

Acknowledgement of Country

The Department of Planning and Environment acknowledges the Traditional Custodians of the land and pays respect to Elders past, present and future. We honour Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to place, and their rich contribution to society. To that end, our work seeks to uphold the idea that if we care for Country, it will care for us.

For this project we would like to acknowledge the Wallumattagal—the place and people of the Black Snapper fish—of the Dharug nation. We recognise their history and pay respect to their culture, connection to their lands, waterways, sky and surrounding clan groups.

Our recognition of these sovereign lands is expressed with deep reverence, connection and commitment to the protocols of old ways, as we tread gently in the footsteps of our ancestors to pave the way for a better future for all people.

Find out more:

www.dpie.nsw.gov.au

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Executive summary

Macquarie Park has successfully developed as one of Australia's largest non-CBD office markets, establishing a cluster of leading companies, a university and hospitals. Macquarie Park is home to Macquarie University, Macquarie University Hospital, Macquarie University Incubator and more than 180 large international and 200 small businesses.

However, new businesses require different modes of working. To continue to grow Macquarie Park's economic capacity, we can transform it as a place by restructuring movement across and within the area, making it easier for people to access and a perfect location for sharing, collaboration and innovation.

Macquarie Park is not currently set up for people and businesses to share ideas. It could be better connected to its traditional culture, nearby natural areas and wider Sydney. This place strategy intends to create opportunities to develop and enhance Macquarie Park, centred on attractive public spaces and connections within and around the area. This will boost its economic capacity and see it transition into a leading 21st century place to collaborate, innovate and do business.

About the place strategy

The aim of the Macquarie Park Innovation Precinct Place Strategy (Macquarie Park Place Strategy) is to create a better place, improve connectivity and find new ways for people to share ideas and technology. In turn, this will increase the attractiveness of Macquarie Park as a place to do business, study and invest in. It will lay the foundations for its transformation to an innovation precinct.

The strategy considers the 350 hectares that includes land between Macquarie Centre and Ivanhoe Estate to Lachlan's Line and Riverside Corporate Park. This area is bound by Epping Road, Delhi Road, M2 Motorway and Vimiera Road and sits adjacent to the Lane Cove National Park.

The place strategy builds on existing work to create a long-term vision for Macquarie Park. It supports the work of the Greater Cities Commission, which is leading the accelerated delivery of key economic precincts across Sydney, including Macquarie Park, in consultation with industry leaders and state agencies.

The place strategy represents the analysis of several barriers to Macquarie Park's growth. From this analysis, we have developed a spatial master plan for a 170-hectare investigation area within the broader 350-hectare Macquarie Park that includes the business park and commercial core.

We've drawn from a cross-government Strategic Infrastructure and Services Assessment, extensive community and stakeholder consultation and baseline technical studies.

The potential

Macquarie Park offers the potential for Sydney to grow as a critical hub for business, innovation, research and education. The Macquarie Park Place Strategy outlines critical approaches to continue building a robust precinct that encourages consistent investment over the long term.

The place strategy builds on a rich foundation of innovation and enterprise, as well as the area's pre-colonial history as a place of trade, exchange and learning. It brings a new focus to the area's Aboriginal culture and heritage, and aims to optimise the location within lovely bushlands and creeks and major transport routes, including the M2 Motorway and Sydney Metro Northwest.

In the 21st century, Macquarie Park will remain a place to share ideas and technology. The place strategy aims to create a place for people, deepened by the recognition of Wallumattagal Country. This is a framework that will inform the planning for new connections and open spaces, as well as 20,000 jobs and up to 7,650 homes in the investigation area, bringing life and activity—day and night—to Macquarie Park. The place strategy presents an important opportunity to create jobs and homes in NSW.



Achieving the vision: Big moves and neighbourhood focus

Using a master planning approach, the place strategy establishes:

- six big moves, each with related actions, that will be applied as the place strategy is implemented
- a master plan that recognises Macquarie Park as a place of many places and establishes an overall design criteria as well as specific criteria for seven neighbourhood areas.

The six big moves are key interventions that require coordination between, and resourcing from, multiple state agencies, council and industry.



1. Drive the transformation of Macquarie Park into an innovation precinct: pursuing talent and technology to create diverse economic and employment opportunities through collaboration and a recognised leadership network that can open up access to both private and public funding and effort



4. Prioritise and enrich the pedestrian experience: improving the quality of natural features and attributes of Country and how people move around



2. Scale and time new development to match infrastructure capacity: planning for the provision of physical and social infrastructure through a Strategic Infrastructure and Services Assessment that identifies over 190 infrastructure and service proposals



5. Create sustainable
neighbourhoods within
Macquarie Park, each with their
own identity and role: defining
the seven neighbourhoods and
considering how to bring about
more cultural, social and visitor
uses to spur on an 18-hour
economy and, where suitable,
new residential uses



improving the quality of how people and goods move around

3. Rebalance transport uses:

Macquarie Park through a new movement and place framework that encourages walking, cycling and public transport use, rather than the prevalence of private car use that exists today



6. Connect to Country and deliver better quality open spaces:

creating more quality public open space and connections within the unique setting of Wallumattagal Country and its history as a place of higher learning

The place strategy considers these moves while focusing on the attributes of seven neighbourhood areas that, alongside the already-rezoned areas of Herring Road Precinct and North Ryde Station Precinct. form a pattern of distinct areas.

- North Park Ngalawala (Reciprocity) sits in the north of Macquarie Park and will be a predominantly commercial neighbourhood, with a restored Industrial Creek weaving through connected open spaces.
- Waterloo Park Butbut (Heart) connects Herring Road Precinct and the university to Macquarie Park Station and could be a new green focus for Macquarie Park with commercial uses and a new activity hub.
- **Shrimptons Quarter Waragal Birrung** (Evening Star) is close to Shrimptons Creek and, with its interface with Herring Road Precinct and the Ivanhoe Estate will be subject to commercial and residential growth.
- **Macquarie Living Station Gari Nawi** (Saltwater Canoe) around Macquarie Park Metro Station will be a place of activity with a commercial core and new residential development.
- Porters Creek Burbigal (Morning) on the eastern interface with Lane Cove National Park will be a commercial and retail space near the station.
- **Wicks Road South Garungul** (Unbreakable) in the south west of the investigation area will evolve into a shared community of commercial, retail and residential uses, with a cluster of education, sports and recreation and cultural spaces.
- North Ryde Riverside Narrami Badu-Gumada (Connecting Water Spirit) in the south is surrounded by Lane Cove National Park and will be a place for new housing with connecting pathways and open spaces.

Implementation

The Department of Planning and Environment will lead the delivery of the place strategy, with the Ryde Coordination Group continuing to provide oversight until an alternative governance structure is in place to support the collaboration between state agencies, council and industry.

Most infrastructure proposals are not funded or committed to and should be regarded as initiatives subject to further development, scoping, business case investigation and investment decisions.

Infrastructure capacity in Macquarie Park will inform how quickly future growth can occur. As a priority, implementation of the place strategy will require further analysis of transport network impacts and validation of transport initiatives, as well as preparation of infrastructure delivery plans. This work will set out capacity thresholds, priorities, funding requirements and mechanisms. It will also set out staging to coordinate delivery of future growth.

A direction under section 9.1 of the NSW Environmental Planning and Assessment Act 1979 will be required to implement the place strategy and enable individual neighbourhood master plans to be prepared and inform local planning controls.



Photography

Image courtesy of Department of Planning and Environment.

Introduction

Macquarie Park—originally known by its Aboriginal name Wallumatta—sits within the City of Ryde local government area (LGA). Macquarie Park is home to Macquarie University, Macquarie University Hospital, Macquarie University Incubator and more than 180 large international corporations and 200 small businesses. With Macquarie Hospital and CSIRO Lindfield nearby, this is one of the largest non-CBD office markets in Australia.

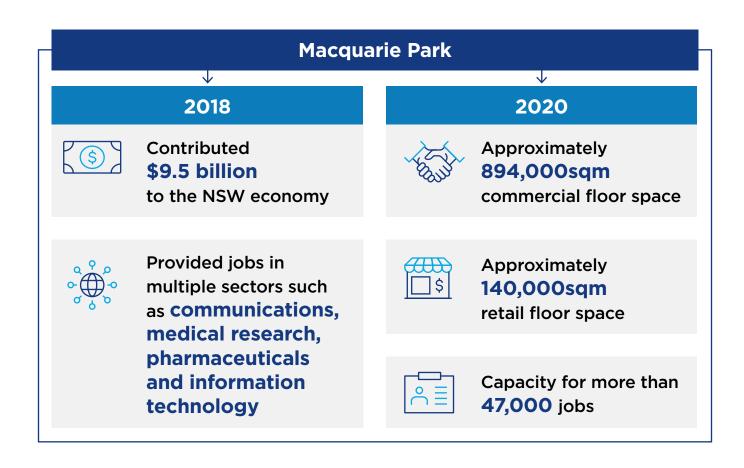
Macquarie Park's success draws on decades of employment-related investment and development. This is a cluster of leading companies, many of which base their Asia-Pacific headquarters in Macquarie Park. People can easily connect to the rest of Greater Sydney via Sydney Metro Northwest services.

Macquarie Park is essential to growing Greater Sydney's capacity as a centre for innovation, attracting top businesses from around the world and creating new jobs and opportunities for the people of Sydney.

The entire 350 hectares includes land between Macquarie Centre and Ivanhoe Estate to Lachlan's Line and Riverside Corporate Park. It is bound by Epping Road, Delhi Road, M2 Motorway and Vimiera Road and sits adjacent to the Lane Cove National Park.

Leveraging its existing economic profile, Macquarie Park has the potential to be transformed into a diverse innovation and collaboration precinct.

This Macquarie Park Place Strategy aims to unlock this potential. It builds not only on the rich foundation of innovation and enterprise, but also on the area's pre-colonial history as a place of trade, exchange and learning. The place strategy aims to create a place for people, deepened by the recognition of Wallumattagal Country.



Purpose

The place strategy creates a long-term vision for Macquarie Park. It is aspirational in nature, setting the scene for a staged approach to development and transformation.

The place strategy has been developed under the Ryde Co-ordination Group (RCG), chaired by the Greater Cities Commission's (Commission) Eastern Harbour City Commissioner with the objective of better co-ordinating land use, infrastructure planning and delivery across the Ryde LGA.

The Commission has been tasked by the NSW Premier to lead the accelerated delivery of key innovation precincts, including Macquarie Park, and is working with industry and state agencies to consider mechanisms to help the area's industries and businesses to grow and thrive.

To support this, the Department of Planning and Environment has analysed several barriers to growth relating to Macquarie Park's disconnection from the environment, road network capacity issues, the lack of quality public places and the limits to walking and cycling.

From this analysis, we have developed a spatial master plan for a 170-hectare investigation area within the Park that includes the business park and commercial core.

We've drawn from a cross-government strategic infrastructure and services assessment, extensive community and stakeholder consultation and baseline technical studies.

By building on Macquarie Park's success to date, the place strategy—aligned with other strategic work across government—provides the foundations to support the area's next phase of evolution. It establishes a framework for creating an additional 20,000 jobs over the next 20 years, supported by up to 7,650 new dwellings in the investigation area.

This work encompasses previous rezoning activity but does not propose land use changes to:

- Macquarie University (Herring Road)
 Precinct, which includes Macquarie University and Macquarie Shopping Centre. Rezoning allowed for the development of four new parks, upgrades to Macquarie University Bus Interchange, a mixed-use academic core at the University, and the renewal of the former Ivanhoe Estate, providing more than 1,000 social and affordable housing units and a new school
- North Ryde Station Precinct in the south-east, within 10 minutes' walk of North Ryde Metro Station. Rezoning allowed for more than 2.4 hectares of park and public plazas and new walking and cycling links including the pedestrian and cycle bridge over Delhi Road, upgraded roads and community facilities.



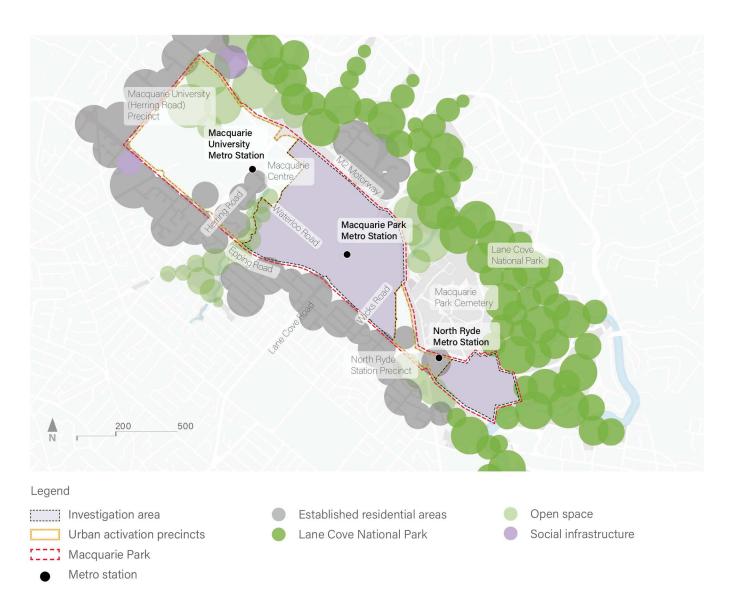


Figure 1

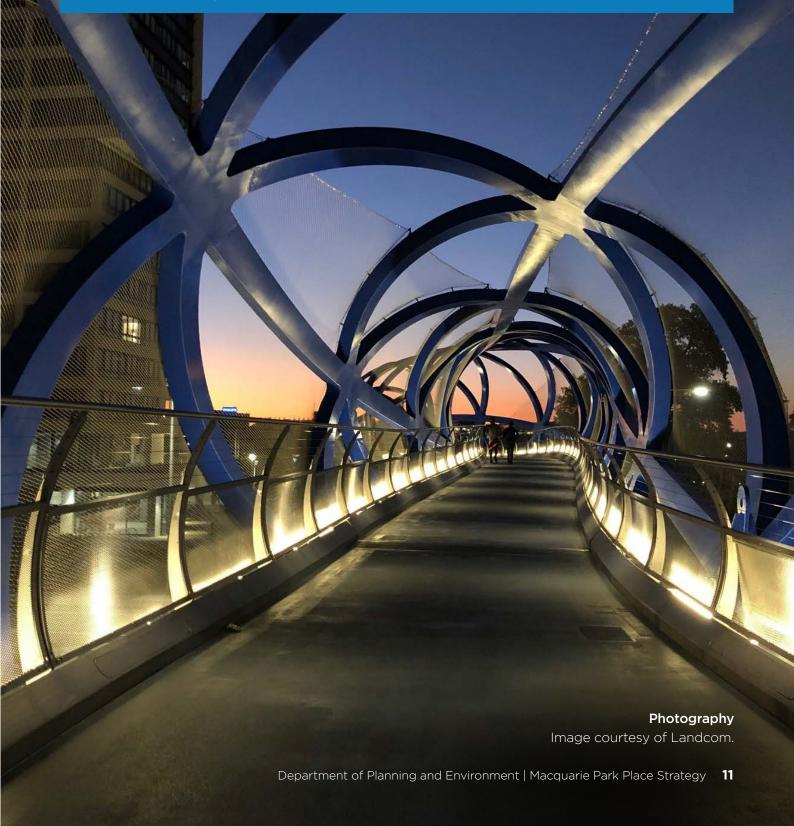
Macquarie Park Corridor

Vision

A growing home to world-class businesses, innovation, research and education, Macquarie Park is competitive and resilient, with a stronger role within Greater Sydney's and Australia's economies.

