planning and engineering approach that minimises the impacts of development on the natural water cycle by protecting natural systems and water quality, integrating stormwater into the landscape, and reducing run off, peak flows and demand for potable water. The Illawarra Shoalhaven Joint Organisation is leading a project to build council capacity in the planning, implementation and maintenance of water sensitive urban design systems.



Strategy 17.1

Encourage the sustainable use of water resources.

Strategic planning and local plans should consider opportunities to:

- locate, design, construct and manage new developments to minimise impacts on water catchments, including downstream impacts and groundwater sources
- incorporate water sensitive urban design particularly where development is likely to impact water catchments, water quality and flows
- encourage the reuse of water in new development, for urban greening and for irrigation purposes
- improve provision for stormwater management and water sensitive urban design.

A region that values its people and places

As the Illawarra Shoalhaven's population grows and changes, the proportion of older people is increasing, average household size is getting smaller, and there is demand for tourism-related housing.

Population projections are based on what we believe is most likely to happen in the future. However we also know that the future is uncertain. Unexpected events may alter the future levels of population growth. So other population outlooks should be considered. By changing the levels of births, deaths and migration, based on how they varied in recent years, we can get a range of future populations. The NSW Government regularly reviews population projections to remain responsive to changes including expected events.

The region will need at least an additional 58,000 homes by 2041.²⁶ Councils will outline how housing growth is to be managed and identify the right locations for additional housing supply through local strategic planning statements and local housing strategies.²⁷

The Regional Plan encourages a diverse and affordable range of housing from apartments in Metro Wollongong, Shellharbour City Centre and Nowra City Centre, to villas and townhouses in strategic centres. New housing will offer a diversity of lot sizes or bedroom numbers to suit seniors, students and people with a disability, as well as being more affordable and sustainable.

More housing choice will meet the needs of the growing population and entice people to relocate to the region to take advantage of the changing nature of work.

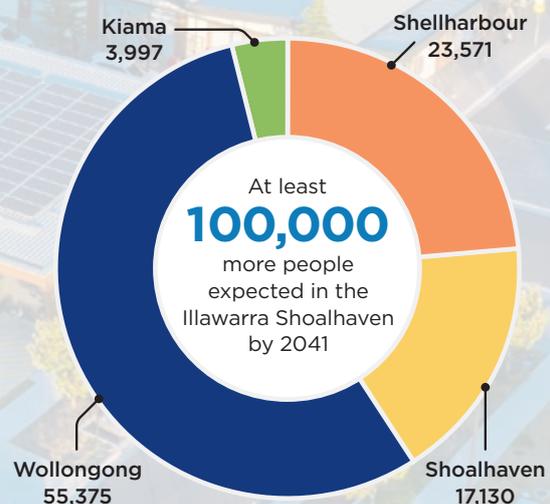
The regionally significant growth areas of West Lake Illawarra and Nowra Bomaderry have a combined capacity to provide 37,600 new dwellings, with 17,000 currently zoned for development.

To support new communities, local centres will provide shopping services, community

services and jobs. These local centres will be developed with active and public transport connections to enhance accessibility to diverse employment opportunities, retail, health and education facilities.

As places grow and change, distinctive local character will be protected, while cultural heritage values will be embraced. Public open space and cultural facilities will be accessible and vibrant, the role of arts and cultural experiences in public spaces will be enhanced, and sufficient space for cemeteries and crematoria will be considered.

An innovative approach to sustainability and resilience will be prioritised as places are developed or revitalised. Councils will incentivise and promote the value of neighbourhood and building design that encourages the take up of solar photovoltaic systems, battery storage, virtual power plants, and water efficiency measures. This includes fully integrated water supply that incorporates wastewater capture and water recycling, harvested stormwater and water sensitive urban design. Resilience to extreme weather will be promoted through climate resilient design including passive cooling, green infrastructure, thermal efficiency and fire and storm resistance.



Objective 18:

Provide housing supply in the right locations

To meet the demand for 58,000 new houses to 2041, a balanced approach will provide housing opportunities in urban release areas and existing urban areas.

Wollongong, Shellharbour and Shoalhaven have a sufficient supply of housing identified to meet demand to 2041, with the regionally significant

growth areas of West Lake Illawarra and Nowra-Bomaderry being the focus for housing supply. These new communities are being designed to be healthy, vibrant, and sustainable with active and passive open space accessible by walkways, cycleways and public transport.

The Illawarra Shoalhaven Urban Development Program (UDP) was initially established to manage regional land and housing supply in response to the region's recognised limited land supply. As initial land release areas are now complete or nearing completion, investigation

Urban Growth Boundaries

The unique character of the cities, towns and villages in the Illawarra Shoalhaven region is contingent on protecting the scenic, non-urban spaces in-between. The Regional Plan identifies West Lake Illawarra, Nowra-Bomaderry and Bombo Quarry as growth areas. Aside from these areas, the Plan concentrates new development and intensive uses in existing centres, rather than in the scenic hinterland that defines the coastal rural character of the region.

The Plan promotes the retention of existing scenic and natural areas, and seeks to protect them through an urban growth boundary. This will be maintained by land use zones that do not permit urban uses or intensive subdivision, and will ensure that existing centres, not identified as growth areas, do not expand into the surrounding, non-urban hinterlands.

The Regional Plan supports regionally significant growth areas by:

- developing a shared vision for the future of Bombo Quarry lands with Kiama Municipal Council, landowners and the community
- unlocking housing supply in West Lake Illawarra and Nowra Bomaderry through



- infrastructure planning and coordination
- monitoring land and housing supply through the Illawarra Shoalhaven Urban Development Program.

Objective 18: *Provide housing supply in the right locations*

areas identified through the UDP can provide Councils with a longer term and strategic approach to respond to higher than expected housing demand. There is additional land near Calderwood in Shellharbour and at Meroo Meadow and Bamarang in Shoalhaven that is currently considered by the UDP as suitable for investigation. It is important to note that any such land identified through the UDP process would require further investigation to consider a range of factors including land suitability for urban use, regional housing supply and demand, population changes, potential alternative sites, competing land uses and environmental impacts.

Shellharbour City Council through its local strategic plans has identified that it has an adequate land supply for the next 20 years to meet projected demand for housing. Shellharbour's Local Housing Strategy will be periodically reviewed to ensure there remains an adequate supply of zoned land to supply housing in the right locations. If future reviews of council's local strategic plans or the Urban Development Program identifies additional land is needed, Council will consider the suitability of locations for additional greenfield land across the local government area.

In the case of Kiama, the community has expressed a desire to meet the demands for new housing by increasing the supply available in existing areas and through the development of Bombo Quarry, rather than providing

opportunities for housing expansion in other non-urban areas. Kiama is only likely to play a supporting role in regional housing supply and has a limited supply of identified new greenfield areas. Kiama Municipal Council has committed to developing a Local Housing Strategy and the NSW Government will work collaboratively with council so it can respond to changing housing needs in line with the community's vision.

When developing local housing strategies, all councils will need to create urban growth boundaries to clearly identify where urban growth is acceptable and where it should be avoided. Local housing strategies will be periodically reviewed to ensure they remain current and responsive to changes in demographic projections including changing migration patterns due to the COVID 19 pandemic.



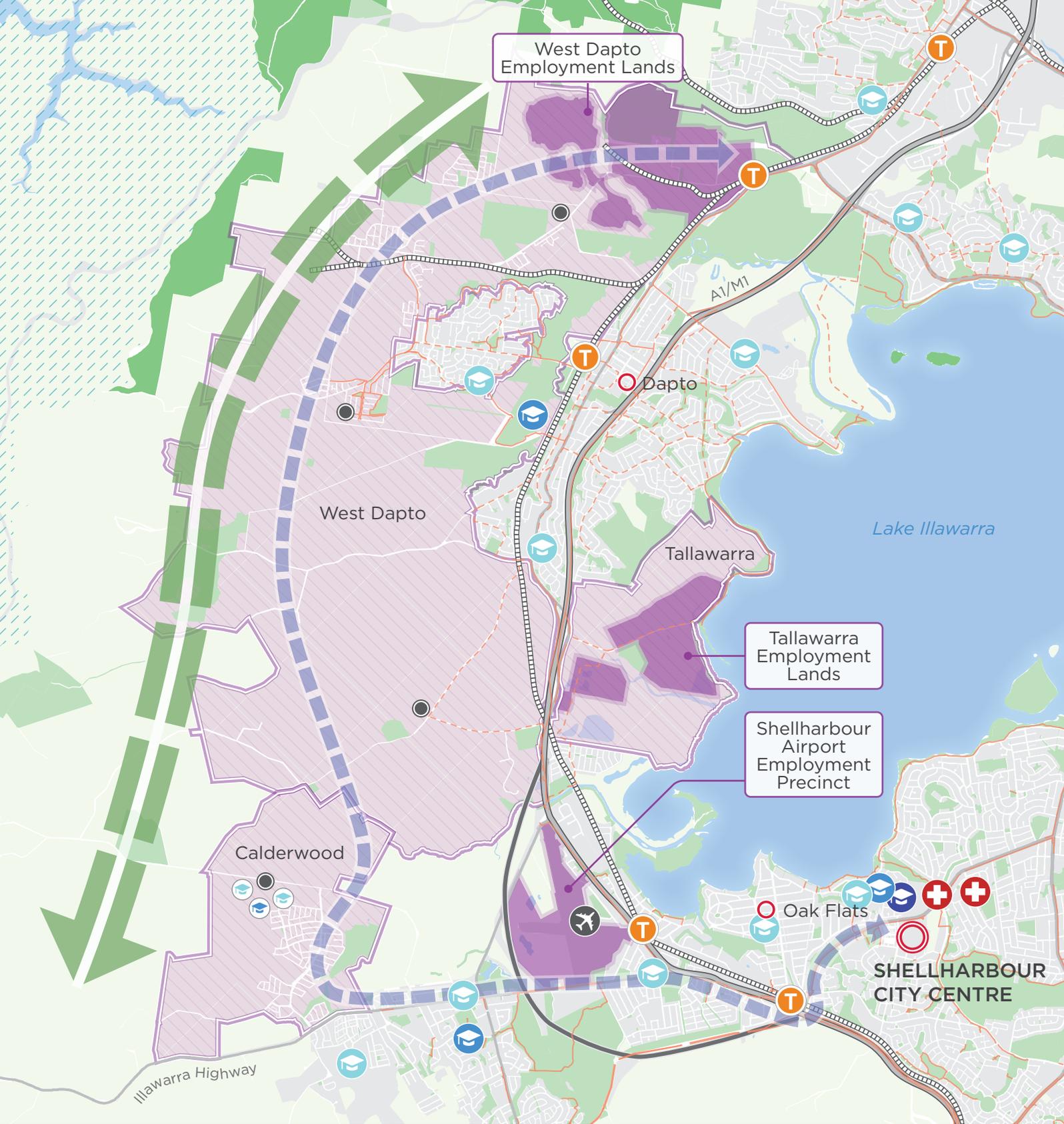
Collaboration Activity 8

Work with Kiama Municipal Council on the development of a Local Housing Strategy.