It is a place for people, characterised by its connectivity and the unique setting of Wallumattagal Country—a place of rivers and fertile wetlands with a deep history of learning, trade and culture.

Macquarie Park is a place where people go to share ideas; a place that fosters creativity through interconnected relationships between people, businesses, places of education and a renewed connection to Country.



Country-centred design

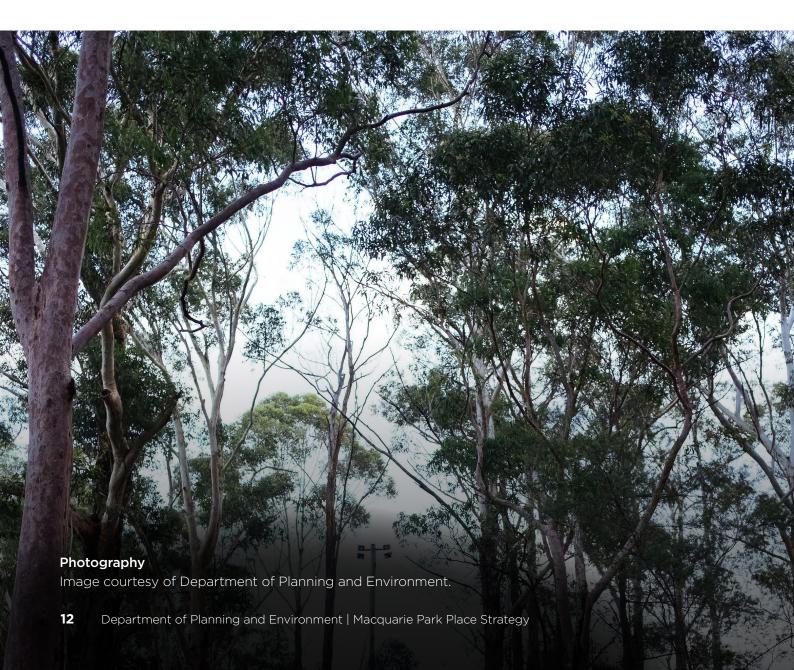
The vision for Macquarie Park embeds an understanding of Country (Ngurra) and its people to help reconnect Macquarie Park with purpose and culture.

For Aboriginal people, Country is an entity encompassing all living systems and their interdependent relationship and interconnection to each other. This means reciprocal relationships between sky, land, sea, people, plants and animals are sustained by the environment and cultural knowledge.

To this end, the Macquarie Park Place Strategy draws from the concept of Country-centred design—a holistic and integrated process that prefaces the care of Country and communities when designing solutions for complex problems.

Country-centred design is driven by four pillars linked together in an iterative process: culture, research, strategy and technology. It informs both master planning and socially and environmentally sustainable development.

Country-centred design equitably balances and represents the broader needs of the environment, its interconnected systems and the humans who inhabit it. Prioritising the central role of Country enables a relationship with Country to emerge relevant to the scale and scope of a project.



Planning and policy context

Macquarie Park's strengths from the tech and bio-tech industry, creative businesses and a leading university can be optimised by overcoming identified constraints. This place strategy aims to do this. It also seeks to address several key NSW Government policy commitments and priorities.

A Metropolis of Three Cities

The Greater Sydney Region Plan - A Metropolis of Three Cities is built on a vision of Greater Sydney as a single metropolis made up of 3 interconnected cities, where most residents live within 30 minutes of their jobs, education and health facilities, services and great places.

Macquarie Park is located within the Eastern Harbour City, and is the northern anchor of the Eastern Economic Corridor that spreads south to Sydney Airport and is home to financial, business and professional services and innovation startup sectors.

A Metropolis of Three Cities also plans for Greater Sydney's future in the context of five separate districts of the city. Macquarie Park is located in the North District.

A Metropolis of Three Cities plans for better connectivity, supports continued growth in global industries and aims to strengthen economic links between Macquarie Park and Greater Parramatta.

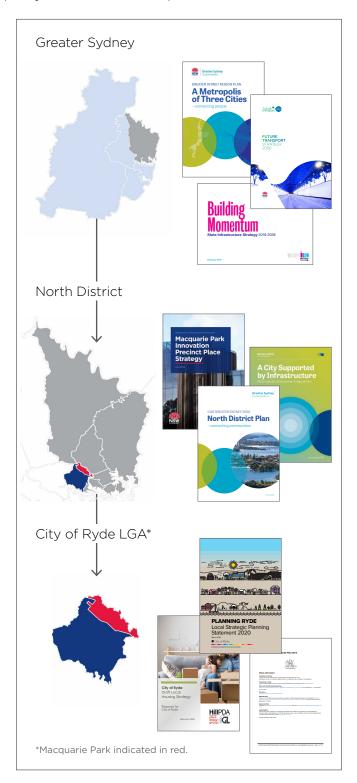


Figure 2
Strategic policy context

North District Plan

The North District Plan sets strategic priorities for Macquarie Park to:

- enable additional capacity for commercial floor space and maintain a commercial core
- improve urban amenity including mitigating the impact of car movements on pedestrians and cyclists
- provide a finer grain road network to enhance pedestrian connections and provide new access points
- promote excellence in urban design by upgrading public areas
- create an innovation ecosystem capitalising on the relationship with Macquarie University and nearby high-tech and medical corporations
- improve public transport connections to Parramatta and the district's other strategic centres, including the Northern Beaches Hospital.

Future Transport 2056 Strategy

Future Transport 2056 Strategy provides an integrated transport vision for NSW.

Early infrastructure initiatives for Macquarie Park include the Macquarie University Bus Interchange, precinct improvements in collaboration with the Australian Government, and the east-west public transport connection from Mona Vale to Macquarie Park. Broader initiatives include upgrades to cycle and pedestrian infrastructure, local walking connections and bus improvements.

Visionary initiatives—those that will be investigated in the longer-term—include a Macquarie Park to South-East Sydney via Rhodes on rail or mass transit.

The place strategy is also informed by Government Architect NSW's Better Placed, Greener Places, Designing with Country and Practitioners' Guide to Movement and Place as well as the City of Ryde Council's Local Strategic Planning Statement.

Other policies and plans

The master plan that supports this place strategy provides the strategic place and urban design framework for the investigation area. Both documents will inform the evolution of Macquarie Park but will also be reviewed as further detailed planning work occurs.

A detailed evidence base supports this place strategy:

- Macquarie Park Strategic Infrastructure and Services Assessment
- Macquarie Park Strategic Master plan and Placemaking Strategy
- Macquarie Park Economic Development Study
- Macquarie Park Innovation Precinct Study
- Macquarie Park Strategic Integrated Transport Plan.

You can view these documents at planning.nsw.gov.au/macquariepark

From the past to today

Country and history

Macquarie Park is traditionally known as Wallumatta Ngurrungra. It is the place of the Black Snapper fish (Wallumai) and the Wallumattagal are the people of the snapper.

By the late 1900s, villages and town centres began to spring up along main roads and around rail stations, bringing with them large increases in population. The Ryde Housing Scheme was established in 1946 to address contemporary housing supply and affordability issues. Throughout the 1950s, Ryde continued to grow and urbanise and by 1957, Top Ryde, Australia's first drive-in shopping mall, opened its doors.

Macquarie University was established in 1964, and the post-war housing boom was matched by an expansion of Ryde's industrial and scientific sectors, including the establishment of a number of CSIRO facilities and the Gladesville industrial area.

Modern significance

Each phase has seen an intensification of land use and a change in the built form in the area. In 1979 the Ryde Planning Scheme required industrial/employment uses to have a "research and development" component to take advantage of the new University. Macquarie Centre, a shopping mall opposite Macquarie University, opened in 1981.

Since then, rezoning has encouraged more commercial and light industrial uses. In 1997 the completion of the M2 Motorway improved accessibility to (not within) Macquarie Park. Construction of the Epping to Chatswood rail link, which opened in 2009, changed land economics and made it viable to put parking underground.

Most recently in 2018, this rail link was redeveloped and incorporated into Sydney Metro Northwest, retaining stations at Macquarie University, Macquarie Park and North Ryde, increasing frequency of services to the area. These phases saw an intensification of land use and a change of built form in the area.

The industry-led Connect Macquarie Park Innovation District (CMPID) formed in 2015 to expand on the area's diverse economy to transition into an Innovation Precinct.

The \$1.8 billion Ivanhoe Estate redevelopment is the largest social housing project in Australia. It includes:

- 3,300 new homes, including 950 for social housing, 128 for affordable housing, and 273 for seniors living
- 2.8 hectares of open space including new parks, a skatepark and a playground
- a new primary school, two childcare centres, a town plaza, new shops, cafes and restaurants
- a new road connecting Herring Road with Lyonpark Road, with a new bridge over Shrimptons Creek.

With these recent developments, there is a mismatch between the scale and rate of residential growth and the provision of physical and social infrastructure including open space and schools infrastructure. To address this, the Ryde Coordination Group (RCG) was established to investigate the best opportunities for place-based planning and to improve collaboration.

Today

Macquarie Park benefits from its distinctive and high-performing assets. It is a leading employment centre with a strong foundation for innovation. People have limited access to open space with only small pockets of high-quality planting and canopy. The different university spaces could be better integrated into the broader area, as could Riverside Corporate Park and surrounding residential areas—it is not an easy area to traverse on foot and is disconnected to culture and Ngurra.

From a built form perspective, the campus-style plots include many surface-level car parks. These interact with light industrial units and a mix of architectural styles, including newer developments that provide more activity at street level. Most places in Macquarie Park are not conducive to sharing ideas.

Economics and employment

The fourth largest employment

centre in Greater Sydney

With floor space for more than 47,000 jobs, Macquarie Park is the fourth largest employment centre in Greater Sydney by number of employees and the largest non-CBD office market in Australia.

In 2020, Macquarie Park contained approximately 894,000sqm of commercial floor space, of which 617,000sqm is premium grade. The 'commercial core' accommodates businesses from pharmaceutical (19%), high tech, computing and technology (25%), electronics (20%) and telecommunications (7%).

Macquarie University services around 45,000 students and 3,000 staff, with more than 9,300 graduates entering the jobs market each year. Macquarie University Hospital is a private not-for-profit teaching hospital located on the university campus. The hospital employs approximately 500 staff.

Macquarie Centre offers large supermarkets, department stores and specialty shopping. Lachlan's Line and the Riverside Corporate Park contain more local retail offerings. People also shop at major bulky goods and large-format retailers along Epping Road.

Infrastructure

Three Sydney Metro Northwest

stations and 30 bus routes

In an established urban setting, Macquarie Park is generally well serviced by infrastructure and services. People can access three Sydney Metro Northwest stations and 30 bus routes. State roads include the M2 Motorway, Lane Cove Road, Delhi Road and Epping Road. Cycle facilities include shared paths along Waterloo Road, Talavera Road and Shrimptons Creek.

Public health facilities include hospitals at Ryde, Royal North Shore, Macquarie and the Children's Hospital at Westmead. Sports and recreational facilities include two 25-metre swimming pools, three multi-use indoor courts and Macquarie Centre ice skating rink. Most cultural facilities are found within Macquarie University, though are limited when providing for future growth and aspirations for increased activation.

Capacity and adequate levels of service to meet recent and future growth consistent with the vision and objectives of this place strategy will need investment in upgrades, expansions and new facilities across most sectors, especially schools and open space, given the current deficit.

Movement

70% of people who work in

Macquarie Park come by car

Approximately 70% of people who work in Macquarie Park come by car. With the Sydney Metro conversion and extension of rail services to Tallawong, the share of public transport trips has increased to 26%. We need further transport investment to reduce the proportion of car trips.

People walk mainly to and from Macquarie University, Macquarie Centre, businesses and green spaces such as Shrimptons Creek and Lane Cove National Park. These short walks are limited to workers going to work from their transport stop or short walks during lunch breaks. It is generally difficult for people to walk due to the long distances between safe crossings and limited direct paths.

The proximity to Lane Cove National Park provides an opportunity to increase cycling once the lack of facilities, safety issues and limited crossing opportunities can be addressed.

Open space

A shortfall of public space

Lane Cove National Park provides 670 hectares of regional open space and a leafy tree canopy. Waterways such as Shrimptons, Kikiya and Mars Creeks are available for people to enjoy, however access can be a challenge.

Within Macquarie Park itself, there are few public space areas and a shortfall—against best-practice benchmarks—of around 16 hectares.

Land use

Current uses will be

complimented with new uses

Macquarie Park includes a strong commercial core, with more diverse uses towards the north and south.

From the north, Macquarie University and Macquarie Centre define the educational and retail uses. Along Waterloo Road, the uses are mostly commercial with dispersed shops and ancillary uses. Around Shrimptons Creek and to the south, we see more housing centred around North Ryde Metro Station. CSIRO and other corporate headquarters are established in the Riverside Corporate Park.

The influx of new housing in the past decade is creating a visible change in the landscape, in part thanks to the rezoning of North Ryde Station and Herring Road precincts. There is strong demand for both commercial development and housing.

More residents mean more people live near workplaces and mass transit, bringing activity, increased public transport patronage and more pedestrian activity that supports retail centres as well as creating more demand for schools and open space. However, we need to balance the residential, economic and employment roles in Macquarie Park.

There is capacity for new housing. This could lead to more night-time activities that support retail and hospitality businesses. However, if housing demand was left unchecked, there would be implications for the road network and infrastructure, especially schools and open space. It could also potentially price business out of the market and reduce land supply for commercial expansion.

Macquarie Park will need to be intentionally planned to support a diversity of people, provide broad economic opportunity and connect to nearby communities. With an international resident base and growing numbers of young people in the area, there is potential for more inclusive programming to connect and expand industry opportunities.

Future

To transform from a place suited for a 20th century economy to one that thrives within a 21st century economy, Macquarie Park needs to increase in scale and have clusters of research, expertise, services and industries. It must provide a unique value proposition for industries with defined areas of specialisation.

By transitioning to an innovation precinct, Macquarie Park can spur productive, inclusive and sustainable economic development. It can offer adaptable and affordable spaces, an open and green environment, and continuing improvements to the local transport network.

Transitioning to an Innovation Precinct

Innovation precincts within a city are areas or 'ecosystems' with high levels of collaboration, ingenuity and economic growth potential directed towards a particular industry, institution or facility specific to a local area. There need to be places where ideas can be shared. Those planning for innovation precincts use an area's character and assets to attract investment from complementary industry tenants, services and facilities.

Macquarie Park's clustering of businesses over a large geographic area gives business access to a large, qualified labour pool, with a strong talent pipeline that is strengthened by the presence of the university.

Our vision for Macquarie Park is for its stronger role within Sydney and Australia's future economy. We can achieve this by diversifying industry-based sectors, encouraging a broader scale of businesses, building on collaborative partnerships, creating a new governance structure with strong leadership and investing in place-based improvements to create vibrancy and diversity.

The place strategy envisages 20,000 new jobs in Macquarie Park in an area that is more vibrant and connected. The aim is to attract high-growth firms. Based on wider macroeconomic and industry trends, we expect future growth will be focused on the following areas:

- Education: Macquarie University is a pioneer in collaboration with industry, business and the public sector and consistently supports individuals, firms and their ideas through partnerships such as the Optus-Macquarie University Cyber Security Hub.
- Medtech, health and biomedical sciences:
 Future partnerships with the private sector, like that between the Macquarie University and Cochlear, will bring mutual benefits and will be essential to grow employment in this sector.
- Health care: Macquarie Park is well placed to take advantage of the continued shift towards higher skilled, knowledge economy jobs, particularly in health care and social assistance.
- Advanced manufacturing: Several firms
 in Macquarie Park support pre-production
 advanced manufacturing activities, and the
 proximity of Macquarie University to advanced
 manufacturing research and development
 presents opportunities for continued growth.
- Digital and telecommunications: Existing
 projects such as the cyber security hub enable
 research that tackles security issues across
 multiple disciplines—computing, engineering,
 business, criminology and law. This is a sound
 foundation for future partnership models.

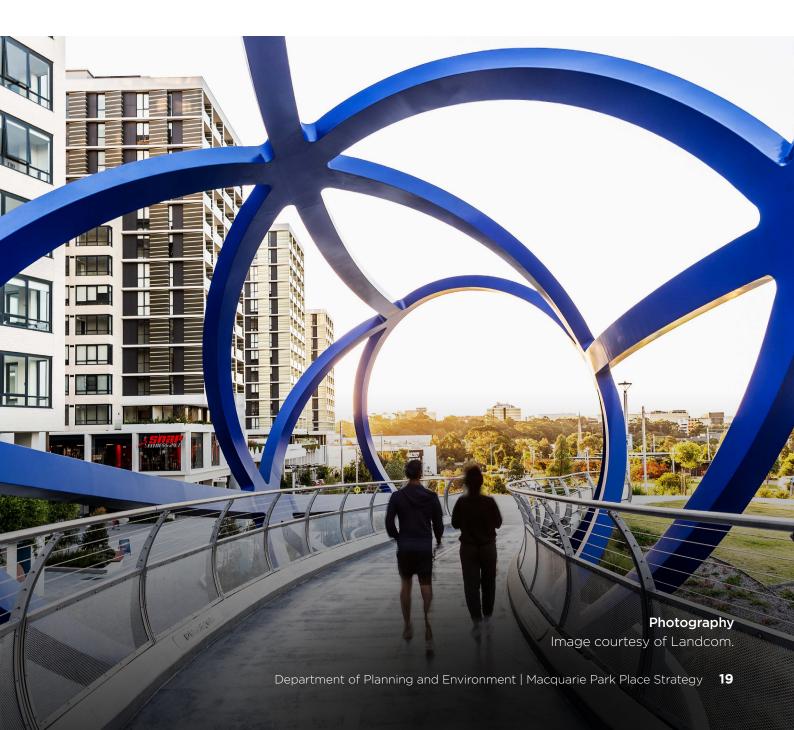
The correlation between place-based vibrancy and high-growth precincts is well documented. Macquarie Park scores well on measures such as transport access, quality work environments and good labour availability but less so in terms of pedestrian connectivity, road congestion, amenities and night-time activities.

Infrastructure

The scale and rate of population and housing growth over the last decade has brought demands for infrastructure and services from those living, working or studying in the area beyond that which is currently provided in Macquarie Park. We need to consider the existing and future demand for infrastructure and services to enable Macquarie Park to evolve into a more vibrant, active and walkable place, and a globally significant innovation precinct. Infrastructure funding will be a challenge that requires collaboration between the NSW Government, City of Ryde Council, industry and the community.

An Assurance Review of Planning in the Ryde Local Government Area by the then Greater Sydney Commission in 2019¹ identified a misalignment in the City of Ryde LGA between the timing of development and the provision of infrastructure to support it. This place strategy provides an opportunity to identify the infrastructure needed to support sustainable development as defined in the findings of the Assurance Review. The Commission has led the development of the Strategic Infrastructure and Services Assessment, which supports this place strategy. The assessment is available at greatercities.au/precincts-and-collaboration-areas/precincts

1. Visit greatercities.au and search for Ryde Assurance Review Stage 2 report



Movement

We are restructuring movement in Macquarie Park to make the area more accessible by foot and more suitable for sharing and collaboration. The place strategy proposes an approach to:

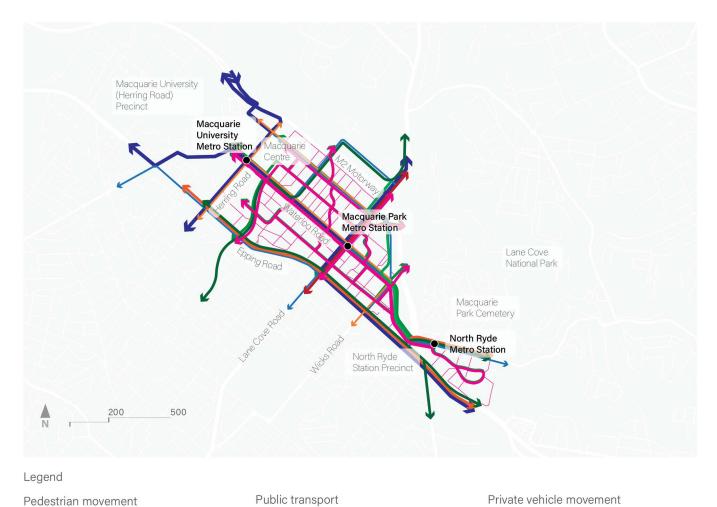
- rebalance the split between car use and sustainable transport use by addressing road capacity
- address the disparity between the 30-minute travel time catchments for public transport and cars
- reduce private parking availability to encourage sustainable travel
- reduce the distance between key places, such as home and work, and allow walking and cycling to become viable choices

- preserve land for longer-term mass-transit connections to/from Macquarie Park
- plan for safe and attractive walking and cycling infrastructure, integrated with open space and separated from general vehicle traffic, supported by new open space
- provide a dense network of walking routes
- investigate safe accessible paths of travel from the south side of Epping Road into Macquarie Park for new students to attend schools and the public to access new attractions, jobs and services
- test new transport solutions, such as electric buses and public charging stations.

Principal arterial (Lane Cove Rd)

Arterial (Epping Rd, Delhi Rd)

Collector



Strategic bus route

Local bus route

Metro station

Figure 3
Proposed movement framework

Pedestrian network

Fine grain network

Principal route tier 1Principal route tier 2

Cycle network map

Open space

Macquarie Park's new open spaces and connections to quality natural areas will emphasise the strong relationship to Wallumattagal Country and heritage.

The place strategy explores opportunities to connect back to the river and creek lines and introduce Country wayfinding, naming and public art.

Open space will be shared with schools, community and cultural events planned and designed in a way that achieves this through inclusion of supporting infrastructure.

Other forms of green infrastructure and natural capital, such as canopy, green walls and roofs, are maximised on public and open space and considered within, on top of and amongst buildings. These can be integrated with other layers of land uses.

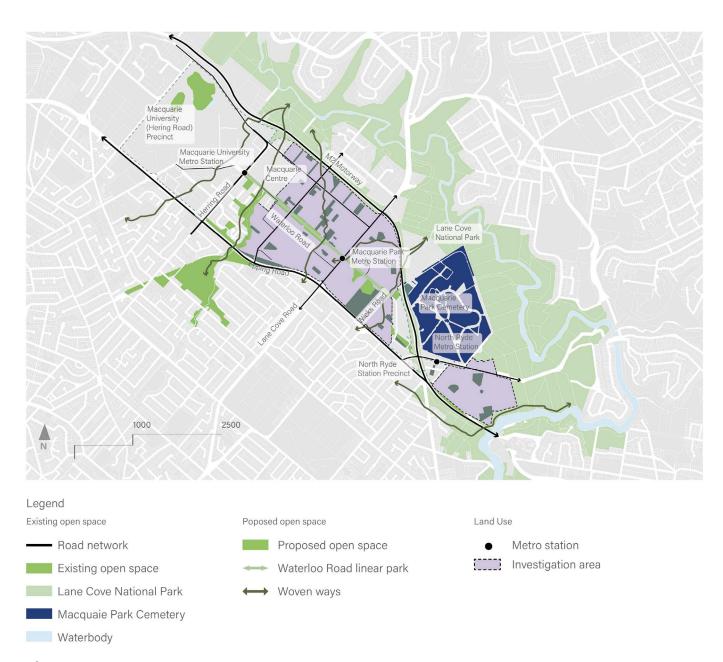


Figure 4Proposed landscape framework map to reflect proposed open space

Land use

The place strategy aims to address the challenges and future expectations of people, place, connectivity and respect for Country for Macquarie Park to adapt and evolve.

Addressing Macquarie Park's lack of quality public areas and its limited cultural and night-time economy will help boost the area's competitiveness alongside more developed urban centres by making it easier for people to share ideas and collaborate.

In this way, we think of Macquarie Park as a 'place of many places' through a series of different neighbourhoods. This will strengthen synergies with existing and emerging neighbourhoods such as Lachlan's Line, Herring Road and North Ryde.

These neighbourhoods are distinct character areas that support a resilient economic future and cultural diversity. Current uses will be complimented with new uses throughout the investigation area. The new activity hubs located at the core of the neighbourhoods will include additional retail, commercial and, in some neighbourhoods, residential uses.

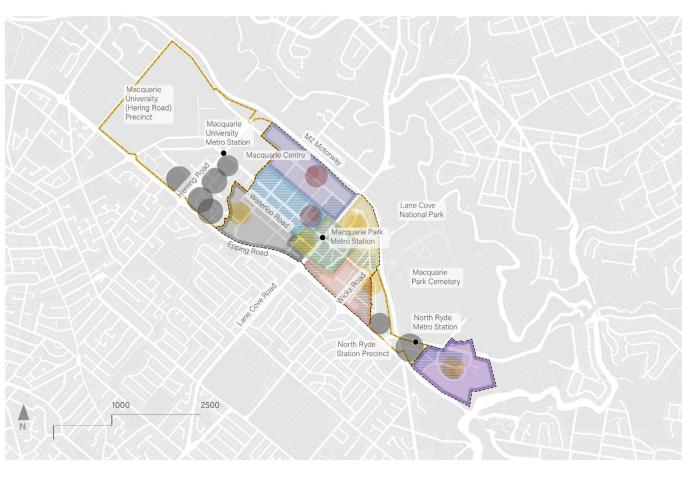




Figure 5Proposed uses and activities framework

We have developed six big moves—key interventions to realise the opportunities to integrate the actions and the transition to an innovation precinct. Our big moves are ambitious, requiring coordination between, and resourcing from, multiple State agencies, Council and industry. Their implementation will require, and will benefit from, extensive community consultation.





Drive the transformation of Macquarie Park into an innovation precinct

This big move leverages the existing economic structure of Macquarie Park to accelerate initiatives that drive economic growth.

Prioritising the pursuit of talent and technology to create diverse economic and employment opportunities requires the cooperation of a recognised leadership network. This network can promote the retention and development of talented and skilled people through small and medium incubator enterprises, and foster a more robust mix of sectors that are more resilient to economic shocks.

The collaborative nature of this network allows access to both private and public funding to stimulate and transform the physical landscape, while increased residential uses and neighbourhood regeneration provide opportunities for local entrepreneurship that fosters a sense of place and community atmosphere.

Businesses in Macquarie Park will be able to take advantage of the area's valuable economic anchors while supporting collaborative innovation at all scales. This will build resilience to shocks and stresses, allow businesses to adapt to global trends and encourage social investment to increase access to talent.



Actions

We proposed the following actions are implemented across Macquarie Park Corridor:

- 1.1 Extend trading hours of core night-time uses with infrastructure to support temporary popups near key interchanges after 5pm.
- 1.2 Design a fit-for-purpose future governance structure to drive growth and provide a coordinated and collaborative vision for Macquarie Park's future, based on the place strategy.
- 1.3 Continue to engage the private sector and the local community actively in events and program development through initiatives such as the Venture cafe and the Macquarie University Incubator.
- 1.4 Promote entrepreneurship and provide opportunities for smaller businesses to increase their exposure to anchor institutions through initiatives such as the CMPID and Macquarie Park forum.
- 1.5 Promote outwards links (leveraging the Hearing Hub and medical research facilities) including local, regional and international networks, including using Macquarie Park as a test bed to promote innovation and the trial of new technologies.
- 1.6 Support business growth and inward investment through incentives to create live-work opportunities for entrepreneurs.

- 1.7 Develop a private sector funding strategy for investments within Macquarie Park.
- 1.8 Work to intensify venture capital presence.
- 1.9 Continue to fund for programmed public spaces and events and create places and spaces for community and worker interaction.
- 1.10 Promote investment in digital infrastructure and technology across Macquarie Park to create a high-quality platform for innovative firms and strengthen the area's networking assets.
- 1.11 Work with the private sector to deliver commercial floor space that provides curated, affordable and agile space for new and innovative enterprises.

In addition to the above actions, we propose the following for the investigation area:

- 1.12 Develop planning controls to create flexible and adaptable floor space that can cater for a range of business types, sizes and sectors as the demand shifts.
- 1.13 Investigate opportunities for a purposebuilt building in a strategic location within the commercial core that provides curated, affordable and agile office space for new and innovative enterprises.





Scale and time new development to match infrastructure capacity

The provision of sufficient physical and social infrastructure is essential for Macquarie Park to transition to an innovation precinct. The Strategic Infrastructure and Services Assessment has considered the impact of growth and change in the area and how appropriate services and infrastructure can support our place-based approach to Macquarie Park's evolution.

The assessment identifies over 190 infrastructure and service proposals, estimated to cost approximately \$6.4 billion to 2036. This includes capital costs for proposals through to 2036, as well as planning and development costs to enable a pipeline of future projects beyond 2036. About \$3.9 billion is associated with major linear city-shaping and city-serving transport infrastructure such as a future Parramatta to Epping mass transit link and several strategic rapid bus corridors, and planning/development costs to enable future public transport links beyond 2036.