Strategy 18.1

Identify urban growth boundaries and facilitate opportunities to support ongoing supply of housing in appropriate locations.



Map 9: West Lake Illawarra Growth Area



- | | | | |
|---|-------------------------|----------------------------|--|
| Regional city | Railway line | Tertiary education | Shellharbour Airport and Technology Park |
| Strategic centre | A1/M1 | Secondary education | Biodiversity corridor |
| Future local centre | Albion Park Rail Bypass | Primary education | Sydney drinking water catchment |
| Housing release areas | Existing cycle paths | Future secondary education | Open space |
| Regionally Significant Employment Lands | Proposed cycle paths | Future primary education | National park |
| Improved connectivity | Train station | Hospital | Water body |

Prioritise opportunities for new housing in strategic centres

Strategic centres are well serviced by utilities, public transport, walking and cycling, education, health and community infrastructure. They provide shopping, community and commercial services.

Corrimal has capacity for housing growth, with its connections to public transport, public open space and cultural facilities. The 18-hectare former Coke Works site could be developed to better connect the town centre to the train station and to increase housing supply and diversity. Any proposed development would need to consider the site's ecological, historical, archaeological and cultural significance.

As the second largest centre in the Shoalhaven, Milton-Ulladulla is becoming more important as tourism and the population grows. Education is becoming a stronger focus, and there is a proposal to establish a Country Universities Centre at Ulladulla. It is also a place for housing choice, and Council will review planning and development controls to increase residential density where appropriate. The future Milton-Ulladulla Bypass will enhance the town centre as a place to live.

The strategic centres of Kiama and Gerringong are a focus for Kiama Municipal Council as it seeks to rely on infill development. The Local Housing Strategy should consider how to incentivise redevelopment through planning controls, to plan for a larger proportion of housing stock to match the needs of

the population, and consider water and wastewater capacity.

Dapto town centre is ideally positioned to meet the needs of the growing population from the West Dapto urban release area. As Dapto grows and changes it will need greater connections to public open space and cultural facilities, better east-west connections between Dapto and West Dapto, and better integration between the train station and the town centre.

Bomaderry has potential to provide greater housing diversity well connected to the train station. The future of Albion Park Rail will also need to be better understood after completion of the Albion Park Rail Bypass.



Strategy 18.2

Facilitate housing opportunities in existing urban areas, particularly within strategic centres.

Strategic planning and local plans should consider opportunities to:

- review planning controls so that they are creating flexible and feasible conditions for housing supply
- align infrastructure and service delivery to match housing supply needs
- explore public domain improvements that would increase capacity for growth
- identify policies and processes that could be reviewed to improve certainty and streamline development processes
- promote urban design outcomes to support healthy and vibrant communities.

Unlock housing supply through infrastructure planning and coordination

Set against the Illawarra Escarpment and a landscape of riparian valleys, the West Lake Illawarra Growth Area has the capacity for 28,000 new dwellings in the Tallawarra, West Dapto and Calderwood urban release areas.²⁸ Nowra-Bomaderry offers long-term capacity of 9,600 new dwellings with the current focus on the Moss Vale Road precincts.²⁹ Other smaller urban release areas such as Redgum Ridge, Shell Heights and Bayswood at Vincentia will contribute to housing supply.

Projected population growth, estimated new homes required and scheduling of new housing informs future infrastructure needs including public transport, roads and schools for regionally significant growth areas.

Identifying and coordinating the planning, funding and roll out of infrastructure and monitoring the take up of housing in the regionally significant growth areas will be undertaken through the Illawarra Shoalhaven Urban Development Program in consultation with industry, councils and infrastructure providers.

The regionally significant growth areas will be strengthened through infrastructure and services that provide:

- access to education facilities, particularly for communities in West Dapto and north of Nowra
- improved connectivity including bus, rail, walking and cycling to Metro Wollongong, Greater Sydney, Shellharbour City Centre and Nowra City Centre
- improved rail facilities at Dapto and Bomaderry to provide higher level of service, multi modal accessibility and convenience

- increased capacity and efficiency to the M1 Motorway and the Princes Highway
- ongoing water, wastewater and electricity capacity
- upgraded health facilities and services at Nowra, Shellharbour and Wollongong Hospitals.
- improved walking and cycling connectivity
- access to essential climate-ready green infrastructure such as public recreational open space in West Dapto.



Strategy 18.3

Identify, prioritise, and coordinate infrastructure needed to support vibrant and healthy communities in the region's urban release areas through the Illawarra Shoalhaven Urban Development Program.



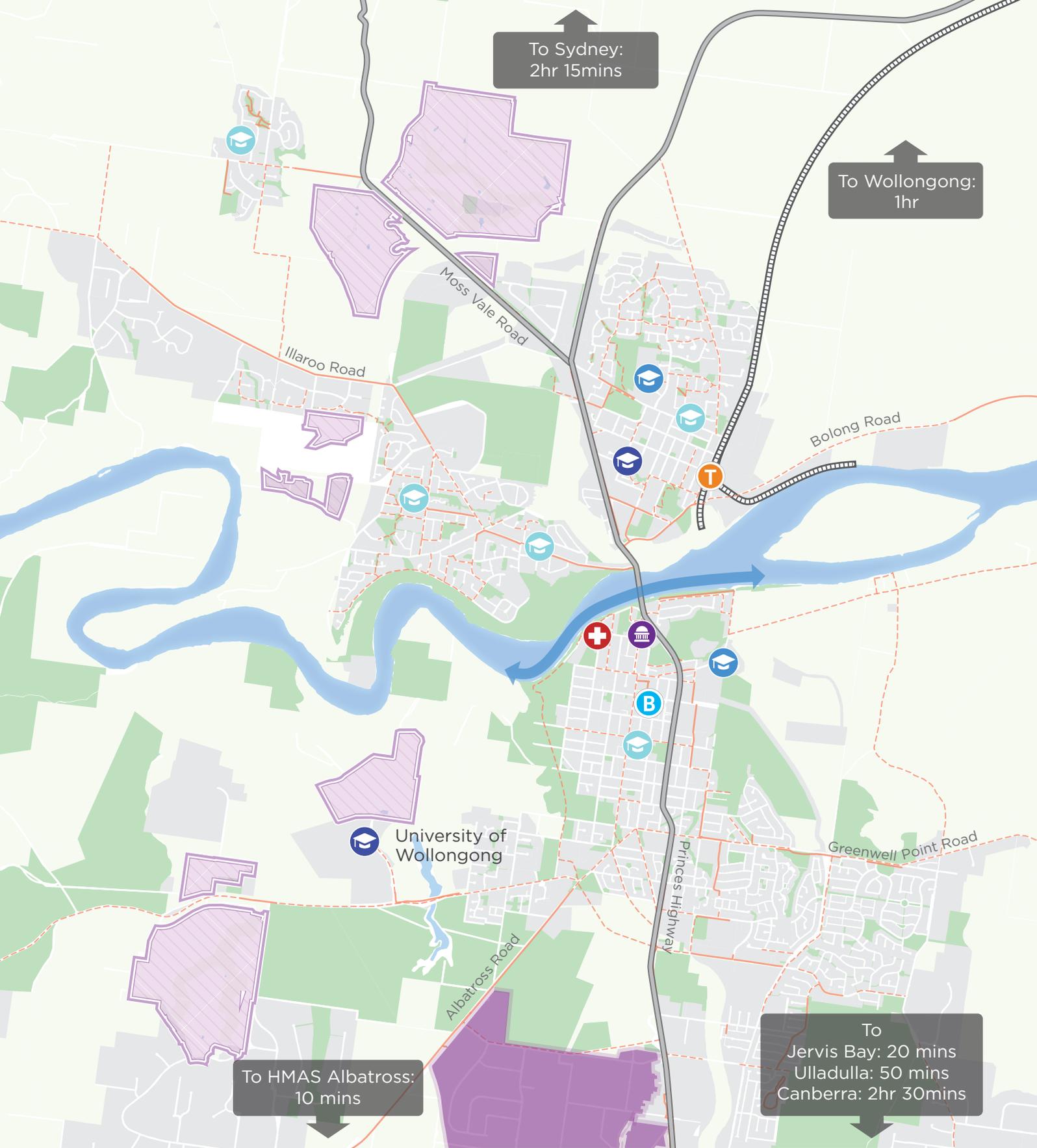
Strategy 18.4

Monitor land and housing supply through the Illawarra Shoalhaven Urban Development Program.

Illawarra Shoalhaven Special Infrastructure Contribution

The Illawarra Shoalhaven Special Infrastructure Contribution (SIC) can help fund state and regional infrastructure to support communities in the regionally significant growth areas of West Lake Illawarra and Nowra-Bomaderry.

The Illawarra Shoalhaven SIC will help fund State and regional roads, public transport infrastructure, pedestrian and cycling paths, health facilities, emergency services, schools and open space improvements.