This infrastructure will provide wide-ranging benefits for many communities across Greater Sydney, meaning only a small portion of these costs could solely be attributed to Macquarie Park.

More work is required to understand which infrastructure should be prioritised to enable the staged growth of Macquarie Park.

Actions

We proposed the following actions are implemented across Macquarie Park Corridor:

2.1 Investigate opportunities for new and upgraded schools of all levels across Macquarie Park.

2.2 Develop an infrastructure priority list for Macquarie Park to shortlist the projects that will deliver the greatest economic, social and health impact.

2.3 Develop strategic place-based infrastructure plan to support agency in-flight projects.

In addition to the above actions, we propose the following for the investigation area:

2.4 Develop state and local infrastructure delivery and contributions plan(s).

PhotographyImage courtesy of Landcom.



Rebalance transport uses

Improving the quality of how people and goods move around Macquarie Park requires better local and regional connections through a new movement and place framework. This will encourage walking, cycling and public transport use, and provide a safe road environment, suitable pathways and streets that balance movement of people and goods with amenity of place. This will mean more people can access Macquarie Park within 30 minutes by public transport, seven days a week.



Actions

We proposed the following actions are

3.2 Prepare precinct transport study.

floor area within developments.

from private vehicle use.

3.1 Encourage a sustained transition away

3.3 Reduce the overall quantum of parking

relative to the number of employees and/or

implemented across Macquarie Park Corridor:



Prioritise and enrich the pedestrian experience

This big move will improve the quality of public areas and how people move around. By responding to natural features and attributes of Country we can create better places for people and boost Macquarie Park's competitiveness.



Actions

We proposed the following actions are implemented across Macquarie Park Corridor:

- 4.1 Implement slow and low speed limits across Macquarie Park.
- 4.2 Enhance lighting, signage, clear sightlines of pedestrian and cycle networks through building design, and activity at ground level and new and existing public spaces to keep 'eyes on the ground' at all times of the day.
- 4.3 Improve Waterloo Road as a pedestrian connector between neighbourhoods.
- 4.4 Continue to incentivise private development to provide 20m and 14.5m wide streets and 8m wide pedestrian links, including separate pathways and cycleways for pedestrians and cyclists, integrated with green infrastructure where possible.

In addition to the above actions, the following are to be implemented in the investigation area:

- 4.5 Provide informal paths through and around buildings that take pedestrians away from major roads and into side streets and laneways that respond to natural features of Ngurra.
- 4.6 Design intersections, undertake landscaping and use robust materials, fixtures and furniture to improve the experience for pedestrians.
- 4.7 Design new built areas that open up the large super lots of land and connect to the public domain through more active uses at street level.
- 4.8 Plan for informal meeting spaces in public areas.
- 4.9 Widen footpaths.



Create sustainable neighbourhoods within Macquarie Park, each with their own identity and role

This big move defines seven neighbourhoods in the investigation area. Along with the two precincts already rezoned, these nine distinct neighbourhoods of Macquarie Park will create a 'place of many places'.

We have the opportunity to create new cultural, entertainment and visitor uses that all contribute to a lively 18-hour economy that attracts new businesses, workers, visitors and investors.

Residential uses will be introduced in some neighbourhoods as a catalyst for activity to support the growth of Macquarie Park as an employment centre and transition to an innovation precinct.

This place strategy allows for the development of performance standard pathways to net zero energy buildings so development can contribute to the NSW Government's objective of net zero emissions by 2050. It will also help us to shift how people travel, reducing the need for onsite parking and opening up opportunities to re-use land otherwise used for on-street and off-street parking.

Neighbourhood master planning and rezoning will happen in stages, over the 20-year life of the strategy and as infrastructure capacity and new amenity is created

Actions

We proposed the following actions are implemented across Macquarie Park Corridor:

5.1 Undertake staged master planning and design guidelines for each new neighbourhood, including a distinct commercial core.

5.2 Establish a commitment to excellence across design and sustainability to achieve high-quality built form, public domain, environmental amenity and performance outcomes to guide quality for planning, development and delivery.

5.3 Investigate new entertainment, events and cultural spaces.

5.4 Introduce best-practice resilient building design controls to mitigate environmental impacts and promote energy and water savings/recycling.

5.5 Ensure a diversity of dwelling typologies including 5-10% affordable housing.

5.6 Contribute to the goal of net zero emissions by 2050.

5.7 Identify potential water-sensitive urban design opportunities in new open space and creek restoration works for optimised urban stormwater management.

5.8 Mitigate impacts of stormwater runoff and impacts of wastewater services from existing and new development in a more sensitive way.

Photography

Image courtesy of Department of Planning and Environment.



Connect to Country and deliver better quality open spaces

This big move will create more public open space, improve the quality and connection of public open space and better interface with Macquarie Park's unique setting within Wallumattagal Country and its history as a place of higher learning.

More quality open space contributes to healthy built environments. But in a dense urban area like Macquarie Park, land is in high demand. We need new and innovative approaches to how we create open space and manage the natural assets of the creeks. We need to consider the interface between land and water so that people can see and know Wallumattagal Country through nature, culture, programming and activation.

Actions

We proposed the following actions are implemented across Macquarie Park Corridor:

6.1 Make Dharug culture more visible by exploring the integration of Dharug language and symbols on signage, wayfinding, building names, new street names and public art.

6.2 Work with Traditional Custodians and knowledge holders to enliven the public realm with programming, activation and installations.

6.3 Investigate opportunities to include Aboriginal representation in Macquarie Park governance structures.

In addition to the above actions, we propose the following for the investigation area:

6.4 Become a leader in green space design, providing new, inviting, accessible, diverse and comfortable public open space and enhanced public open space.

6.5 Create a well-connected network of new and improved open spaces for the growing Macquarie Park community.

6.6 Investigate opportunities to show and open up the creek spaces and historic lines as open water and as places of increased biodiversity and green infrastructure.

6.7 Create a richer urban tree canopy along major roads and intersections.

6.8 Provide high-quality green infrastructure including, where feasible, creek restoration.

Photography

Image courtesy of Department of Planning and Environment.



Master plan

The master plan represents an aspirational end-state for Macquarie Park's revitalisation and will inform more detailed master planning and rezoning work. It is designed broadly around existing assets, planned investment or policy directions, and recommended interventions. It incorporates an assessment of Macquarie Park's movement, open space and social infrastructure needs.

The master plan is supported by a strategic spatial framework that seeks to increase connectivity and rebalance transport, moving Macquarie Park from a 20th century suburban campus to a 21st century

urban place that encourages the sharing of ideas and builds an ecosystem of collaboration and innovation. The interwoven layers of the master plan and strategic spatial framework are brought together by the overarching approach of Country-centred design.

Read about the structure plan in the Macquarie Park Innovation Precinct Master Plan, in particular the movement layer in the supporting analysis at planning.nsw.gov.au/macquariepark

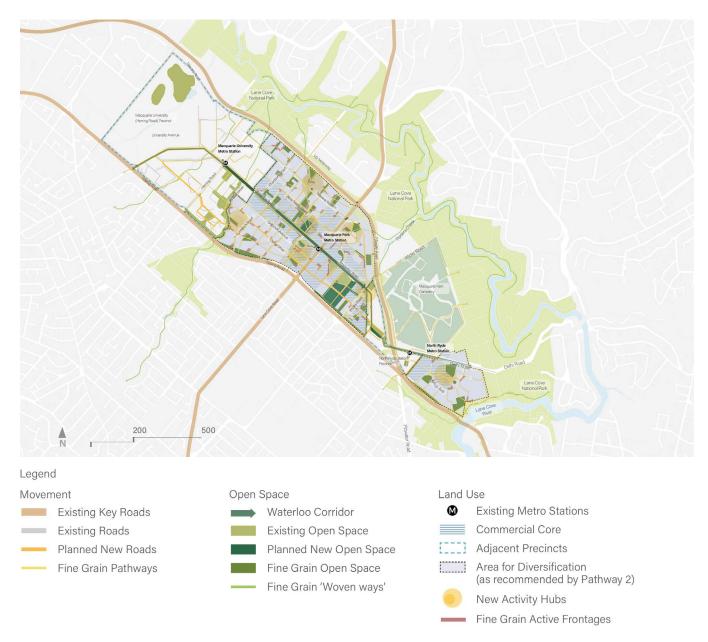


Figure 6
Proposed structure plan

A place of many places

Each neighbourhood of Macquarie Park will have distinct features to support a resilient economic future and cultural diversity.

Seven new neighbourhoods are proposed for the investigation area covered by the master plan. We defined these by natural elements, geographical boundaries and names to reflect the area's deep-time history and a connection to the Songlines, stories and traditional knowledge of the Wallumatta.

The seven neighbourhoods are:

1. North Park - Ngalawala (Reciprocity)

- 2. Waterloo Park Butbut (Heart)
- 3. Shrimptons Quarter Waragal Birrung (Evening Star)
- 4. Macquarie Living Station Gari Nawi (Saltwater Canoe)
- 5. Porters Creek Burbigal (Morning)
- 6. Wicks Road South Garungul (Unbreakable)
- 7. North Ryde Riverside Narrami Badu-Gumada (Connecting Water Spirit)

To realise this transformation and prioritise the actions from the 'big moves', we have established design criteria for each neighbourhood based on the existing urban setting and proximity to natural assets. A collective set of design criteria also applies to the investigation area overall.



Legend

1) North Park

- Ngalawala (Reciprocity)

Waterloo Park

- Butbut (Heart)

Shrimptons Quarter

- Waragal Birrung (Evening Star)

Macquarie Living Station

- Gari Nawi (Saltwater Canoe)

S Porters Creek

- Burbigal (Morning)

(6) Wicks Road South

- Garungul (Unbreakable)

7 North Ryde Riverside

 Narrami Badu-Gumada (Connecting Water Spirit)

Metro station





---- Macquarie Park Investigation Area

Figure 7

Proposed neighbourhoods

Overall design criteria

The following design criteria apply to all new neighbourhoods in the investigation area, with design criteria for each neighbourhood set out in the next section. These criteria, and those specific to neighbourhoods, will be used to inform preparation of the neighbourhood master plans, planning proposals and development applications.

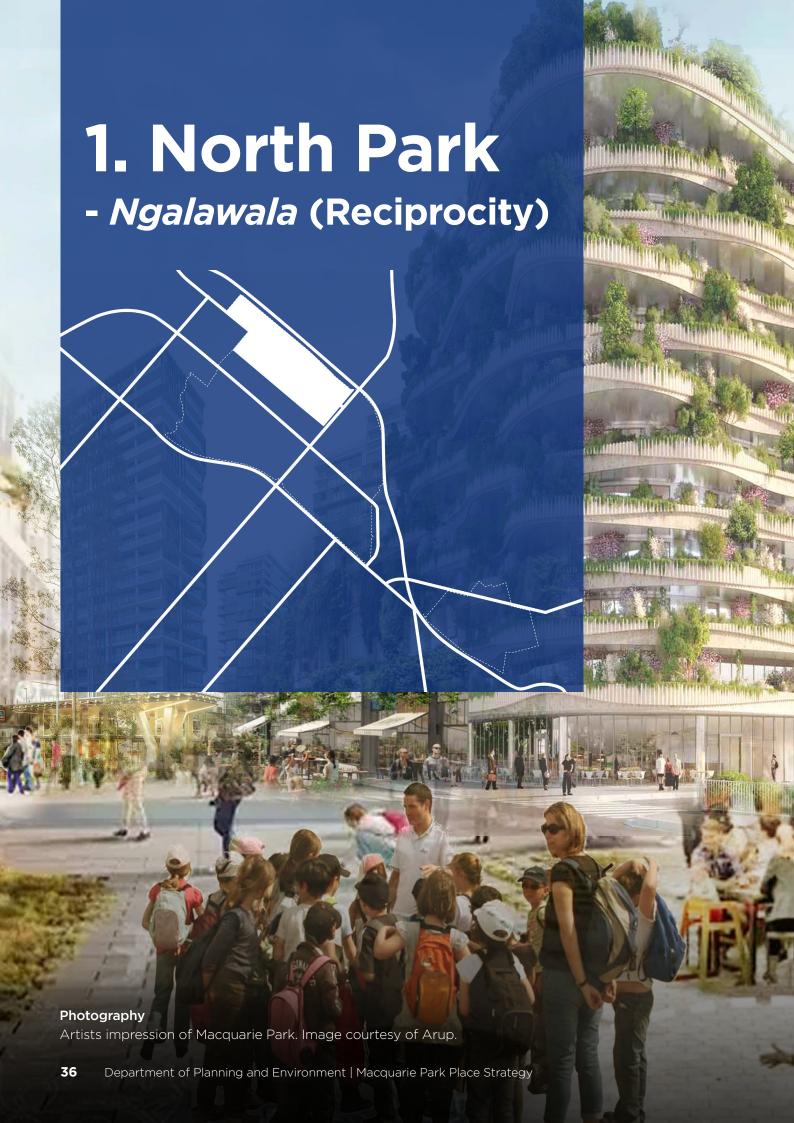
Table 1Design criteria

Design c	riteria	Description
	New public open space	 Ensure open space is inviting, accessible, diverse and comfortable, fostering opportunities for active lifestyles and social connections. Ensure visual and physical connectivity between the open spaces, woven ways and through-site access to link them to each other and to the wider area. Ensure open space design considers and embraces the topography of the neighbourhood.
(m)	Greenery	 Ensure no net loss of canopy across the precinct. Aim for the following canopy targets: Residential zoned land including streets 40%. Business zoned land including streets 35%. Open space including streets 45%.
	Building typologies	 Avoid large footprint, single-site buildings and aim for series of buildings around courtyards that allow through-site links. Consider mixed-use buildings with cultural, educational/school, health and community facilities as well as residential and commercial uses. Encourage a diversity of apartment types, sizes and layouts to accommodate households of all ages, abilities, sizes and needs, including those with demands on space and acoustic privacy due to working from home. Use changes in scale and built form to create architectural interest and diversity and enhance relationship with the public domain.
*	Overshadowing	 Protect solar access to public open space, with winter solstice protection from 10am to 2pm. Require all solar testing without the benefit of artificial solar access or heliostat intervention.
	Wind	 Design building massing, set backs and articulation zones to enable the achievement of appropriate wind conditions. Ensure design mitigates adverse wind effects and satisfies the relevant wind criteria for the intended uses of the public domain. Ensure design does not exceed the Wind Safety Standard. Ensure wind impacts in public areas should not exceed the wind comfort standard criteria for sitting, standing and walking, considering the intended use of the space.