Map 10: Nowra Bomaderry Growth Area

0 1 2km



- | | | |
|--|--|---|
|  Regional Open Space - Riverfront |  Existing cycle paths |  Tertiary education |
|  Nowra Bomaderry Release Areas |  Proposed cycle paths |  Secondary education |
|  South Nowra Employment Precinct |  Railway line |  Primary education |
| |  Train station |  Health facilities |
| |  Bus terminal |  Open space |
| |  Civic hub |  Water body |

Objective 19:
Deliver housing that is more diverse and affordable

Households in the Illawarra Shoalhaven have varying needs and budgets and as such they require a range of housing types across the housing continuum. Living in an affordable situation means people have more flexibility in where they choose to live, helps them feel part of their community, and leads to a more even distribution of wealth in the community.

People may need homes of a certain size, configuration, accessibility or location. Planning for a diversity of housing choices gives more people more options at different stages of life, and different levels of affordability. Housing diversity extends into aspects such as lot sizes, the number of bedrooms, or whether housing is suitable for seniors, students or people with a disability.

Throughout the region, particularly outside Metro Wollongong, single detached dwellings are the most dominant form of housing. Of the more than 11,000 new homes constructed in the last five years, 60 per cent were detached single dwellings.³⁰ As demand for housing for rental and purchase increases, the market tightens for those on lower incomes, students, people living on their own or seniors, especially when the number of smaller homes is limited.

The region's social housing provides accommodation options for people who need it; however, the housing on offer does not always match the needs of occupants who would be better served by smaller homes or multi dwelling housing.

Collaborative action can increase the diversity of housing choices and dwelling sizes while increasing the supply of affordable and social housing.



Provide a diversity of housing choices and dwelling sizes

Household sizes in the region are changing, especially the proportion of smaller households (couples without children will increase by 41 per cent to 2041 and single person households by 45 per cent). Councils should seek to increase the number of smaller dwellings in new developments to accommodate these households.

Changing attitudes such as preferences for lower maintenance, energy efficiency, adaptability and places that are within walking distance of shops, services or public transport, combined with the scarcity of well-located land, are also expected to drive a need for smaller and more diverse housing types.

Population projections also indicate that while around 129,000 people in the region were aged 55 and over in 2016, this number could range in size between 186,500 and 197,800 by 2041. In Shellharbour the number will rise by 70 per cent. These projections indicate the need for housing and care facilities that are suitable for seniors.

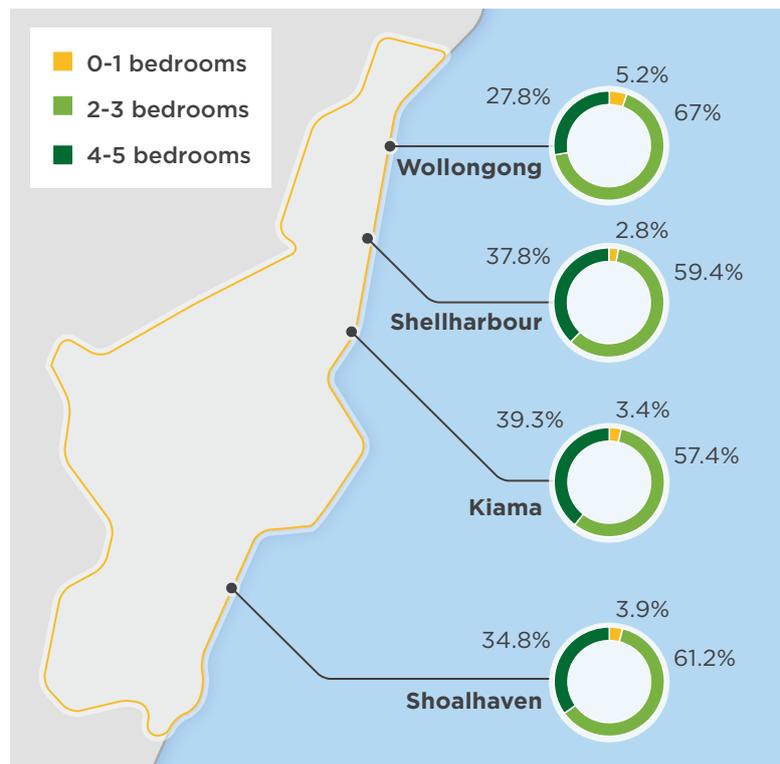
The lifestyle changes following the COVID-19 pandemic may see more people working flexibility, which could require new dwellings to be designed with greater flexibility to accommodate home-based working.

Strategy 19.1

Continue to provide for and encourage a range of housing choices.

Strategic planning and local plans should consider opportunities to:

- provide a mix of housing types and lot sizes including small lots in urban release areas
- provide a mix of housing sizes including studios and one-bedroom dwellings
- consider incentives to increase the supply of housing that is appropriate for seniors, including low-care accommodation
- consider whether development standards, including minimum lot sizes, minimum frontage and floor space ratio are inadvertently inhibiting opportunities for diverse housing options
- explore innovative solutions in housing to cater for a range of community needs, including those of older people, multi-generation families, people living in group housing, people with special needs or people from different cultural backgrounds.



81%

of low and very-low income households in **rental stress**

51%

of low and very-low income households in **purchase stress**

Increase the supply of affordable housing

Planning mechanisms, including affordable housing targets, must be supported by other measures including a whole-of-government approach, strong leadership, government-owned land and collaboration with industry and community housing providers.

The *Shoalhaven Affordable Housing Strategy 2018* provides for affordable rental housing and other types of low-cost housing. It includes a strategy to mandate affordable and low-cost dwelling types. Wollongong City Council's *Draft Housing and Affordable Housing Options Paper 2020* supports greater housing diversity, and includes measures to increase the supply of affordable rental housing. It proposes an Affordable Housing Policy, Affordable Housing Contributions Scheme and affordable housing targets.

Collaborating with community housing providers builds capacity, facilitates partnership brokering, and helps to remove planning barriers to increase the supply of affordable housing. This process can also facilitate the use of government-owned land to generate jobs and stimulate the economy. The region's community housing providers include Housing Trust and Southern Cross Community Housing. These organisations provide a range of housing options including affordable housing.

Action 8:

Establish the Illawarra Shoalhaven Affordable Housing Roundtable with councils, community housing providers, the NSW Government and housing development industry to collaborate, build knowledge and identify barriers to increase the supply of affordable housing.

Strategy 19.2

Investigate affordable housing targets in consultation with the Illawarra Shoalhaven Affordable Housing Roundtable.

Collaborating on affordable housing in the Shoalhaven

Shoalhaven City Council entered into an agreement with the Department of Communities and Justice and Southern Cross Housing to build an affordable housing project on council-owned land in Bomaderry. This will be a mixed tenure development targeted to very low income renting households and low income purchasing households

Southern Cross Housing will build, own, manage and operate the affordable housing development.

Renew and increase social housing

The NSW Government builds and renews social housing in the region through programs such as Communities Plus and the Social and Affordable Housing Fund. Two major projects in Wollongong will provide 100 new social and affordable housing with private homes at Robert Street, Corrimal and Crown Street, Wollongong under the Communities Plus program.

These projects will transform vacant land into vibrant, mixed housing communities, including 25 social housing dwellings. The Housing Trust will manage the social and affordable housing properties across both sites.

The two projects, valued at \$36 million, will build modern townhouses and new apartment buildings that blend-in with their surrounding communities and help meet the area's high demand



Strategy 19.3

Assess the potential to renew social housing sites to deliver an increase in social housing stock and greater vibrancy in local communities.

for social housing. The projects will also deliver critical and timely local economic benefits during construction with the projects anticipated to generate around 70 direct jobs and a further 100 indirect jobs.

Fostering a culture of collaboration between councils, community housing providers, industry and the NSW Government will create a stronger platform to drive positive change in the social housing sector. Investment into social housing can also provide a strong economic stimulus and recovery mechanism



65%

of households own their own home

27%

of households rent

9,000+

social housing dwellings

NSW Aboriginal Housing Office

The NSW Aboriginal Housing Office (AHO) plans for affordable, quality housing for Aboriginal and Torres Strait Islander people in NSW, recognising that secure, affordable housing can help to address disadvantage and provide opportunities for Aboriginal people. The AHO is jointly funded by the NSW and Australian governments to administer the State's Aboriginal community housing assets.

The AHO owns around 6,000 homes in Illawarra Shoalhaven, in a mix of free-standing houses, townhouses and apartments. The AHO is working on a 'podular housing' project in Nowra where homes are constructed offsite, reducing on-site building time. The homes also offer flexibility and can be extended with additional pods as required.

Objective 20:

Establish a shared vision for the future of Bombo Quarry lands

Bombo Quarry is a 114-hectare regionally significant site long recognised for its potential reuse for employment and residential needs. The Quarry has supplied hard-rock resources to the Illawarra and Sydney construction markets since the 1940s, providing rail ballast, aggregate and road-based products.

As the Quarry nears the end of its operational life, it could potentially be transformed with new housing, workplaces or recreational areas.

The site is close to the M1 Motorway, the South Coast Rail line and Kiama town centre. Redevelopment would not threaten nearby productive agriculture land. It could be a once-in-a-generation opportunity to attract sustainable and diverse employment opportunities and supply a greater choice of housing in an area where supply is limited.

The Quarry's potential reuse has had a long and complex history. It will require a shared vision for its future that incorporates community aspirations, builds on the area's strengths and adds to its vibrancy.

This process should consider:

- how to target employment uses that would provide economic diversity, innovation and sustainability and how the area could complement other regionally significant employment lands
- how to plan for a diversity of housing for the growing and changing population
- opportunities to enhance and complement local and regional open space and recreation opportunities
- how to integrate and connect the area with Kiama and Kiama Downs.

Progressing beyond the vision for Bombo, the NSW Government will collaborate with Kiama Municipal Council, landowners and the community to better understand timeframes for the Quarry's end of life, remediation and landowner objectives.

Action 9:

Develop a shared vision for the future of Bombo Quarry in collaboration with Kiama Municipal Council, landowners and the community.

Objective 21:

Respond to the changing needs of local neighbourhoods

Restrictions introduced to manage COVID-19 forced a shift in working lives. With many people working from home, more people engage with their local neighbourhood centres and walk or shop locally. This presents benefits such as healthier communities and less pressure on transport networks.

Capitalising on these behavioural shifts requires a rethink of the role and function of local neighbourhood centres to improve local services and public places or to encourage a greater mix of uses including shared facilities, smart work or co-working hubs, education facilities, health services, or community and social services. Planning can guide investment in infrastructure and provide flexibility in land uses to capitalise on these opportunities.

Local neighbourhoods in the Illawarra Shoalhaven could also benefit from investment in open space and cultural and exhibition spaces. Quality green, open and public space can support and create local character, or help to build a sense of identity where people grow attached to their area and want to make a contribution to culturally rich neighbourhoods. Consideration should also be given to the potential of shared use facilities and co-working hubs.

Some centres and local neighbourhoods have competing land use pressures and require a clear direction. Council's local strategic planning statements should seek to support these places with a clear vision for their future.

Strategy 21.1

Consider the changing needs of local neighbourhood centres.

Strategic planning and local plans should consider opportunities to:

- explore flexibility and supporting a mix of land uses so that local streets and spaces can be adapted to new uses and user needs over time
- improve public space, in consultation with the community, to foster and support connectivity and great places to live for changing populations.



Objective 22:

Embrace and respect the region's local character

Neighbourhoods in the Illawarra Shoalhaven are rich in diversity, heritage and character, including rural villages such as Jamberoo, charming historic towns such as Berry, vibrant tourist destinations such as Gerringong, and relaxed villages along the coastline. These places are highly valued and offer a distinct character and lifestyle. They are the places where communities live and spend leisure time, and where people connect and interact.

Local character is created by a combination of land, people, built environment, history, culture and tradition, both Aboriginal and non-Aboriginal. Considering local character in the planning and development process looks at how people and places interact to create an area's distinctive character.

In 2019, the Department of Planning, Industry, and Environment produced the *Local Character and Place Guideline* to ensure strategic planning recognises and enhances local character, and



Strategy 22.1

Support the development of local character statements in accordance with the NSW Government's *Local Character and Place Guideline*.

communities can share what they value about their area.

Local character statements are an opportunity to consider the local character of neighbourhoods. They represent:

- a place-based, design-led approach that builds on the valued characteristics of neighbourhoods and places
- the way communities define character and can shape the future character of their local area
- a way to make the right planning mechanisms available to fully realise these shared visions for the future.

Councils are encouraged to produce local character statements to inform local strategic planning and local plans.



Urban Design Guide for Regional NSW

The *Urban Design Guide for Regional NSW* provides guidance for healthy built environments. It recognises and celebrates the diversity of urban environments, natural landscapes, climates and communities in regional NSW. It acknowledges that unique conditions are being challenged by external factors such as climate change, which impacts people and natural environment.

The Guide will inform sustainable approaches to mitigate these impacts.

Objective 23: *Celebrate, conserve and reuse cultural heritage*

The Illawarra Shoalhaven has a rich and diverse heritage with strong links between Aboriginal communities and the region's coast and the escarpment, as well as townships associated with early European colonisation, including Mount Kembla. The region's heritage is part of its identity and character and could generate greater economic value, particularly through cultural tourism.

Cultural heritage values must be embraced as the region grows and changes. Assessment of Aboriginal cultural heritage values early in the planning process provides the best opportunity to identify and protect significant values. Incorporating and celebrating cultural heritage elements in the planning stage through to the design and development of places will embed cultural awareness, enrich connectedness, and build respect for the Illawarra Shoalhaven's cultural history.

Respectfully combining history and heritage with modern design creates places with shared values and a clear sense of place and identity. Government Architect NSW is working with recognised Aboriginal knowledge holders, built

environment experts and the community to develop a set of Cultural Design Principles that will encourage responses to Aboriginal cultural connections to Country in the designing and planning of new projects.

The NSW Government is leading the *Aboriginal Engagement in Climate Change Adaptation Program*, a community-led engagement process that will lead to a decision-making framework for Aboriginal landowners to identify cultural values at risk from climate change and develop climate change adaptation options.



Strategy 23.1

Identify, conserve and enhance cultural heritage values.

Strategic planning and local plans should consider opportunities to:

- engage Traditional Owners and the community early in the planning process to understand heritage values
- undertake heritage studies early to inform conservation and value add opportunities
- apply adaptive reuse and heritage interpretation to create distinctive local places
- manage and monitor the cumulative impact of development on the heritage values and character of places.



Wollongong

Objective 24:

Support major events, public art and cultural activities

The region is home to the Wollongong Art Gallery, the Illawarra Performing Arts Centre, the Shellharbour Civic Centre, the Shoalhaven Entertainment Centre, a world-class equestrian centre at Willinga Park, and the Bundanon Trust's arts and cultural institution at Riversdale.

The proposed Kiama Arts and Cultural Precinct Development could be an all-season performance and exhibition space that utilises new and existing infrastructure including the heritage-listed Old Fire Station. It is proposed to house a new Arts Centre with a 220-seat theatre, restaurant and bar, workshop spaces and gallery/exhibition spaces. The Precinct is supported by the NSW Government's Stronger Country Communities Fund, the Regional Cultural Fund, and the *Economic Development Strategy for Regional NSW*.

Working with councils, the NSW Government will work to improve access to cultural facilities through the development of the Illawarra Shoalhaven Green Grid identified in objective 14.

Wollongong's Wonderwalls Festival invites creative artists from around the world to paint murals on walls around Metro Wollongong. It adds vibrancy and character to the centre and attracts visitors.

A place with night-time activity can be dynamic and contribute to the local economy. These

places are usually mixed use centres with adequate noise control, appropriate operating hours, and safe late-night travel options. A fun and safe night-time economy meets the social and recreational needs of shift workers, young people, tourists and visitors.

Greater use of public areas for temporary uses, and vacant or underutilised commercial spaces for arts, events and creative uses can add fun and interest to areas in transition. Incorporating and celebrating arts and creative elements in the planning stage through to the design and development of places will embed a sense of excitement into the fabric of a place.



Strategy 24.1

Support public art, major events and cultural activities.

Strategic planning and local plans should consider opportunities to:

- enhance and protect creative work and performance spaces, and related facilities
- support the temporary use of vacant buildings for performance and creative work
- support the night-time economy
- facilitate opportunities for creative and artistic expression and participation with a minimum regulatory burden
- encourage the diversification of uses, or activation of underutilised facilities
- facilitate street art to enhance urban areas and contribute to the attractiveness of neighbourhoods.

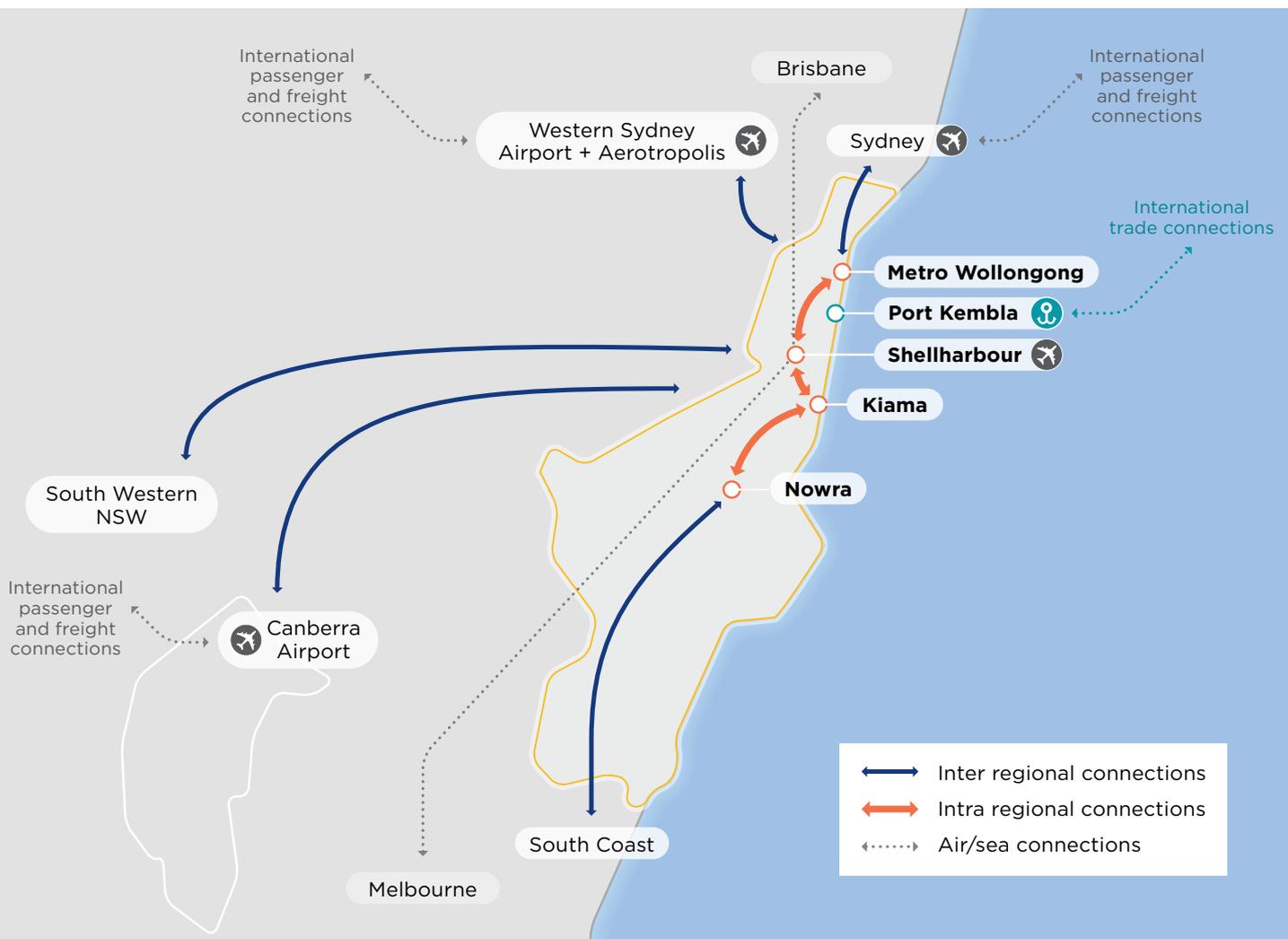
A smart, connected and accessible region

The Illawarra Shoalhaven will leverage its location and strengths to provide smart, efficient and reliable connections that bring residents and visitors closer to jobs, centres, education and the natural environment.