Table 1Design criteria (continued)

Design criteria **Description Building design** Ensure design responds to context, character, culture and Country. Promote architecture that puts people first, including how they experience a building at street level and how public areas and buildings interface. Encourage innovative, creative and high-quality building design that positively contributes to the public domain and defines streets and public spaces. Achieve high-level sustainable development baseline targets. Location of Locate taller buildings where they have least shadow impact on taller buildings public areas, including footpaths, connections and meeting spaces. Locate taller buildings to take advantage of views and proximity to open space. • Ensure adequate separation between buildings to maximise direct solar access to adjoining properties. Use appropriate design features on taller buildings to minimise the impact of wind on the public domain. **Taller building** Avoid visual bulk when taller buildings are viewed from street areas design not only at site level, but when considering the buildings together at the activity hubs and from, where relevant, the M2 or creek areas. • Design taller buildings to allow for a permeable and interesting skyline. Provide variation in built form and heights to ensure appropriate interface with adjacent development sites. Maximise direct solar access to adjoining properties. Podium design Consider weather protection and clear identifiable entrances. Prioritise building frontages that create human scale and are busy and active, addressing open space, pathways and woven ways to bring activity and connections and provide passive surveillance.







Ngalawala is the northern quadrant of Macquarie Park between Shrimptons Creek and Porters Creek, adjacent to M2 Motorway. Ngalawala, meaning reciprocity, is the foundation of law/lore and an important principle for a future business-focused neighbourhood.



Statement sentence

A commercial neighbourhood with a new activity hub supported by the Metro station and a diversified local centre. A restored Industrial Creek will provide a focus to connect quality open spaces. A new cluster of public uses will encourage places for gathering and meeting.

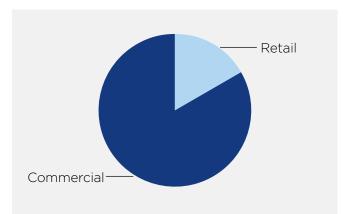


Key stats

4,000+ new jobs

18-hour economy

no residential population



450,000-500,000sqm total built space. No new homes.

Ngalawala is characterised by its proximity to the Lane Cove National Park. It links from the rear of Macquarie Centre to Lane Cove Road and from the M2 Motorway southward to a series of incomplete connections that run parallel to Waterloo Road.

Industrial Creek can be better used, both in physical and interpretational forms, integrating the presence of water and its connection back to the Lane Cove River.



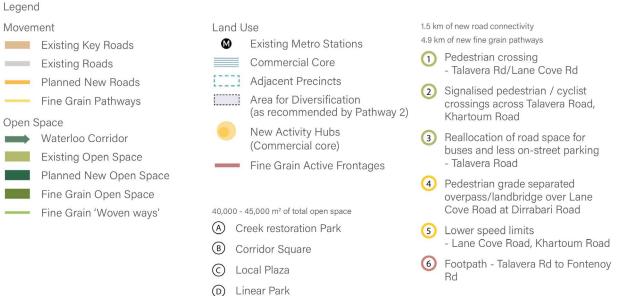


Figure 8Proposed Structure Plan: North Park - Ngalawala (Reciprocity)

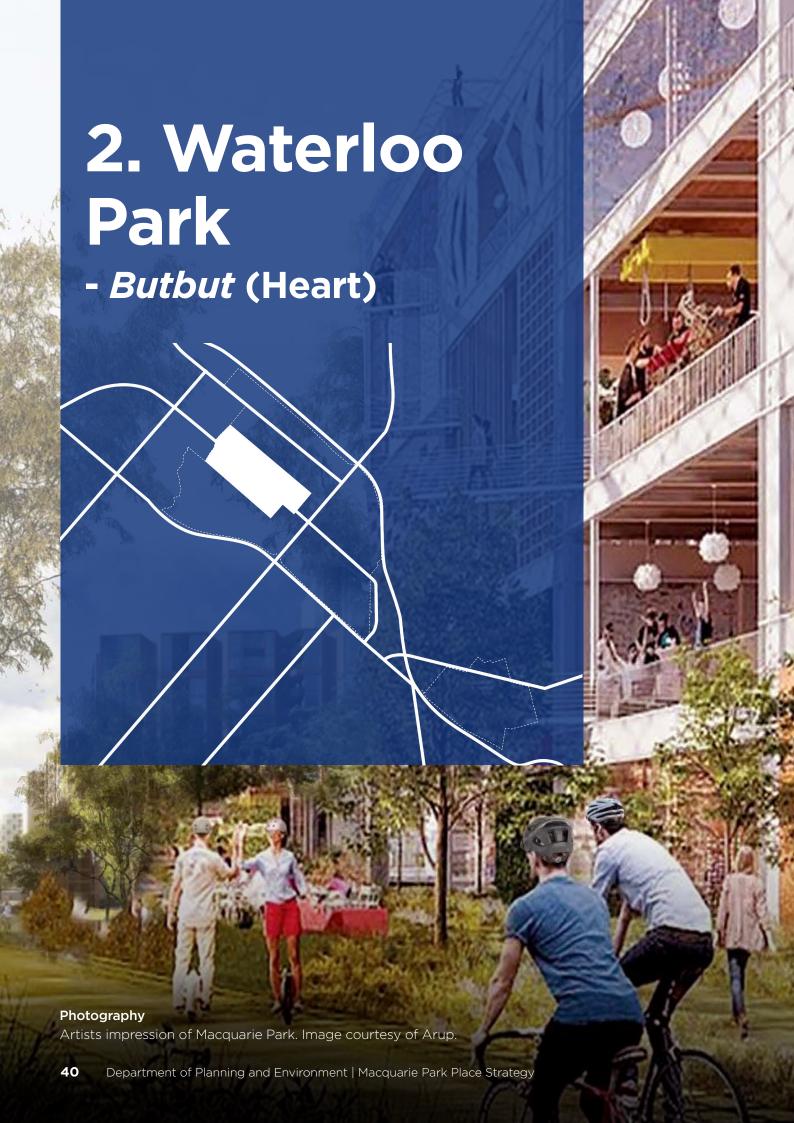
- The proximity of Macquarie Centre plays an important anchor role, especially with the creation of new streets accessing the retail precinct (New North Street). The existing high-profile pharmaceutical business also forms a key business anchor.
- Responsive, Reciprocity and Relationships are connections to Ngurra, represented with links to open spaces, natural landscape and recreation spaces through to natural creeks including Barabiyanga (Porters) Creek.
- Around Industrial Creek and Khartoum Road, a new cluster of public-facing uses will encourage gathering and meeting throughout the day—this could include new performance and arts spaces around the creek line.
- Improvements to Khartoum Road will assist east-west connections within the urban environment and improve access to the national park. Woven ways will link key sites and have a strong role in creating a walkable neighbourhood.
- Adjacent landowners will work together
 to create the woven ways that will be an
 exemplar for delivery focused on connectivity
 and walkability.

Phasing and delivery

Years 1-5	Years 6-10	From year 11+
New diversified employment space for approximately 1,000 new jobs	Additional 1,000 new jobs with increased diversity of type and sector and further local	Space for 2,000+ additional jobs in a diversity of sectors and scales
Innovation-led temporary and meanwhile uses	residential growth 18-hour economy strategy	New infrastructure connections Continuous connection along
New ceremonial spaces for culture	Permanent and temporary connectivity projects through the fine grain road network and woven ways	Khartoum Road

Neighbourhood design criteria

Design criteria New public open space Create 50,000sqm of parks, squares, plazas and linear parks. Create open spaces that are inviting, accessible, diverse, comfortable and encourage activation. Restore Industrial Creek and integrate the riparian corridor into Creek Restoration Park. Ensure all areas are within 400m of a 3,000sqm park. Location of taller buildings Location of Talavera Road and Within the new activity hub at the intersection of Talavera Road and Khartoum Road.





This neighbourhood connects the emerging Herring Road Precinct and the university to Macquarie Park Station, cutting across the ridges between Porters Creek and Shrimptons Creek. It has potential to form a new green focus for Macquarie Park.



Statement sentence

This is the main central neighbourhood that connects Herring Road to Macquarie Park Station. It is a commercial neighbourhood, with a new activity hub, extensive existing commercial core and potential to form a new green focus for Macquarie Park, a connecting link and a welcoming space of arrival.

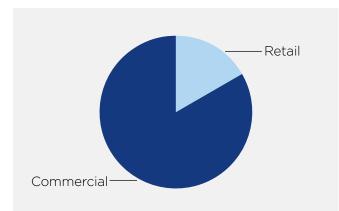


Key stats

1,000+ new jobs

18-hour economy

no new residential population



300,000-400,000sqm total built space. No new homes.

Butbut is characterised by its position on Waterloo Road. It will link to and connect with walking and cycling links and better public transport interchanges and micro-mobility options. More active shopfronts will support the commercial core of Macquarie Park. Waterloo Road will transform into a place more than a movement area, with intensified tree planting connecting new open spaces at Khartoum Road and Coolinga Street. Here the line of the creek will

be revealed with water within the public realm and enhancing green infrastructure to define and demark the route of the creeks.

The new Transport for NSW offices and associated open space adds vibrancy to the neighbourhood. New links and smaller block structures create opportunities for finer grain employment spaces. A new activity hub will cluster around Industrial Creek and its parks.



Land Use 2.2 km of new road connectivity Movement 3.4 km of new fine grain pathways **Existing Metro Stations** Existing Key Roads Macquarie University Bus Interchange Commercial Core **Existing Roads** (MUBI) [___] Adjacent Precincts Planned New Roads 2 pedestrian crossings across Waterloo Area for Diversification Fine Grain Pathways Road (as recommended by Pathway 2) Open Space BPIP Stage 1 and 2 improvements New Activity Hubs including new signalised pedestrian Waterloo Corridor (Commercial Core) crossings **Existing Open Space** Fine Grain Active Frontages Waterloo Road improvements: bus Planned New Open Space lanes, fine grain street access Fine Grain Open Space Lower speed limits - Waterloo Road and Fine Grain 'Woven ways' 40,000 - 45,000 m² of total open space Khartoum Roads A Central Park creek restoration

Figure 9
Proposed Structure Plan: Waterloo Park - Butbut (Heart)

B Corridor SquareC Local Plaza

- The Transport for NSW headquarters building and associated open space forms an **important new anchor**. This cluster will be enhanced into high-profile science and technology buildings around Waterloo Road and connected to Macquarie Park Metro Station.
- Linking across the high points and connecting the two primary creeks, Butbut can be the healthy, healing heart of Wallumatta.
 It will be characterised by health, medicine, pharmaceutical businesses and educational institutions.
- The Macquarie University Faculty of Engineering presents an opportunity to develop a **cluster of public uses**, with a whole life learning offer in a natural setting around the creek.
- A corridor with multiple walking trails, cycleways and possible micro-mobility corridors weaving through and across the neighbourhood.
- Adjacent landowners and state agencies will need to work together to deliver benefits.

Phasing and delivery

Years 1-5	Years 6-10	From year 11+
New diversified employment space for approximately 100 new jobs	Increased diversity of jobs by type and sector and 300 new jobs	Space for 600+ additional jobs in a diversity of sectors and scales
Innovation-led temporary office spaces	Waterloo Road public realm plan implemented	New infrastructure connections Increased presence of university
New cycling infrastructure	Permanent and temporary connectivity projects	uses within the neighbourhood

Neighbourhood design criteria

Design criteria		Description
	New public open space	 Create 25,000sqm of parks, plazas and linear parks and 25,000sqm of enhanced open space.
		 Restore Industrial Creek and integrate the riparian corridor into the neighbourhood as a woven way and revealed within Central Park.
		 Ensure the linear park along Waterloo Road provides intensified tree planting and landscaping linking key destinations and providing intimate dwell spaces.
		• Plan for all areas to be within 400m of a minimum 3,000sqm park.
φ <u>γ</u>	Podium design	Ensure buildings along Waterloo Road should address this key spine road and 'gateway' to the area.

3. Shrimptons Quarter - Waragal Birrung (Evening Star) Photography Image courtesy of Department of Planning and Environment. 44 Department of Planning and Environment | Macquarie Park Place Strategy



Waragal Birrung is close to Shrimptons Creek and directly interfaces with the Herring Road Precinct and the Ivanhoe Estate.



Statement sentence

Planned commercial and residential growth will create a new activity hub, drawing from existing economic anchors and spurring opportunity for innovation and interconnection with surrounding communities at the Ivanhoe Estate and Shrimptons Quarter.

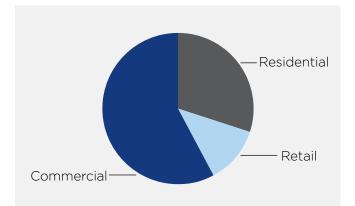


Key stats

2,400+ new jobs

18-hour economy

2,100-2,600 new homes



600,000-650,000sqm total built space. 2,100-2,600 new homes.

Waragal Birrung provides both the practical access to Metro stations within landscaped edges and proximity to open spaces. We can look to create synergies with new communities in the Ivanhoe Estate and the wider Herring Road Precinct as both transform in the coming years. Shrimptons Creek, a 3.3 km tributary of Lane Cove River, is being revitalised to enhance access to open spaces that link to Wilga Park and Elouera Reserve. A corridor of walking trails, cycleways

and possible micro-mobility corridors will weave through and across the water corridors. Buses may be prioritised as part of consolidated public transport plan to link Macquarie Park Metro Station and Macquarie University Metro Station.

The eight-hectare Optus campus in this neighbourhood gives workers and residents access to green spaces, dining options and the nearby Macquarie University Metro Station.



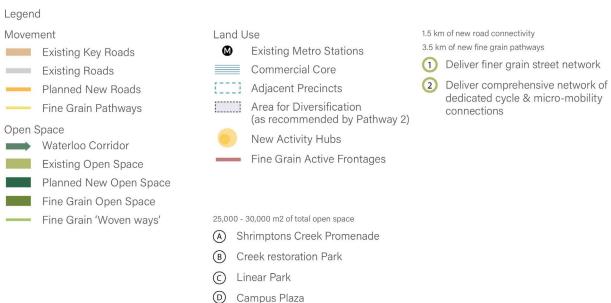


Figure 10Proposed Structure Plan: Shrimptons Quarter - Waragal Birrung (Evening Star)

- The Optus campus is an important economic anchor. Clustering further telecommunications business and increasing the diversity of workspace will enrich the attraction of the area.
- The interaction between a new residential community at the Ivanhoe Estate, linked by a new footbridge, and new commercial uses create an opportunity for cultural spaces to mix these previously separate users.
- New residential communities in the Ivanhoe
 Estate and Shrimptons Quarter will include
 active spaces and community facilities.

- A network of active transport and links
 to open space will use natural corridors to
 connect people to Ivanhoe Estate and in and
 between publicly accessible courtyards and
 shared spaces.
- Regeneration of Industrial Creek and better access to Shrimptons Creek creates opportunity to weave uses and places together between the university and business community.
- Collaboration between Optus and the wider technology cohort could be extended to collaborative working with new residential communities.

Phasing and delivery

Years 1-5	Years 6-10	From year 11+	
New diversified employment space for approximately 400	Space for 400 additional jobs in a diversity of sectors and scales	Space for 2,000+ additional jobs in a diversity of sectors and scales	
new jobs Approximately 320 new dwellings	Approximately 320 new dwellings	Additional 1,460+ dwellings	
5	Continued environmental	New infrastructure connections	
Creation of Creative Pop Up	upgrades to the creek	Rollout of 18-hour	
Active uses facing the creek		economic strategy	
		Through-site links in Optus campus	

Neighbourhood design criteria

Design criteria Description New public Create 45,000sqm of new open space, promenades, plazas and open space linear parks. Restore Industrial Creek and integrate neighbourhood within parks that sit alongside it. Create Shrimptons Creek Promenade along the natural riparian corridor with improved pedestrian and cycle links which also connect to existing residential development to the west. • Use linear parks to form the landscaped western edge of the neighbourhood. • Ensure all residential dwellings are within 200m of a 3,000sqm park. **Podium** For development near Shrimptons Creek, orientate building entries to design the creek to encourage activity and passive surveillance.

4. Macquarie **Living Station** - Gari Nawi (Saltwater Canoe) **Photography** Image courtesy of Department of Planning and Environment. 48 Department of Planning and Environment | Macquarie Park Place Strategy



Gari Nawi is located around Macquarie Park Metro Station and contains the intersection of Lane Cove Road and Waterloo Road.



Statement sentence

This predominantly commercial neighbourhood will encompass a new activity hub, an extensive commercial core and new residential development, giving it the capacity to develop into a denser and more integrated place of economic vitality.

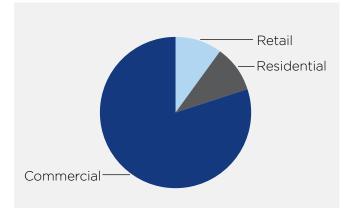


Key stats

2,000+ new jobs

18-hour economy

350-450 new homes



500,000-550,000sqm total built space. 350-450 new homes.

Gari Nawi provides workers and residents easy access to Metro services or strategic bus routes. This gives it the capacity to develop deeper connections, intensified economies, active cultural offerings and stronger partnerships.

The intersection of Lane Cove Road and Waterloo Road is a key node for the whole of Macquarie Park. Current movement is characterised by wide grid form roads. Limited pedestrian crossings restrict pedestrian movement while facilitating vehicle movement.

The Macquarie University Faculty of Engineering buildings present an opportunity to create a cluster of public facing uses and activities. There will be a lifelong learning building that will align with Industrial Creek. Potential for Create NSW and Council to collaborate and explore opportunities for these spaces.

Walking, cycling and micro-mobility connections will work alongside bus priority initiatives.



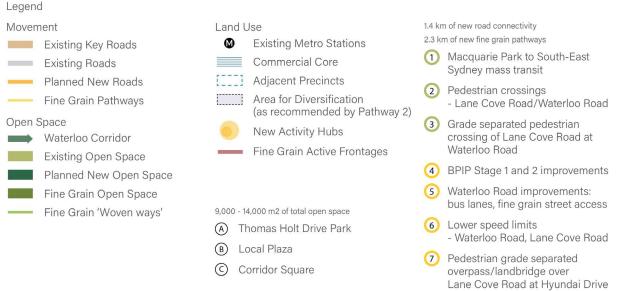


Figure 11Proposed Structure Plan: Macquarie Living Station - Gari Nawi (Saltwater Canoe)

- Intensive development should include cultural spaces and activity areas that benefit from evening footfall and Metro connections.
- Hyundai's Australasian HQ provides a strong brand that could attract further A grade commercial space around the Metro station.
- Residential developments can catalyse clusters of ground floor uses and the potential for activity at different times of the day. The opportunity to explore residential development exists within the identified activity hub.
- The Metro station—including lower level connections into the concourse from adjoining plots—will be optimised. Safe crossings will be planned for Lane Cove Road and woven ways through shared spaces will create better walking links.
- Aligned and assembled landowners'
 collaborative schemes will be supported
 alongside work across government to increase
 interconnectivity and passenger experiences.
- The key intersection node allows views over the creeks lines to the river and national park, providing a sense of connection to Country.

Phasing and delivery

Years 1-5	Years 6-10	From year 11+
New diversified employment space for approximately 500 new jobs Approximately 90	Space for 500 additional jobs in a diversity of sectors and scales	Space for 1,200+ additional jobs in a diversity of sectors and scales
	Approximately 80 new dwellings	Additional 180+ dwellings
new dwellings New public art program	Conversion of car parks into active uses	Integration of Metro station into neighbourhood
Cultural spaces	Continued environmental upgrades to the creek	Roll out of 18-hour economic strategy

Neighbourhood design criteria

Design criteria		Description
	New public open space	 Create 11,000sqm of parks, plazas and squares and 3,000sqm of new open space. Plan for commercial areas to be within 400m of 3,000sqm park. Plan for residential dwellings to be within 200m of 3,000sqm park.
Q	Location of taller buildings	 Locate taller buildings around the Metro Station and activity hub. Locate height to take advantage of views (Lane Cove National Park) and open space. Provide variation in built form and heights to interface nicely with adjacent development sites.

5. Porters Creek

- Burbigal (Morning)

Fignite

Photography

Image courtesy of Department of Planning and Environment.



The neighbourhood is the eastern edge and interfaces with the national park and commercial core bounded by the M2 Motorway.



Statement sentence

A predominantly commercial and retail space within an existing electronics cluster, this neighbourhood offers proximity to the station and attractive landscaped areas.

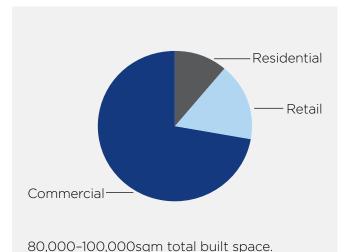


Key stats

600+ new jobs

18-hour economy

400-600 new homes



Burbigal is bound by Lane Cove Road to the north, the Lane Cove National Park and M2 Motorway to the east and Wicks Road to the south. It offers key open space and connections to the natural environment through Fountain Garden, Halifax Street Park and Porters Creek.

400-600 new homes.



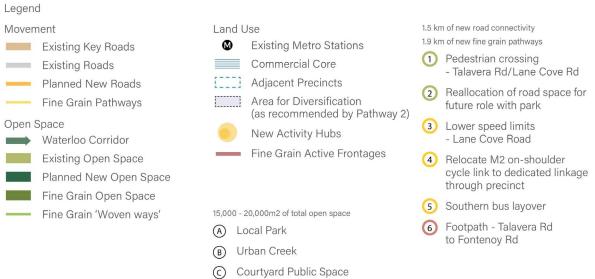


Figure 12Proposed Structure Plan: Porters Creek - Burbigal (Morning)

- Porters Creek could be revived and renamed as Barabiyanga Creek to provide a buffer to the motorway and new open space near Macquarie Park Metro Station.
- A new park on a current wasteland and construction compound could offer new culture spaces, restorative areas and a new ranger station.
- **Collaboration** between state agencies and utilities is required for the new park.

- Access to Lane Cove Road, combined with improved facilities could make it easier to walk to the Metro stations, open spaces or Wicks Road.
- The electronics cluster including Canon and Epson supports future definition as a place of increased economic importance.
- A new residential community would be supported with active spaces and community facilities.

Phasing and delivery

Years 1-5	Years 6-10	From year 11+
New diversified employment space for approximately 100	Space for 200 additional jobs in a diversity of sectors and scales	Space for 500 additional jobs in a diversity of sectors and scales
new jobs	Approximately 125 new dwellings	Additional 260+ dwellings
Approximately 115 new dwellings New park	Conversion of car parks into active uses	Ecological monitoring hub collecting data
	New wayfinding	Roll out of 18-hour economic strategy

Neighbourhood design criteria

Design criteria		Description
	New public open space	 Create 18,000sqm of parks, plazas and squares and 2,000sqm of enhanced open space.
		 Form a landscaped eastern edge to the neighbourhood and provide a buffer to the M2 Motorway.
		 Aim for all areas to be within 400m of a minimum 3,000sqm park, with housing within 200m of 3,000sqm park.
<u></u>	Location of taller buildings	 Locate taller buildings around the new activity hub. Locate height to take advantage of views and access to open space.



- Garungul (Unbreakable)



Photography

Image courtesy of Department of Planning and Environment.



Garungul is in the south west of the investigation area, bound by Lane Cove Road to the north, Epping Road to the west, and Lachlan's Line to the south and east.



Statement sentence

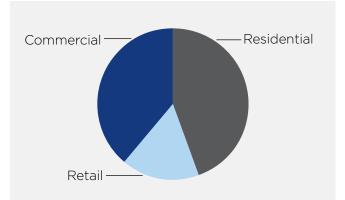
This is a shared community of commercial, retail and residential uses, with a cluster of education uses and sports and recreation pitches, as well as being used for cultural practices. This will allow the continuity and evolution of traditional knowledge protocols and governance of Ngurra, particularly through the restoration of Pages Creek.



Key stats

2,100+ new jobs

1,500-2,000 new homes



250,000-300,000sqm total built space. 1,500-2,000 new homes.

Garungul is characterised by education, health and wellbeing activities, with Macquarie Park education precinct and walking connections links to North Ryde and Macquarie Park. The neighbourhood directly interfaces with Lachlan's Line around North Ryde Metro Station. There is real potential to develop diversified commercial spaces, including space for small to medium businesses, co-working and incubation spaces.



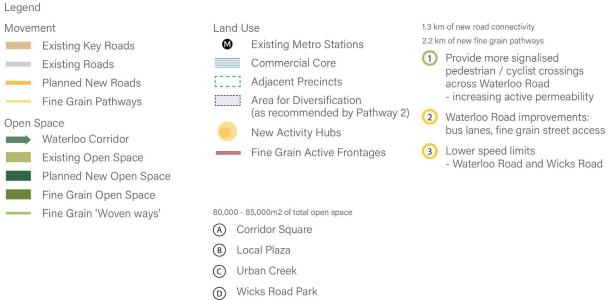


Figure 13Proposed Structure Plan: Wicks Road South - Garungul (Unbreakable)

- The neighbourhood offers opportunities to build a continuity of knowledge and lore, linking to increased physical activity.
- Vibrant cultural spaces for practice and performance would be easily accessed from public transport and nearby existing residential communities.
- An education collaboration zone around education infrastructure could enhance transition between primary, secondary and post-school learning and employment, embed

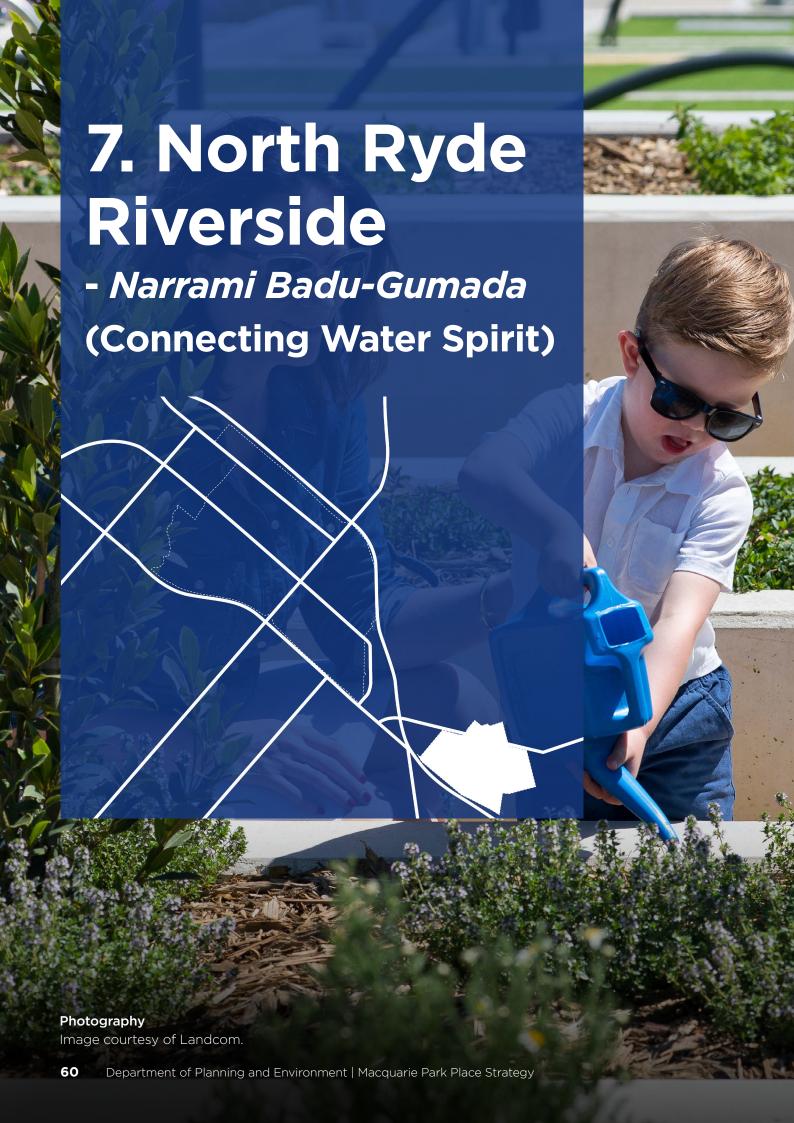
- cultural literacy and develop community wellbeing with sporting and other groups.
- Connections will bring opportunity, such as those to Metro stations, Lachlan's Line and Wicks Road.
- Opportunities exist to develop new diversified commercial spaces and mixed-use areas.
- A new residential community would be supported with active spaces and community facilities. Inside the commercial core, there is the opportunity to explore residential uses within the identified activity hub.

Phasing and delivery

Years 1-5	Years 6-10	From year 11+	
New diversified employment space for approximately 400 new jobs Approximately 355 new dwellings Micro-mobility project A new primary/high school education precinct	Space for 500 additional jobs in a diversity of sectors and scales	Space for 1,200+ additional jobs in a diversity of sectors	
	Approximately 370 new dwellings	and scales Additional 775+ dwellings	
	Conversion of car parks into	Cultural hub and diverse	
	active uses	working spaces	
	Continued environmental upgrades	Roll out of 18-hour economic strategy	

Neighbourhood design criteria

Design criteria **Description New public** Create 95,000sqm to 100,000sqm of parks, plazas and squares, open space including 3,500sqm of enhanced open space. Plan for commercial development to be within 400m of a minimum 3,000sqm park and new housing to be within 200m of a minimum 3,000sqm park. Location Locate taller buildings along Wicks Road and around the new of taller activity hub. buildings **Building** · Incorporate educational facilities into the podiums of typologies mixed-use buildings. New Incorporate new primary and secondary school facilities potentially with education shared school-community facilities in the vicinity of this neighbourhood. precinct





Narrami Badu-Gumada is the southernmost neighbourhood of Macquarie Park and is not directly connected to the rest of the investigation area. It is bound to the north by North Ryde Metro Station, the M2 Motorway to the west and Delhi Road to the east and the Lane Cove National Park to the south.