Investments in infrastructure such as improvements to the M1 Motorway, a new four-lane bridge over the Shoalhaven River at Nowra, and investigations into faster rail connections will physically improve connections. Infrastructure agencies such as TfNSW will work with local government through forward infrastructure planning to address connectivity issues including congestion and further investigate potential road corridors in response to local and regional growth. Integrating land

use planning and transport planning at a local scale will maximise the benefits of these investments, catalysing further investment that brings more jobs, housing diversity, and low-carbon transport choices.

The Shellharbour Airport connects the region by air to Victoria and Queensland, while freight is moved on road and rail corridors such as the M1 Princes Motorway (Mount Ousley Road), Picton Road, Appin Road, as well as the Illawarra and South Coast Rail Line and the Moss Vale to Unanderra Rail Lines. The proposed Outer Sydney Orbital (Stage 2) is investigating improved connections between Western Sydney and the Illawarra Shoalhaven.



The Illawarra Shoalhaven is well placed to embrace innovative thinking and digital technologies. It is already home to one of Australia’s most active business incubator and accelerators, iAccelerate, at the Innovation Campus in Wollongong. Co-working spaces and Siligong Valley, the local community network, support tech and start-up professionals from across the region.

In the post COVID-19 world, people are likely to:

- place even greater value on walking and cycling networks
- seek more from digital connectivity to work flexibly
- generate additional demand for faster delivery of goods to homes and workplaces.

Opportunities for remote working and work hubs could mean more people can live in the region particularly as connectivity to Sydney, Western Sydney and Canberra becomes faster and easier.



Springhill Rd Wollongong

Objective 25: *Collaborate to leverage opportunities from Western Sydney’s growth*

Objective 25: *Collaborate to leverage opportunities from Western Sydney’s growth*

The Western Parkland City, Western Sydney City Deal, and tangible benefits presented through the Port Kembla international trade gateway, present once-in-a-lifetime opportunities for growth and collaboration. The *Western Sydney and Illawarra Shoalhaven Roadmap to Collaboration* is the first step towards unlocking significant growth opportunities for both regions.

The Roadmap works towards a more collaborative approach to leverage opportunities in both regions to promote sustainable economic growth, cooperative leadership, cross-regional benefits in shared service delivery, infrastructure investment, and better freight and passenger connections.

Leveraging connectivity to the Western Parkland City will, in the longer term, create economic opportunities for the Illawarra Shoalhaven in aerospace and defence, education, advanced manufacturing, visitor economy, freight and logistics, and smart city technology.

The NSW Government will continue to work with the Illawarra Shoalhaven Joint Organisation, which is leading the collaboration opportunities between the two regions.

Strategy 25.1

Engage and collaborate on opportunities for mutual and sustainable social, economic and employment benefits across the Illawarra Shoalhaven and Western Sydney.



Objective 26:

Create faster rail connections between Greater Sydney, Wollongong and Nowra

The NSW Government has a vision for vibrant and growing regional economies, which includes better connectivity between regional cities, key centres and Greater Sydney. Reduced travel times will give people more choice about where they live and work and provide a catalyst for regional growth.

One of the key elements of NSW Government's *A 20-Year Economic Vision for Regional NSW* is better connectivity between regional centres, and from cities and international gateways. The *NSW Fast Rail Network Strategy* will be a blueprint for how the network could look so that future investment decisions on fast rail are well considered.

Four routes have been identified: Sydney to Newcastle and Port Macquarie, Sydney to Wollongong-Bomaderry, Sydney to Central West, and Sydney to Canberra.

The NSW Government has committed an initial \$295 million to start early works for the fast rail network, including \$125 million to duplicate the rail line between Berry and Gerringong. The duplication will build a four-kilometre crossing loop around Toolijooa to enable trains to cross each other.

An additional platform is also planned at Bomaderry Station so that a train can arrive

before another departs. In the future, this will mean more frequent services for South Coast customers, as trains will be able to pass each other between Kiama and Bomaderry.

Building on this initial work, the NSW Government is now working with the National Faster Rail Agency to develop a business case for fast rail on the Sydney to Bomaderry corridor.

The Illawarra Shoalhaven's proximity to Greater Sydney already provides economic, social and recreational benefits; faster rail connections will connect more people, alleviate growth pressures in Sydney, and provide more employment opportunities for people in Illawarra Shoalhaven.

Fast rail stations will open up opportunities to stimulate development and business investment, with businesses able to access an expanded workforce and markets. As fast rail work progresses, better local feeder transport routes will provide the impetus for residential development and accessibility benefits beyond the immediate station precincts and into wider districts.

Fast rail infrastructure changes also bring opportunities for coordinated place-making in centres and along the corridor.



Collaboration Activity 9

Work with Transport for NSW on the *NSW Fast Rail Network Strategy* and identify opportunities to leverage investment at a regional and local scale.

Objective 27: *Protect major freight networks*

In 2016, more than 35 million tonnes of freight moved in, out and within the Illawarra Shoalhaven by road and rail including commodities such as coal, grain, flour, steel, cement and limestone, motor vehicles, mineral ore and manufactured goods.³¹

By 2056, containers and hydrogen are likely to be added to current commodities being transported into and out of the region. Port Kembla will become NSW's second international container port when Port Botany has reached capacity. There will be more outbound freight flows to Greater Sydney compared to today's inbound focus. This will support bulk export industries such as coal and grain, and producers such as Bluescope Steel and Manildra.

Manildra's Shoalhaven Starches plant is a state-of-the-art manufacturing facility in Bomaderry that produces industrial and food products that are distributed nationwide and overseas. It takes grain and flour and produces a variety of products including ethanol, starch, gluten and glucose.

Infrastructure Australia recognises freight rail access to Port Kembla as an initiative of national priority. This will require new road and rail connections from Port Kembla to freight networks, specifically intermodal facilities in Western Sydney. The Maldon to Dombarton Rail Line and Outer Sydney Orbital have the potential to deliver improved connectivity. These longer-term transport and corridor upgrades will influence the relationship between Western Sydney and the Illawarra Shoalhaven.

Future planning should recognise the increasing importance placed on 24/7 supply chain operations and protect the freight network from potential encroachment by the expansion of residential areas and other sensitive land uses, consider and mitigate the impacts of associated noise and air emissions, and encourage off-road freight or create connections between heavy vehicle routes that do not involve local roads where possible.

Strategy 27.1

Optimise the efficiency and effectiveness of freight handling and logistics network. Strategic planning and local plans should consider opportunities to:

- protect, maintain and improve the existing and emerging freight transport networks
- balance the need to minimise negative impacts of freight movements on urban amenity with the need to support efficient freight movements and deliveries
- limit incompatible uses in areas expected to have intense freight activity.

Objective 28: *Create connected and accessible walking and cycling networks*

Well-designed streets, paths and public spaces that provide physical separation from motorised traffic; easy to follow wayfinding; end-of-trip facilities; and green infrastructure with adequate shade will encourage more people to walk and ride as part of day-to-day life.

Walking and cycling connections need to be prioritised in a way that maximises accessibility to and from workplaces, educational institutions, public transport stops and stations, and centres.

The planning and designing of new communities in West Lake Illawarra and Nowra Bomaderry must connect facilities such as new schools with walking and cycling networks.

Wollongong City Council's draft *Cycling Strategy 2030* sets a vision for the area to become known as a cycling city. Kiama Municipal Council will develop a walking and cycling strategy, and Shellharbour City Council is updating its *Shared Use Path Masterplan*. The NSW Government will work closely with

councils on these strategies to create regional walking and cycling connections.

Well-designed pedestrian and cycling networks can also attract visitors. In the Illawarra Shoalhaven, this means local walking and cycling networks should connect to regional networks including proposals for a Grand Pacific Walk, Great South Coast Walk, and shared paths around Lake Illawarra.

Strategy 28.1

Improve and/or create connected and accessible walking and cycling networks. Strategic planning and local plans should consider opportunities to:

- connect existing coastal walkways to enhance the user experience and link coastal towns and villages
- integrate walking and cycling networks into the design of new communities
- prioritise walking and cycling in areas around schools, health services, aged care facilities, sporting, cultural and recreational facilities
- explore ideas from the *Streets as Shared Spaces* program.

Objective 29:

Utilise smart infrastructure to drive resilience, prosperity and vibrant places

Illawarra Shoalhaven combines proximity to Sydney with an educated workforce and an ecosystem of innovation. Fostering smart technology in the region will attract and retain university graduates, improve economic diversity, promote resilience and contribute to more vibrant places.

The Illawarra Shoalhaven Joint Organisation has led the *Illawarra Shoalhaven Smart Region*

Strategy, a collaborative vision to leverage the region's innovative environment within the context of digital transformation. The NSW Government has released the *Smart Places Strategy*, which takes a place-based approach to smart places and interconnected systems.

Beyond economic opportunities, real-time access to data through the Internet of Things can detect natural disasters and provide risk assessments that will help in fast communication and critical event response. Real time monitoring can also include valuable insights into heat, air quality, soil quality, water, waste, weather, noise, road safety, and stormwater management.

For example, the region's challenging and unique topography has led to 33 serious floods in the last 50 years. To get smarter about managing this challenge, councils in the region are collaborating on the Illawarra Shoalhaven *Smart Water Management Project*. This project uses smart technology solutions and data analytics to respond to and improve stormwater management, water quality, flood mitigation, and access to information to ensure community safety in flash flood events.

Smart infrastructure also improves the amenity of public spaces and helps visitors with smart lighting, smart screens and smart tour guides. The integration of smart city technology with smart phones will make it easier for people to find their way around or visit local attractions, and can enrich community engagement processes.

Strategy 29.1

Integrate smart technology and the Internet of Things into local strategic planning, including consideration of how it can improve community engagement and information sharing in the planning process.

Objective 30:

Prepare for mobility changes that improve connectivity and sustainability

The transport of the future will be shaped by technology and innovation like drones, automated vehicles and real-time service information.

While passenger vehicles are the predominant form of travel in the region they contribute considerably to greenhouse gas emissions. Electric and hydrogen vehicles are becoming more readily available with hydrogen vehicle production planned at Port Kembla. Automated vehicles could better connect the low density, highly dispersed population, particularly in the south of the region, to transit hubs where customers interchange to mass transit to strategic centres.

The lack of public charging infrastructure is a barrier to the uptake of electric vehicles, as is the need for home charging systems. A regional approach to electric vehicle charging infrastructure will plan for new charging points for electric vehicles. This can incorporate council infrastructure to support fleet transitions and collaborations with industry partners.

The NSW Government has announced an Electric Vehicle Infrastructure and Model Availability Program as part of its *Net Zero Plan Stage 1: 2020-2030*. This will fast-track the electric vehicle market in NSW. The program includes funding for approximately 120 new fast electric vehicle charging locations across NSW.

The rise of e-commerce is increasing demand for faster delivery of goods. Automated vehicles

and drone technology could transform how these goods are delivered, and change logistics supply chains in the coming years.

Places with an employment focus, such as Metro Wollongong, Shellharbour City Centre and Nowra City Centre, will need to be planned for in a way that can leverage these mobility changes.

This includes planning for electric vehicle recharging or rethinking the use of car parks or drop-off bays for alternative uses (commercial uses, storage, logistics hubs, depots or community uses) if autonomous vehicles reduce requirements for car parking.



Strategy 30.1

Foster a regional approach to the rollout of electric vehicle charging infrastructure that considers potential sites for charging stations, including council-owned land, and how these locations can be activated as places.



Strategy 30.2

Support technology-enhanced mobility changes by providing flexibility in the way centres are planned.

Strategic planning and local plans should consider opportunities to:

- foster the take up of automated and electric vehicles for public transport, active transport and personal use
- incorporate facilities to encourage the use of car sharing, and electric and hybrid vehicles, including charging stations.

Appendix:

Summary of objectives, actions, strategies and collaboration activities

Theme: A productive and innovative region



Objective 1: Strengthen Metro Wollongong as a connected, innovative and progressive City

Action 1: Develop a Metro Wollongong Health Precinct Strategy.

Strategy 1.1: Continue to strengthen Metro Wollongong through local strategic planning such as Wollongong City Council's *Urban Design Framework*.

Strategic planning and local plans should consider opportunities to:

- create a permeable and connected pedestrian network
- encourage a diversity of housing including affordable housing and student housing around commercial priority areas
- elevate the importance of design quality and design excellence outcomes
- utilise green infrastructure to create a green network of open spaces
- activate public domain to support investment and renewal.

Strategy 1.2: Continue to strengthen Metro Wollongong's commercial function through local strategic planning such as Wollongong City Centre Planning Review.

Local strategic planning and local plans should consider opportunities to:

- prioritise jobs growth and a resilient Commercial Core by safeguarding land for commercial, job-generating development
- strengthen and simplify planning controls to promote a diversity of buildings that respond to people and place, define the city's skyline and create streets that are scaled for people
- develop active city streets that retain local character and support flexibility to the changing retail environment
- encourage the temporary use of vacant properties to help with street activation.

Strategy 1.3: Continue to revitalise and activate the Sports and Entertainment Precinct and foreshore in local strategic planning and local plans such as Wollongong City Council's *Urban Design Framework* and precinct planning in collaboration with state agencies.

Strategic planning and local plans should consider opportunities to:

- improve the visual and physical access to the foreshore, including improving the pedestrian interface with the WEC, WIN Stadium, the beach and Lang Park
- encourage broader uses of the Precinct during times outside of events
- better utilise the WEC and WIN Stadium
- improve access to public and active transport networks including links to Wollongong Train Station and event transport
- embrace the location's environmental setting by protecting key views, improving and activating public spaces and managing exposure to climate hazards.

**Objective 1:
Strengthen Metro
Wollongong as a
connected, innovative
and progressive City**

Strategy 1.4: Continue to expand the education, innovation and research capabilities of Metro Wollongong.

Strategic planning should consider opportunities to:

- encourage collaboration between education and research institutions to foster knowledge sharing and innovation
- encourage the attraction of an additional university presence in the Commercial Core or Commercial Frame
- foster opportunities to develop and enable smart city approaches throughout Metro Wollongong.
- review the endorsed Master Plan for the University of Wollongong Wollongong Innovation Campus

Strategy 1.5: Continue to strengthen connectivity in Metro Wollongong in local strategic planning and local plans such as Council's *Urban Design Framework, Pedestrian Plan* and *Access and Movement for People Strategy*.

Strategic planning and local plans should consider opportunities to:

- collaborate between Council and state government agencies
- activate entrances to Wollongong Train Station and improve place-making at Lowden Square and on Crown Street
- balance the needs of pedestrians and vehicle traffic through the West Crown and Keira Street corridor to create a vibrant and iconic intersection
- promote walking and cycling through enhancements such as improved wayfinding, amenities and safety
- promote the redevelopment and increased densities within walking distance to Wollongong Train Station
- integrate bus services with other modes including park and ride facilities, and opportunities for car, bike and scooter sharing services
- consider opportunities for innovative mobility changes including electric vehicles and autonomous bus systems.

Collaboration Activity 1: Work with Venues NSW, Wollongong City Council and Department of Regional NSW on the revitalisation and activation of the Metro Wollongong Sports and Entertainment Precinct and foreshore.

Collaboration Activity 2: Engage with University of Wollongong as it leads a review and refresh of the Innovation Campus Masterplan.

Collaboration Activity 3: Work with Transport for NSW and Wollongong City Council on a Place-based Transport Plan for Wollongong

**Objective 2:
Grow the region's
Regional Cities**

Action 2: Develop a Nowra City Centre Strategic Roadmap to set a vision, identify actions and guide inter-agency and inter-government collaboration.

**Objective 2:
Grow the region's
Regional Cities**

Strategy 2.1: Activate Nowra City Centre.

Strategic planning and local plans should consider opportunities to:

- leverage investments in Nowra Bridge, Riverfront Precinct and Shoalhaven District Memorial Hospital
- improve connections between the Nowra Bridge, Riverfront Precinct, Hospital and the commercial area
- identify clear planning and approval pathways and remove planning barriers to increase residential development
- guide decision-making around infrastructure and services including public domain improvements, green infrastructure, open space and walking and cycling connections
- understand Shoalhaven District Memorial Hospital's opportunities for expansion or complementary surrounding land uses.

Strategy 2.2: Enhance the diversity and strength of Shellharbour City Centre.

Strategic planning and local plans should consider opportunities to:

- facilitate higher density mixed use development with quality connected open space and increased tree canopy
- explore opportunities to support a night-time economy and smart work hubs
- improve access and movement between the centre's functions and destinations
- improve connectivity into Shellharbour City Centre from surrounding suburbs through better pedestrian, cycle and public transport connections including from Oak Flats Train Station
- leverage future investment in health and education services
- facilitate diversification and growth in employment opportunities.

Strategy 2.3: Health district planning should consider opportunities for the future use of the existing Shellharbour Hospital site and improved connections to adjoining areas.

Collaboration Activity 4: Work with Transport for NSW and Shoalhaven City Council on a Place-based Transport Plan for Nowra City Centre.

Collaboration Activity 5: Work with Shoalhaven City Council, Department of Regional NSW, Transport for NSW, Department of Health and other relevant stakeholders to drive the revitalisation of the Nowra Riverfront and assist in fast-tracking development of the precinct

**Objective 3:
Grow the Port of
Port Kembla as an
international trade hub**

Strategy 3.1: Protect Port Kembla as an international gateway for freight and logistics.

Strategic planning and local plans should consider opportunities to:

- reduce land use conflicts from adjoining land uses including residential, commercial development and infrastructure use and, where appropriate, include buffer measures to minimise the impact of development on the efficient functioning of the Port and the freight industry
- consider the suitability of high traffic-generating developments, such as largescale retail and high density residential, on roads that service the Port to reduce conflicts with dangerous goods vehicles.

Strategy 3.2: Regional economic development and strategic plans should consider the development of the Port as a green hydrogen hub to create economic and jobs growth in the region.

**Objective 4:
Activate regionally
significant
employment precincts
to support new and
innovative economic
enterprises**

Action 3: Develop precinct profiles for the regionally significant employment lands and where required, establish precinct collaboration teams to activate land for economic growth.

Strategy 4.1: Support new and innovative economic enterprises.

Strategic planning and local plans should consider opportunities to:

- retain and manage regionally significant employment lands and safeguard them from competing pressures
- provide flexibility in local planning controls
- align infrastructure to support the rollout of employment land in the region.

Strategy 4.2: Monitor the take up and availability of employment land through the Employment Lands Development Monitor.

Strategy 4.3: Support defence and advanced manufacturing industries.

Strategic planning and local plans should consider opportunities to:

- protect the airspace around defence facilities consistent with the current Australian Noise Exposure Forecast mapping in local environmental plans
- provide space and co-location opportunities for electronic, information technology, logistics, and aviation and defence support industries in employment precincts such as the Albatross Aviation and Technology Precinct and the South Nowra Industrial Lands.

Strategy 4.4: Continue to support the growth of Shellharbour Airport through Shellharbour City Council's *Airport Strategic Business Plan*.