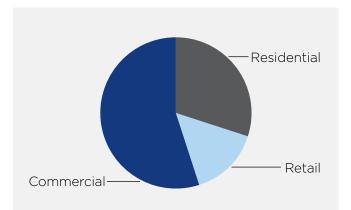
Statement sentence

Surrounded by the landscape of the Lane Cove National Park and located near North Ryde Metro Station, Nangamay will be a place for new housing and a new activity hub within the existing commercial core, supported by new pathways and open space areas.



Key stats

18-hour economy
1,500-2,000 new homes



400,000-500,000sqm total built space. 1,500-2,000 new homes.

The neighbourhood is the former CSIRO site and includes several office buildings in a typical business park format. Its topography towards Lane Cove National Park road grid design, narrow footpaths and the absence of cycling infrastructure make it a place that is better suited to cars rather than walking or cycling.

However, its proximity to the national park, combined with its topography, give it a distinctly natural character.

There will be a lifelong learning building on the alignment of Porters Creek and potential for collaboration with Create NSW and council to explore opportunities to activate these spaces.

Direct connection to Lane Cove National Park and River create walking, running and cycling opportunities. Walking trails, cycleways and possible micro-mobility corridors will weave through and across the water corridors.



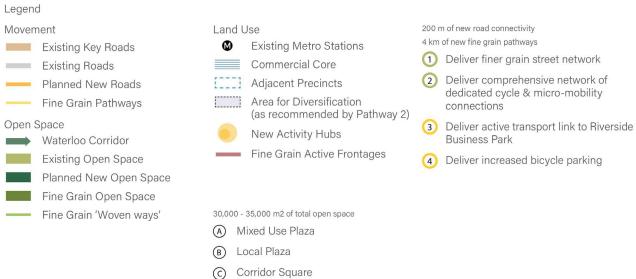


Figure 14Proposed Structure Plan: North Ryde Riverside - Narrami Badu-Gumada (Connecting Water Spirit)

- The City of Ryde Council offices and surrounding A-Grade office space creates a high-quality address to the south of the neighbourhood with views and links directly to the national park. New sustainable businesses could include those in horticulture.
- North Ryde Metro and Macquarie
 University Bus Interchange require a new
 interconnection to the rest of Riverside
 Corporate Park. Other connections could
 include those to Lane Cove National Park and
 Lane Cove River for people wanting to walk,
 run or cycle.
- There are opportunities for the adaptive re-use of former CSIRO buildings.

- The proximity to the national park could see links for new education and training including Aboriginal ranger programs.
- Current landowners are formed into a collaborative group that could be expanded to partnerships with the NSW National Parks and Wildlife Service and the residential community around North Ryde Metro Station.
- The unique set of **natural spaces** could open opportunities for regeneration of plants and waterways.
- A new residential quarter with open space and access to the national park could include cultural and social uses at ground level near adjoining work spaces and employment areas. Inside the commercial core, there is the opportunity to explore residential uses within the identified activity hub.

Phasing and delivery

Years 1-5	Years 6-10	From year 11+	
New diversified employment space	New diversified employment space	New diversified employment space	
Approximately 225	Approximately 330	Additional 945+ dwellings	
new dwellings	new dwellings	Consolidation of residential	
Wayfinding and public art	Traditional custodians,	development	
Regenerative Country-centred landscape management	program	Further connections to Lane Cove River	
	Conversion of car parks into active uses	Roll out of 18-hour economic strategy	
	Continued environmental upgrades to the national park and routes	occinering chargy	

Neighbourhood design criteria

Design criteria		Description
	New public open space	 Create 35,000sqm of parks, plazas and squares. Design open space that embraces the topography of the neighbourhood. Aim for a commercial areas to be within 400m of a 3,000sqm park and new housing within 200m of a 3,000sqm park.
	Building typologies	 Incorporate educational facilities into the podiums of mixed use building to support learning facilities and capitalise on opportunities for innovation.

Implementation

Governance

Collaboration between state agencies, council and industry will drive the implementation of the place strategy. The Ryde Coordination Group (RCG) has overseen the preparation of this place strategy and the master plan for the investigation area. The GCC was originally established to co-ordinate infrastructure and land use planning within the City of Ryde. Following completion of the Place Strategy and Strategic Infrastructure and Services Assessment, the role of the GCC is expected to transition, overseeing the delivery of the Place Strategy until a new governance structure is established to focus on implementation. The NSW Government, working with City of Ryde Council and the Commission, may be required to develop and manage the future growth including economic development and operation of Macquarie Park, curating the innovation ecosystem and delivering the actions outlined in the place strategy.

A tailored approach will be developed to both secure the economic vitality of the area and improve the quality of Macquarie Park as a place. This will be underpinned by coordination with state agencies to fund and deliver the infrastructure required. Rezoning of land within the investigation area will need to consider the timing of the provision of infrastructure to ensure that growth is matched with the necessary infrastructure to support it.

Any governance and collaboration approaches will:

- investigate custodial representation within the governance frameworks and structures to build an ongoing respect and care for Country
- foster a collaborative/networking environment with companies in Macquarie Park
- coordinate activity between state agencies to maximise public sector benefits and investment
- communicate ongoing public investment and initiatives in and around the area to attract industry and business
- introduce whole-of-precinct sustainability initiatives, including multi-utility hubs, net zero emission strategies, green and active streets, and improved building performance
- use innovation and partnership approaches to provide local and regional infrastructure including funding and financial models for new open space and social infrastructure
- investigate shared parking, parking pricing, transport management associations, alternative freight arrangements, car sharing and ride sharing, and preparations for autonomous vehicles to encourage increased active and public transport use.

Implementation pathways

Finalisation of the place strategy is the first step to realising the vision for Macquarie Park.

A ministerial direction under section 9.1 of the *Environmental Planning and Assessment Act* 1979 will enable development to progress in line with the place strategy, precinct master plan and infrastructure opportunities.

There are two pathways available to implement the place strategy and master plan through new planning controls:

- through state and local governmentled detailed master planning of each neighbourhood; or
- through out of sequence industry-led detailed neighbourhood master plan.

The out of sequence pathway provides landowners with scope to prepare a detailed neighbourhood master plan, where eligibility criteria include full landowner agreement and a satisfactory response to study requirements on the proposed neighbourhood master plan are achieved. Any costs associated with progressing an out-of-sequence master plan and rezoning proposal will be borne by the applicant.

All neighbourhood master plans would be subject to review by the NSW State Design Review Panel.

Before land use planning amendments can be proposed via any neighbourhood master planning process (including out of sequence master plans), a precinct transport study, an Infrastructure Delivery Plan and development contributions plan/s must be finalised and adopted by the relevant authority/s. These plans will ensure that new development makes fair and proportionate contributions to local and regional infrastructure required to support development, residents, workers and visitors.

A planning agreement can be considered in lieu of, or in addition to, a development contributions plan and arrangements to make contributions to regional infrastructure. Any planning agreement must, as a minimum, offer to make arrangements for delivery of the

infrastructure required to support the relevant neighbourhood's development, including a proportionate contribution to any whole-ofprecinct infrastructure which may be provided in another neighbourhood.

In addition to information about infrastructure provision, neighbourhood master plans will be accompanied by supporting technical studies which have informed the preparation of the master plan. The neighbourhood master plan should suggest draft planning controls prepared to a sufficient level of detail to permit an Explanation of Intended Effect (EIE) to be prepared. The neighbourhood master plan, its supporting technical studies and the EIE will be publicly exhibited for comment.

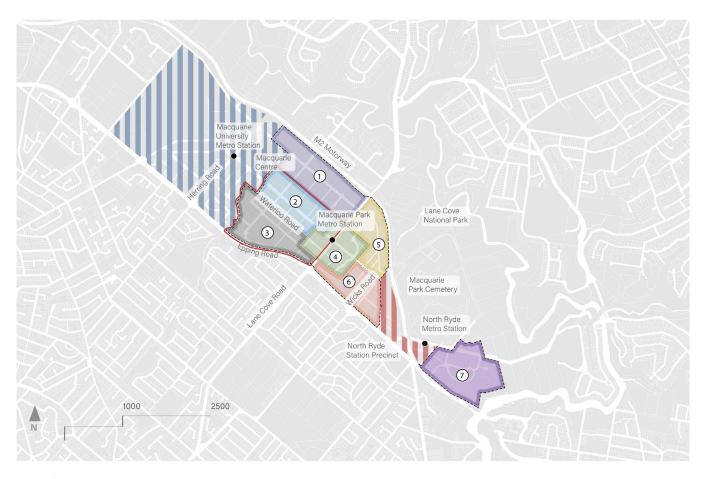
Following exhibition, the draft planning controls will be reviewed to take account of any submissions received and the revised planning controls will be implemented via a 'self-repealing' State Environmental Planning Policy (SEPP). The self-repealing SEPP will amend planning controls in the *Ryde Local Environmental Plan 2014*.

Stage 1 Neighbourhood Master Plan Implementation

The significant infrastructure investment needed to support growth in Macquarie Park means master planning of the neighbourhoods by the NSW Government and council will be staged. A collaborative evaluation and assessment has been undertaken to identify the priority neighbourhoods. Criteria used in this assessment included:

- Opportunity to deliver on big moves
- Extent of existing or short-term catalysts that means intervention and change will have an impact
- Potential for cumulative benefits from delivering contiguous neighbourhoods to optimise investment.

Neighbourhoods 2 - Waterloo Park (Butbut) and 3 - Shrimptons Quarter (Waragal Birrung), and the western portion of neighbourhood 4 - Macquarie Living Station (Gari Nawi), have been identified as priority neighbourhoods to be delivered in Stage 1 of the MPID Implementation.



Legend

- North Park
 Ngalawala (Reciprocity)
- Waterloo Park
 Butbut (Heart)
- Shrimptons QuarterWaragal Birrung (Evening Star)
- Macquarie Living Station
 Gari Nawi (Saltwater Canoe)
- Porters CreekBurbigal (Morning)
- 6 Wicks Road South
 Garungul (Unbreakable)
- North Ryde Riverside
 Narrami Badu-Gumada
 (Connecting Water Spirit)
- Metro station
- Macquarie university (Herring Road) Precinct
- North Ryde Station precinct
- Stage 1 Neighbourhood
 Master Plan
- --- Macquarie Park Investigation Area

Figure 15

Stage 1 Priority Neighbourhoods.

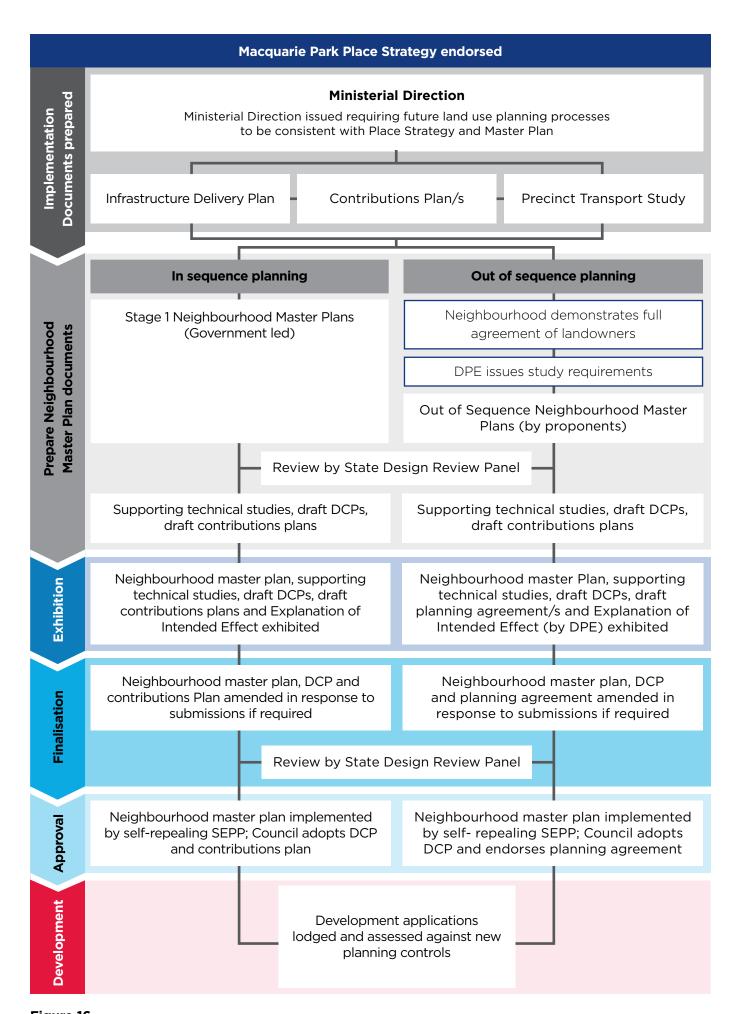


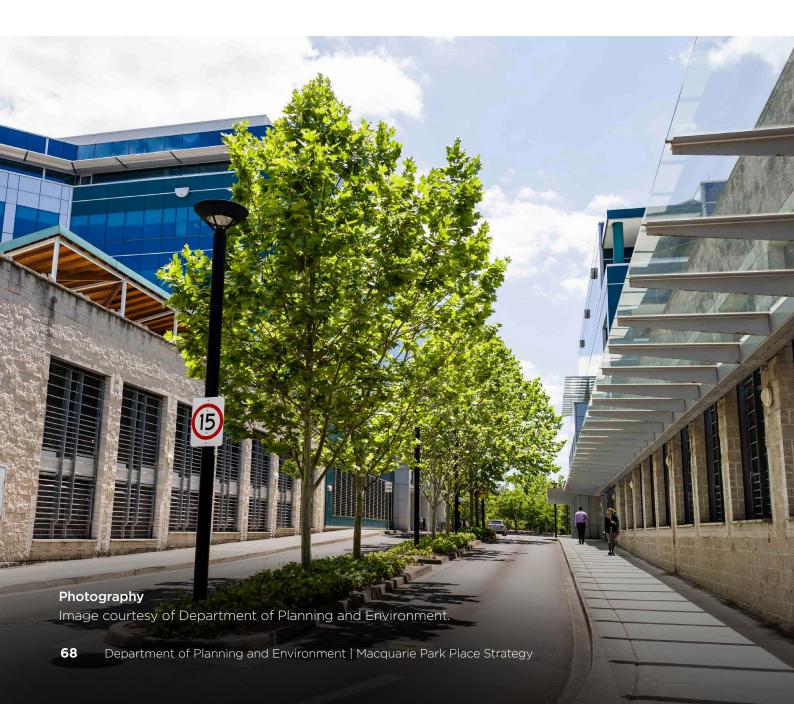
Figure 16 Implementation pathways.

The next step is to progress the first staged neighbourhood master plans and further refine the infrastructure items into one or more infrastructure delivery plans that investigate the infrastructure costs, staging, sequencing, delivery partners and mechanisms in collaboration with City of Ryde Council, Transport for NSW and other infrastructure agencies. This work will be informed by a precinct transport study to be led by Transport for NSW. No rezoning of land will occur until an endorsed infrastructure delivery plan that addresses local and regional infrastructure needs is in place for each neighbourhood.