Strategic planning and local plans should consider opportunities to:

- appropriately manage and protect Shellharbour Airport's land-use and airspace to support aviation operations (including regular public transport) and related business
- activate employment lands surrounding the airport with flexible planning controls.

**Objective 5:
Create a diverse
visitor economy**

Strategy 5.1: Create an environment for a diverse visitor economy.

Strategic planning and local plans should consider opportunities to:

- enhance the amenity, vibrancy and safety of centres and township precincts
- create green and open spaces that are accessible and well connected and enhance existing green infrastructure in tourist and recreation facilities
- support the development of places for artistic and cultural activities
- protect heritage, biodiversity and agriculture to enhance cultural tourism, agri-tourism and eco-tourism
- support appropriate growth of the night-time economy
- provide flexibility in planning controls to allow sustainable agritourism and ecotourism
- improve public access and connection to heritage through innovative interpretation
- incorporate transport planning with a focus on active transport modes to connect visitors to key destinations
- provide water services to meet the needs of visitors.

**Objective 5:
Create a diverse
visitor economy**

Strategy 5.2: Support a diverse visitor economy in national parks through collaboration between National Parks and Wildlife Service, Destination NSW, Destination Networks, councils and local tourism organisations to encourage and welcome visitors.

Collaboration Activity 6: Work with councils, TNSW, NPWS, DRNSW, Destination NSW and community groups to identify opportunities to improve connections between existing coastal walks throughout the region.

**Objective 6:
Activate the region's
harbours to promote
the blue highway**

Strategy 6.1: Activate the region's harbour and ports as well as their related commercial areas in strategic planning and local plans.

**Objective 7:
Respond to the
changing nature
of retail**

Strategy 7.1: Respond to the changing nature of retail. Strategic planning and local plan should consider opportunities to:

- provide flexibility and facilitate a broad range of commercial, business and retail uses within centres
- focus future commercial and retail activity in existing commercial centres, unless there is no other suitable site within existing centres, there is a demonstrated need, or there is positive social and economic benefit to locate activity elsewhere.

**Objective 8:
Strengthen the
economic
self-determination
of Aboriginal
communities**

Strategy 8.1: Support and partner with Aboriginal communities to identify opportunities to activate land including the biodiversity offset market to drive economic prosperity, training and employment for Aboriginal communities.

Strategy 8.2: DPIE Planning continues to offer the preparation of a strategic assessment of the landholdings of LALCs.

Strategy 8.3: Prioritise the processing of unresolved Aboriginal Land Claims on Crown land.

Strategy 8.4: Provide opportunities for the region's LALCs to interact with and utilise the NSW planning system and the planning pathways available to achieve development aspirations.

**Objective 9:
Promote agriculture
innovation,
sustainability
and value-add
opportunities**

Strategy 9.1: Promote agriculture and aquaculture innovation, sustainability and value-add opportunities such as agritourism. Strategic planning and local plans should consider opportunities to:

- protect identified important agricultural land and industries from other land uses, land use conflict and fragmentation
- protect assets and infrastructure such as freight and logistics facilities from land use conflict and the encroachment of incompatible land use to facilitate investment in the agricultural supply chain
- minimise the impacts of development on aquatic habitats in aquacultural estuaries
- manage water availability and protect water sources.

Strategy 9.2: Enable new rural residential development only where it has been identified in a local strategic plan, prepared by council and endorsed by the Department of Planning, Industry and Environment.

**Objective 10:
Sustainably maximise
the productivity of
resource lands**

Strategy 10.1: Consider the ongoing operation of existing mining and resource extraction and future development of known resources. Strategic planning and local plans should consider opportunities to:

- protect areas of mineral and energy resources potential
- protect infrastructure that facilitates mining industries, such as road and rail freight routes, from development that could affect current or future extraction
- address water resource constraints and impacts.

Strategy 10.2: Consider opportunities for strategic biodiversity conservation measures around known hard rock resource lands to protect environmental values and provide certainty for extraction activities.



Theme: A sustainable and resilient region

**Objective 11:
Protect important
environmental assets**

Strategy 11.1: Protect, maintain or restore important environmental assets.

Strategic planning and local plans should consider opportunities to:

- recognise the validated high environmental value lands in local environmental plans
- minimise potential impacts arising from development on areas of high environmental value and implement the 'avoid, minimise and offset' hierarchy
- consistently manage riparian corridors through strategic conservation planning initiatives that accommodate natural physical processes and integrate water sensitive urban design principles.

Strategy 11.2: Protect and enhance the function and resilience of biodiversity corridors in strategic planning and local environmental plans.

Strategy 11.3: Consider the needs of climate refugia for threatened and dominant species in strategic planning including biodiversity and conservation planning.

Strategy 11.4: Protect biodiversity values in urban release areas.

Strategic planning and local plans should consider opportunities to:

- incorporate validated and up-to-date environmental data
- investigate strategic biodiversity conservation opportunities.

Strategy 11.5: Protect coastal lakes and estuaries by implementing the NSW Government's Risk-Based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions, with sensitive coastal lakes and estuaries prioritised. Strategic planning and local plans should support improved water quality and ecological function.

Strategy 11.6: Align local plans with any certified Coastal Zone Management Plan or certified Coastal Management Program.

**Objective 12:
Build resilient places
and communities**

Action 4: Develop a resilience benchmarking matrix tool to assist councils to assess their level of resilience.

Strategy 12.1: Support locally led development of resilience and adaptation plans that:

- encourage sustainable and resilient building design and materials including the use of renewable energy
- promote economic diversity and prosperity, improving liveability and strengthening the health, wellbeing and social cohesion of a place
- integrate emergency management and recovery needs into new and existing urban areas including evacuation planning, safe access and egress for emergency services personnel, buffer areas, building back better, whole-of-life cycle maintenance and operation costs for critical infrastructure for emergency management
- recognise the benefits of social connectivity and social cohesion to community resilience.

Strategy 12.2: Reduce exposure to bushfire and natural hazards

Strategic planning and local plans should consider:

- the proximity of new development, including urban release areas, in relation to areas of high bushfire risk, flooding hazards or coastal erosion/inundation to protect the community from natural hazards
- preparing, reviewing and implementing floodplain risk management plans in existing and new growth areas to improve community resilience to the impacts of flooding and to enable flood constraints to be incorporated into planning processes early for new development.

Strategy 12.3: Reduce the region's exposure to natural coastal hazards through implementing the NSW Government's Coastal Management Framework.

Strategic planning and local plans should consider opportunities to:

- transition existing certified coastal zone management plans to coastal management programs
- implement and review certified coastal management programs to enable the sustainable use of coastal land for infrastructure and development and to improve the resilience of the region's coastal settlements to existing and future coastal hazards
- ensure areas identified for development are consistent with limitations and agreed long-term management strategies in any certified coastal zone management plan or certified coastal management program
- enable effective consideration of coastal hazards including consideration of climate change, with any certified coastal zone management plan or certified coastal management program.

**Objective 13:
Increase urban tree
canopy cover**

Strategy 13.1: Foster opportunities to increase urban tree canopy coverage in urban areas.

Strategic planning and local plans should consider opportunities to develop long-term urban tree canopy targets accounting for local characteristics and community expectations.

Objective 14:
Enhance and connect parks, open spaces and bushland with walking and cycling paths

Action 5: Develop the Illawarra Shoalhaven Green Grid and identify priority projects for enhancement.

Strategy 14.1: Enhance and increase access to public spaces.

Strategic planning and local plans should consider opportunities to:

- plan for urban release areas to supply a sufficient quantity and quality of new accessible open space
- explore new public space in accordance with the Government Architect NSW's *Greener Places and Better Places* guidance, and with consideration of the *Designing with Country* discussion paper, *Streets as Shared Spaces program*, and *Everyone Can Play*
- require large urban renewal initiatives to demonstrate how the quantity of, or access to, high quality and diverse local public space is maintained or improved.

Objective 15:
Plan for a Net Zero region by 2050

Action 6: Develop an Illawarra Shoalhaven Sustainability Roadmap that identifies innovative initiatives that can be delivered through an ecosystem of collaboration.

Action 7: Develop a sustainability framework for regionally significant precincts to promote carbon neutral sustainable growth and development.

Strategy 15.1: Strategic planning and local plans should consider opportunities to encourage initiatives that reduce emissions.

Strategy 15.2: Strategic planning and local plans should consider opportunities to encourage energy efficient building design for residential, commercial and industrial areas.

Strategy 15.3: Promote opportunities for clean energy in the region including pumped hydro, hydrogen and biogenic gas.

Strategy 15.4: Explore opportunities where carbon sequestration using estuarine ecosystems could be used for estuary riverbank restoration and/or be included in coastal management programs.

Strategy 15.5: Explore opportunities for using agricultural land to sequester carbon in vegetation and soils, and to grow biomass for bioenergy.

Collaboration Activity 7: Work with the Energy Corporation of NSW, the Renewable Energy Sector Board, councils, Aboriginal and community stakeholders to develop the Illawarra Renewable Energy Zone.

Objective 16:
Support the development of a circular economy

Strategy 16.1: Strategic planning and waste management strategies should consider supporting development of a circular economy and opportunities for industrial symbiosis.

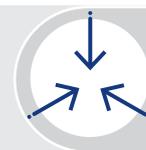
**Objective 17:
Secure water
resources**

Strategy 17.1: Encourage the sustainable use of water resources.

Strategic planning and local plans should consider opportunities to:

- locate, design, construct and manage new developments to minimise impacts on water catchments, including downstream impacts and groundwater sources
- incorporate water sensitive urban design particularly where development is likely to impact water catchments, water quality and flows
- encourage the reuse of water in new development, for urban greening and for irrigation purposes.
- improve provision for stormwater management and water sensitive urban design.

Theme: A region that values its people and places



**Objective 18:
Provide housing
supply in the
right locations**

Strategy 18.1: Identify urban growth boundaries and facilitate opportunities to support ongoing supply of housing in appropriate locations.

Strategy 18.2: Facilitate housing opportunities in existing urban areas, particularly within strategic centres.

Strategic planning and local plans should consider opportunities to:

- review planning controls so that they are creating flexible and feasible conditions for housing supply
- align infrastructure and service delivery to match housing supply needs
- explore public domain improvements that would increase capacity for growth
- identify policies and processes that could be reviewed to improve certainty and streamline development processes
- promote urban design outcomes to support healthy and vibrant communities.

Strategy 18.3: Identify, prioritise, and coordinate infrastructure needed to support vibrant and healthy communities in the region's urban release areas through the Illawarra Shoalhaven Urban Development Program.

Strategy 18.4: Monitor land and housing supply through the Illawarra Shoalhaven Urban Development Program.

Collaboration Activity 8: Work with Kiama Municipal Council on the development of a Local Housing Strategy.

**Objective 19:
Deliver housing
that is more diverse
and affordable**

Action 8: Establish the Illawarra Shoalhaven Affordable Housing Roundtable with councils, community housing providers, the NSW Government and housing development industry to collaborate, build knowledge and identify barriers to increase the supply of affordable housing.

**Objective 19:
Deliver housing
that is more diverse
and affordable**

Strategy 19.1: Continue to provide for and encourage a range of housing choices.

Strategic planning and local plans should consider opportunities to:

- provide a mix of housing types and lot sizes including small lots in urban release areas
- provide a mix of housing sizes including studios and one-bedroom dwellings
- consider incentives to increase the supply of housing that is appropriate for seniors, including low-care accommodation
- consider whether development standards, including minimum lot sizes, minimum frontage and floor space ratio are inadvertently inhibiting opportunities for diverse housing options
- explore innovative solutions in housing to cater for a range of community needs, including those of older people, multi-generation families, people living in group housing, people with special needs or people from different cultural backgrounds.

Strategy 19.2: Investigate affordable housing targets in consultation with the Illawarra Shoalhaven Affordable Housing Roundtable.

Strategy 19.3: Assess the potential to renew social housing sites to deliver an increase in social housing stock and greater vibrancy in local communities.

**Objective 20:
Establish a shared
vision for the future of
Bombo Quarry lands**

Action 9: Develop a shared vision for the future of Bombo Quarry in collaboration with Kiama Municipal Council, landowners and the community.

**Objective 21:
Respond to the
changing needs of
local neighbourhoods**

Strategy 21.1: Consider the changing needs of local neighbourhood centres.

Strategic planning and local plans should consider opportunities to:

- explore flexibility and supporting a mix of land uses so that local streets and spaces can be adapted to new uses and user needs over time
- improve public space, in consultation with the community, to foster and support connectivity and great places to live for changing populations.

**Objective 22:
Embrace and
respect the region's
local character**

Strategy 22.1: Support the development of local character statements in accordance with the NSW Government's *Local Character and Place Guideline*.

**Objective 23:
Celebrate, conserve
and reuse cultural
heritage**

Strategy 23.1: Identify, conserve and enhance cultural heritage values.

Strategic planning and local plans should consider opportunities to:

- engage Traditional Owners and the community early in the planning process to understand heritage values.
- undertake heritage studies early to inform conservation and value add opportunities
- apply adaptive reuse and heritage interpretation to create distinctive local places
- manage and monitoring the cumulative impact of development on the heritage values and character of places.

**Objective 24:
Support major
events, public art
and cultural activities**

Strategy 24.1: Support public art, major events and cultural activities.

Strategic planning and local plans should consider opportunities to:

- enhance and protect creative work and performance spaces, and related facilities
- support the temporary use of vacant buildings for performance and creative work
- support the night-time economy
- facilitate opportunities for creative and artistic expression and participation with a minimum regulatory burden
- encourage the diversification of uses, or activation of underutilised facilities
- facilitate street art to enhance urban areas and contribute to the attractiveness of neighbourhoods.

Theme: A smart and connected region



**Objective 25:
Collaborate to
leverage opportunities
from Western
Sydney's growth**

Strategy 25.1: Engage and collaborate on opportunities for mutual and sustainable social, economic and employment benefits across the Illawarra Shoalhaven and Western Sydney.

**Objective 26:
Create faster rail
connections between
Greater Sydney,
Wollongong and Nowra**

Collaboration Activity 9: Work with Transport for NSW on the *NSW Fast Rail Network Strategy* and identify opportunities to leverage investment at a regional and local scale.

**Objective 27:
Protect major freight
networks**

Strategy 27.1: Optimise the efficiency and effectiveness of freight handling and logistics network.

Strategic planning and local plans should consider opportunities to:

- protect, maintain and improve the existing and emerging freight transport networks
- balance the need to minimise negative impacts of freight movements on urban amenity with the need to support efficient freight movements and deliveries
- limit incompatible uses in areas expected to have intense freight activity.

**Objective 28:
Create connected
and accessible walking
and cycling networks**

Strategy 28.1: Improve and/or create connected and accessible walking and cycling networks.

Strategic planning and local plans should consider opportunities to:

- connect existing coastal walkways to enhance the user experience and link coastal towns and villages
- integrate walking and cycling networks into the design of new communities
- prioritise walking and cycling in areas around schools, health services, aged care facilities, sporting, cultural and recreational facilities
- explore ideas from the *Streets as Shared Spaces* program.

**Objective 29:
Utilise smart
infrastructure to drive
resilience, prosperity
and vibrant places**

Strategy 29.1: Integrate smart technology and the Internet of Things into local strategic planning, including consideration of how it can improve community engagement and information sharing in the planning process.

**Objective 30:
Prepare for mobility
changes that improve
connectivity and
sustainability**

Strategy 30.1: Foster a regional approach to the rollout of electric vehicle charging infrastructure that considers potential sites for charging stations, including council-owned land, and how these locations can be activated as places.

Strategy 30.2: Support technology-enhanced mobility changes by providing flexibility in the way centres are planned.

Strategic planning and local plans should consider opportunities to:

- foster the take up of automated and electric vehicles for public transport, active transport and personal use
- incorporate facilities to encourage the use of car sharing, and electric and hybrid vehicles, including charging stations.

Glossary

Active transport: Transport that is human powered, such as walking and cycling.

Affordable housing: Housing for very low to moderate income households. These are households whose gross incomes fall within the following ranges of the medium household income:

- very low: less than 50% of median income
- low: 50–80% of median income
- moderate: 80–120% median income.

Climate refugia: Areas where species can retreat to and persist in under changing environmental conditions. Refugia are areas that maintain favourable climatic conditions absent in the surrounding landscape, thereby

safeguarding the persistence of biodiversity. There are two key types of refugia, termed internal and external, and are determined by their spatial relationship with species' known distributions. Climate refugia data can be accessed at nswclimaterefugia.net together with associated explanatory reports.

Circular economy: A circular economy values resources by keeping products and materials in use for as long as possible. 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.

Employment lands: Land that is zoned for industrial or similar purposes in planning instruments. These uses include manufacturing; transport and warehousing; service and repair trades and industries; integrated enterprises with a mix of administration, production, warehousing, research and development; and urban services and utilities. Employment lands are monitored through the Illawarra Shoalhaven Employment Lands Development Monitor (ELDM) which tracks the development status of employment lands.

Existing urban areas: Land zoned for an urban purpose, excluding greenfield release areas.

Green Grid: Refers to the network of public and open spaces throughout the Region, including waterways, riparian areas, bushland, parks and open spaces and tree canopy.

Greenfield areas: Also referred to as release areas, these terms refer to new housing developments on land that has not been previously developed or used for other urban purposes.

Housing affordability: Refers to the capacity of individuals or households to enter the rental and privately owned housing markets.

Illawarra Shoalhaven Region: The Local Government Areas (LGAs) of Kiama, Shellharbour, Shoalhaven and Wollongong.

Illawarra Shoalhaven Urban Development

Program: The NSW Government's program that manages land and housing supply, monitors the planning, servicing and development for new urban areas as well as the provision of housing in existing urban areas in Wollongong, Shellharbour, Kiama and Shoalhaven.

Local centres: Local centres provide services such as shopping, dining, health and personal services to meet the daily and weekly needs of the local community. They are smaller than the metropolitan, regional, and strategic centres.

Local Plans: Includes Local Environmental Plans and Development Control Plans.

Strategic Planning: Includes the preparation of Local Strategic Planning Statements (LSPS),

local housing strategies, employment land or retail studies, and other activities undertaken to support the development of local and regional plans by all levels of government.

Metropolitan City: The highest order centre in the Region, Metro Wollongong.

Mixed-use areas or precincts: Areas that facilitate a mixture of commercial, retail, residential and other land uses.

Public spaces: Public spaces are all places publicly owned or of public use, accessible and enjoyable by all for free. They include open spaces, public facilities and streets.

Regional city: The second highest order centres. Regional cities are of regional strategic importance and include Shellharbour City Centre and Nowra City Centre.

Resilience: Resilience is the capacity of individuals, communities, businesses and systems within a city to survive, adapt and thrive no matter what kinds of chronic stresses and acute shocks they experience (100 Resilient Cities).

Social housing: Housing for people on low incomes or people in housing crisis, owned or managed by government or community housing providers. Rents are based on income.

Special Infrastructure Contribution: A Special Infrastructure Contribution is a mechanism to collect contributions from residential development to help fund state and regional infrastructure.

Strategic centres: Well-serviced centres with opportunities for new housing. Strategic centres in the Illawarra Shoalhaven region include Corrimal, Milton-Ulladulla, Kiama, Gerringong, Dapto, Bomaderry and Albion Park Rail.

Virtual Power Plant: A distributed energy management system which aggregates standalone assets (e.g. commercial buildings and industrial facilities) and distributed energy systems (e.g. ground and rooftop solar PV, battery storage and bioenergy), and connects these systems in a virtual environment.

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Agency abbreviations

DPI – NSW Department of Primary Industries

DPIE – NSW Department of Planning, Industry and Environment

DRNSW – NSW Department of Regional NSW

TfNSW – Transport for NSW

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