A range of funding mechanisms will be tested and matched to infrastructure items

and categories including investigating a local contribution regime and opportunities for direct negotiations to contribute to the delivery of public benefits beyond the necessary infrastructure to support increase in density and activity. This may include options for innovative infrastructure funding mechanisms as determined through the Productivity Commissioner's review of contributions.

A ministerial direction under section 9.1 of the *Environmental Planning and Assessment Act 1979* will enable development to progress in line with the place strategy and infrastructure opportunities.



Actions table

Table 2 These actions will be implemented across Macquarie Park Corridor

Action	Description	Lead	Support
1.1	Extend trading hours of core night-time uses with infrastructure to support temporary popups near key interchanges after 5pm.	Property owner	City of Ryde
1.2	Design a fit-for-purpose future governance structure to drive growth and provide a coordinated and collaborative vision for Macquarie Park's future, based on the place strategy.	GCC	DPE
1.3	Continue to engage the private sector and the local community actively in events and program development through initiatives such as the Venture cafe and the Macquarie University Incubator.	CMPID	GCC, Property owners
1.4	Promote entrepreneurship and provide opportunities for smaller businesses to increase their exposure to anchor institutions through initiatives such as the CMPID and Macquarie Park forum.	City of Ryde, Macquarie University	Property owners, CMPID
1.5	Promote outwards links (leveraging the Hearing Hub and medical research facilities) including local, regional and international networks, including using Macquarie Park as a test bed to promote innovation and the trial of new technologies.	City of Ryde	GCC, Property owners, CMPID
1.6	Support business growth and inward investment through incentives to create live-work opportunities for entrepreneurs.	CMPID	GCC, City of Ryde, Property owners
1.7	Develop a private sector funding strategy for investments within Macquarie Park.	TBD	
1.8	Work to intensify venture capital presence.	CMPID	
1.9	Continue to fund for programmed public spaces and events and create places and spaces for community and worker interaction.	City of Ryde	CMPID
1.10	Promote investment in digital infrastructure and technology across Macquarie Park to create a high-quality platform for innovative firms and strengthen the area's networking assets.	TBD	Property owners

Table 2These actions will be implemented across Macquarie Park Corridor (continued)

Action	Description	Lead	Support
1.11	Work with the private sector to deliver commercial floor space that provides curated, affordable and agile space for new and innovative enterprises.	Property owners	CMPID, City of Ryde
2.1	Investigate opportunities for new and upgraded schools Department DPE of all levels across Macquarie Park. of Education		DPE
2.2	Develop an infrastructure priority list for Macquarie Park to shortlist the projects that will deliver the greatest economic, social and health impact.	DPE, NSW infrastructure agencies	GCC, City of Ryde
2.3	Develop strategic place-based infrastructure plan to support agency in-flight projects.	NSW infrastructure agencies	GCC, DPE
3.1	Encourage a sustained transition away from private vehicle use.	City of Ryde	TfNSW, Property owners
3.2	Prepare precinct transport study.	TfNSW	DPE, GCC, City of Ryde
3.3	Reduce the overall quantum of parking relative to the number of employees and/or floor area within developments.	City of Ryde	Property owners
3.4	Reduce the overall quantum of parking relative to number of residents within developments.	City of Ryde	Property owners
3.5	Improve the quality of interchange between metro, bus and active transport networks.	TfNSW	DPE
3.6	Improve access to fast and frequent public transport services including Sydney Metro and Macquarie University Bus Interchange.	TfNSW	DPE, City of Ryde
4.1	Implement slow and low speed limits across Macquarie Park.	TfNSW	
4.2	Enhance lighting, signage, clear sightlines of pedestrian and cycle networks through building design, and activity at ground level and new and existing public spaces to keep 'eyes on the ground' at all times of the day.	City of Ryde	

Table 2 These actions will be implemented across Macquarie Park Corridor (continued)

Action	Description	Lead	Support
4.3	Improve Waterloo Road as a pedestrian connector between neighbourhoods.	City of Ryde	TfNSW, Property owners
4.4	Continue to incentivise private development to provide 20m and 14.5m wide streets and 8m wide pedestrian links, including separate pathways and cycleways for pedestrians and cyclists, integrated with green infrastructure where possible.	DPE, City of Ryde	
6.1	Make Dharug culture more visible by exploring the integration of Dharug language and symbols on signage, wayfinding, building names, new street names and public art.	City of Ryde	Property owners, Aboriginal communities
6.2	Work with Traditional Custodians and knowledge holders to enliven the public realm with programming, activation and installations.	City of Ryde	Local Aboriginal communities
6.3	Investigate opportunities to include Aboriginal representation in Macquarie Park governance structures.	GCC	Local Aboriginal communities, DPE

DPE: Department of Planning and Environment. GCC: Greater Cities Commission. CMPID: Connect Macquarie Park Innovation District. TfNSW: Transport for NSW.

Table 3Additional actions that will be implemented within the investigation area

Action	Description	Lead	Support
1.12	Develop planning controls to create flexible and adaptable floor space that can cater for a range of business types, sizes and sectors as the demand shifts.	DPE, City of Ryde	
1.13	Investigate opportunities for a purpose-built building in a strategic location within the commercial core that provides curated, affordable and agile office space for new and innovative enterprises.	TBD, Property owners, Investment NSW	City of Ryde, TfNSW, DPE, Create NSW
2.4	Develop state and local infrastructure delivery and contributions plan(s).	DPE, City of Ryde	GCC
3.7	Create a master plan for each neighbourhood to provide a safe, direct, attractive, comfortable and adaptable walking and cycling network.	DPE, City of Ryde	GCC
4.5	Provide informal paths through and around buildings that take pedestrians away from major roads and into side streets and laneways that respond to natural features of Ngurra.	City of Ryde	Property owners
4.6	Design intersections, undertake landscaping and use robust materials, fixtures and furniture to improve the experience for pedestrians.	City of Ryde, TfNSW	DPE, Property owners
4.7	Design new built areas that open up the large super lots of land and connect to the public domain through more active uses at street level.	DPE, City of Ryde, Property owners	
4.8	Plan for informal meeting spaces in public areas.	City of Ryde	
4.9	Widen footpaths.	City of Ryde, TfNSW	Property owners
5.1	Undertake staged master planning and design guidelines for each new neighbourhood, including a distinct commercial core.	DPE, City of Ryde	GCC
5.2	Establish a commitment to excellence across design and sustainability to achieve high-quality built form, public domain, environmental amenity and performance outcomes to guide quality for planning, development and delivery.	DPE	City of Ryde
5.3	Investigate new entertainment, events and cultural spaces.	City of Ryde, Property owners	

Table 3 Additional actions that will be implemented within the investigation area (continued)

Action	Description	Lead	Support
5.4	Introduce best-practice resilient building design controls to mitigate environmental impacts and promote energy and water savings/recycling.	City of Ryde	DPE, Property owners, Sydney Water
5.5			Property owners
5.6	Contribute to the goal of net zero emissions by 2050.	City of Ryde	Property owners
5.7	Identify potential water-sensitive urban design opportunities in new open space and creek restoration works for optimised urban stormwater management.	City of Ryde, DPE	Property owners, Sydney Water
5.8	Mitigate impacts of stormwater runoff and impacts of wastewater services from existing and new development in a more sensitive way.		
6.4	Become a leader in green space design, providing new, inviting, accessible, diverse and comfortable public open space and enhanced public open space.	City of Ryde	Property owners
6.5	Create a well-connected network of new and improved open spaces for the growing Macquarie Park community.	DPE, City of Ryde	Property owners
6.6	Investigate opportunities to show and open up the creek spaces and historic lines both as open water and as places of increased biodiversity and green infrastructure.	DPE, City of Ryde	Property owners
6.7	Create a richer urban tree canopy along major roads and intersections.	City of Ryde, TfNSW	Property owners
6.8	Provide high-quality green infrastructure including, where feasible, creek restoration.	City of Ryde, Property owners	

DPE: Department of Planning and Environment. GCC: Greater Cities Commission. TfNSW: Transport for NSW.

Infrastructure funding

Infrastructure funding in Macquarie Park will be challenging and will require different approaches that recognise:

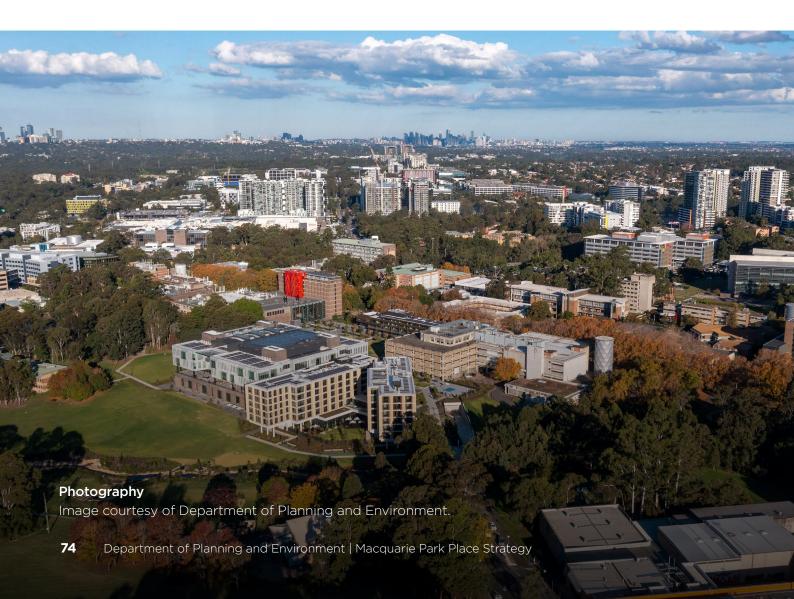
- costs of growth infrastructure are shared across the public and private sector
- development contributions alone will not be sufficient to fund the required infrastructure and other funding sources and approaches may be identified
- securing unencumbered land at ground level for infrastructure will be increasingly challenging in an urban area like Macquarie Park.

The infrastructure opportunities and delivery pathways will require further refinement through the preparation of infrastructure delivery plans and a master plan for each neighbourhood.

The collection of contributions towards regional infrastructure will be explored. The NSW Government is reviewing its approach to this following the recommendations of the NSW Productivity Commission in March 2021.

Council would also be responsible for a proportion of infrastructure costs. However, more detailed neighbourhood-level planning may suggest additional local infrastructure work such as further stormwater improvements.

Most infrastructure proposals as identified in the Strategic Infrastructure and Services Assessment are also not funded or committed. As a result, they should be regarded as initiatives subject to further development, scoping, business case investigation and investment decisions.



Glossary

30-minute city	A planning concept for a city in which people can easily access the places they need to visit on a daily basis within 30 minutes' travel from where they live. In the Greater Sydney context, the focus is on access to the nearest centre within 30 minutes by public transport, walking or cycling
Accessibility	The ability for everyone, regardless of age, ability, special needs or where they live, to use and benefit from the transport system
Active transport	Transport that is human powered, such as walking or cycling
Adaptive re-use	A process that changes a disused or ineffective item into a new item that can be used for a different purpose
Amenity	The extent to which a place, experience or service is pleasant, attractive or comfortable
	Improved features, facilities or services may contribute to increased amenity
Built form	The function, shape and configuration of buildings as well as their relationship to streets and open spaces
Community	A specific type of stakeholder
	These are groups of people in particular places who are both affected by our work and experience the outcomes and benefits of our activities
Country-centred design	Embedding an understanding of Country and its people into place to help reconnect Macquarie Park with purpose and culture
Department of Planning and Environment	The statutory authority of the NSW Government responsible for managing the planning, heritage, infrastructure and environment needs of the state
Eastern economic corridor	From Macquarie Park through to the Harbour CBD to Sydney Airport, contributing two-thirds of NSW's economic growth in 2015/16 financial year
Greater Cities Commission	An independent agency that coordinate and align the planning for the Greater Sydney Region; Lower Hunter and Greater Newcastle City; and the Illawarra-Shoalhaven City
Green infrastructure	The network of natural and semi-natural systems including bushland, parks, private gardens, rivers and streams and native vegetation
	In urban areas, these systems have typically been modified compared to their natural state, strategically planned, design and/or managed. These systems play an important part in supporting a good quality of life for people now and into the future

Innovation precinct	Areas, or 'ecosystems', with high collaboration, ingenuity and economic growth potential directed towards a particular industry, institution or facility specific to a local area
	Macquarie Park has been identified as an innovation precinct and the GCC has been tasked by the Premier to lead its accelerated delivery
Infrastructure delivery plan	Identifies the infrastructure required in the area to support growth and change into the future, including delivery mechanisms and funding
High-quality open space	Walkable, accessible, well-designed public open spaces where people can relax, exercise, play and enjoy the natural environment including appropriate access to natural sunlight in mid-winter
Liveability	Used in land use planning to focus on quality of life within a given area considering social, economic and environmental factors
	It encompasses the impact of the built environment on human health and community well-being
Macquarie Park investigation area/ master plan area	Comprises 170 hectares of land, spanning south-east from the Macquarie Shopping Centre through to the commercial core, and then further south to North Ryde Riverside Business Park
	This area has not been rezoned and this document sets the framework for future growth
Macquarie University	Includes Macquarie University and Macquarie Shopping Centre
(Herring Road) Precinct	It will be home to four new parks, upgrades to Macquarie University Bus Interchange, a mixed use academic core at the university, and the renewal of the former Ivanhoe Estate that has provided over 1,000 social and affordable housing units as well as a new school
Ngurra	Ngurra is a word that it appears in many different Aboriginal languages around the country, that basically has the same meaning. It's the word for 'Country' 'home', 'camp', 'a place of belonging', 'a place of inclusion
North Ryde Station Precinct	In the Macquarie Park's south, includes new homes and jobs within 10 minutes of North Ryde Metro Station
	It includes more than 2.4 hectares of park and public plazas, walking and cycling links including the new pedestrian and cycle bridge over Delhi Road, upgraded roads and community facilities
Public spaces	Areas that are publicly accessible where people can interact with each other and make social connections
RCG	Ryde Coordination Group chaired by the Greater Cities Commission with membership including government agencies and Ryde Council

Stakeholder	An individual, group or corporation that has an interest or concern in a matter or issue
Sydney Metro	A fully automated, high frequency rail network connecting Sydney
Transport for NSW (TfNSW)	The statutory authority of the New South Wales Government responsible for managing transport services in the state
Wallumattagal	The place and people of the Black Snapper fish—of the Dharug nation
Wallumattagal Country	A place of rivers and fertile wetlands with a deep history of learning, trade and culture
Woven ways	A network of routes and spaces that cut against the strong grid pattern, while responding to natural features and attributes of Ngurra to strike a balance across the networks and improve the quality of place
	A key aim of the movement framework is to integrate the different needs of user's 'woven ways'



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