Department of Planning, Housing and Infrastructure

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Macquarie Park Corridor Infrastructure Delivery Plan

Draft for Public Exhibition

June 2024





The Department of Planning, Housing and Infrastructure acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land, and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Executive Summary

The Department of Planning, Housing and Infrastructure (the Department) is leading the development of a masterplan for the Macquarie Park Innovation Precinct (MPIP) to support the two-stage rezoning of the MPIP. The masterplan is part of the implementation of the Macquarie Park Innovation Precinct Place Strategy (the Place Strategy) in 2022.

Building on the comprehensive strategic analysis in the Macquarie Park Strategic Infrastructure and Services Assessment (SISA) prepared by the Greater Cities Commission in 2022, the Department worked closely with GLN Planning to prepare this Infrastructure Delivery Plan (IDP). The intention of this IDP is to provide details of the funding and delivery mechanisms that can be used to provide infrastructure to meet the needs of growth in the Macquarie Park Corridor (MPC), particularly the infrastructure needed in the Stage 1 and Stage 2 Rezoning areas.

The IDP also addresses the land requirements for infrastructure including acquisition or dedication strategies how a range of delivery mechanisms will be used to provide infrastructure, particularly local infrastructure.

The IDP provides detail on how local infrastructure that is needed to serve Stage 1 and Stage 2 Neighbourhoods can be provided. The plan presents a proposed integrated arrangement of mechanisms to fund various facilities.

The following table and charts provide a summary of the different infrastructure types, responsibilities, funding / delivery mechanisms to be used.

Infrastructure category	Primary parties responsible for delivery	Mechanisms to be used
Local infrastructure	Ryde City Council	Works conditions of development consent
innastructure	Developers of land in the	Local infrastructure contributions
	MPIP	• LEP provisions for floor space & height incentives
		• LEP provisions linking development and provision of certain infrastructure on key sites
		• Macquarie Park special rate (commenced in 2006)
		Stormwater levy
		State budget allocations
Utility infrastructure	Utility providers (e.g. Sydney Water)	 User fees and charges Developer servicing plan (DSP)
State	Commonwealth and	Budget allocations
infrastructure	State governments	Housing and Productivity Contributions

Table 1 Macquarie Park Infrastructure Delivery Mechanisms

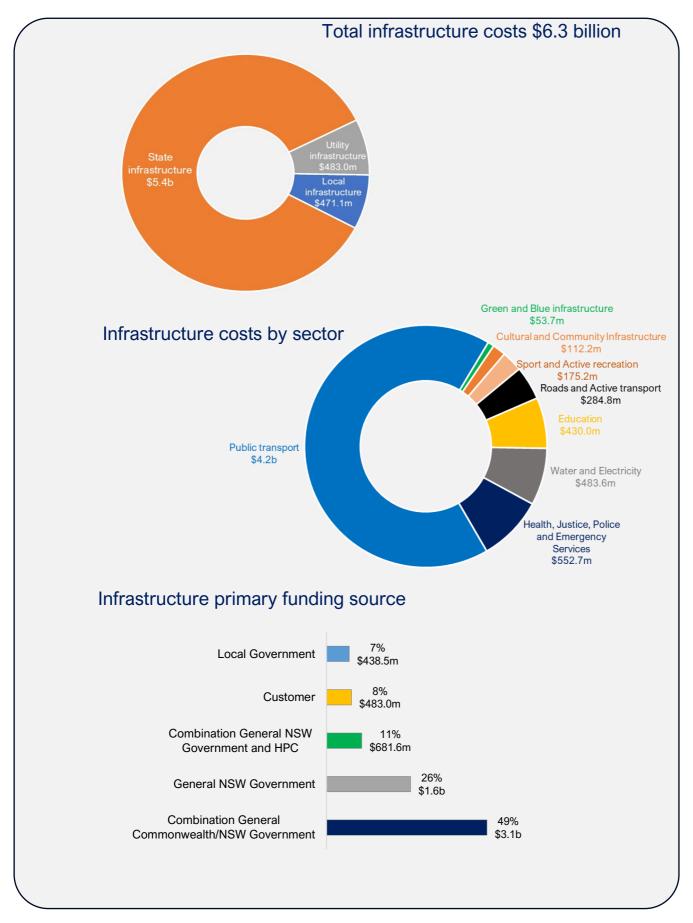


Figure 1 Infrastructure costs

The NSW government has committed funding in excess of \$1 billion toward State and regional infrastructure. These health, education, transport and recreation infrastructure initiatives – listed in **Table 19** – are in various stages of delivery, and some are considered to be critical to delivering the service capacity required by the projected growth. They are also to help ease existing backlogs arising from the rapid growth that occurred in the last decade.

Stage 1 local infrastructure summary

The infrastructure planned to be provided as part of future development of the Stage 1 Rezoning Area includes the following:

- A total of 5.1 hectares of embellished open space.
- The passive open space is to be provided in six separate locations, the largest being 2.3 hectares situated adjacent to Shrimptons Creek. The passive recreation areas will be embellished and dedicated to Ryde City Council by developers of 'key sites' identified in the LEP.
- Approximately 4,500 square metres of public plazas located at the cross-roads of Lane Cove Road and Waterloo Road (eastern side) above the Macquarie Metro Station.
- A multipurpose indoor facility comprising 5,300 square metres of floor area. The facility will include community floor space and indoor courts.
- A fine grain road network that builds on the existing planned network in the area's development control plan comprising approximately 66,000 square metres of land. Of this, approximately 8,000 square metres is to be acquired and approximately 58,000 square metres is expected to be dedicated for roads and road widenings.

Stage 2 local infrastructure summary

The infrastructure planned to be provided as part of future development of the Stage 2 Rezoning Area includes the following:

- A total of 7.1 hectares of embellished open space.
- The open space is to be provided in seven separate locations, the largest being 2.8 hectares situated at 144 Wicks Road. The open spaces will be embellished and dedicated to Ryde City Council by developers of 'key sites' identified in the LEP.
- Approximately 4,800 square metres of public plazas located at the cross-roads of Lane Cove Road and Waterloo Road (western side) above the Macquarie Metro Station.
- A fine grain road network that builds on the existing planned network in the area's development control plan comprising approximately 75,800 square metres of land. Of this, approximately 4,600 square metres is to be acquired and approximately 71,200 square metres is expected to be dedicated for roads and road widenings.

Additional to the above, Stage 1 and Stage 2 developments will contribute towards new and upgraded recreation and community facilities to be provided in the surrounding area by Ryde City Council under a new local infrastructure contributions plan.

Next steps

Implementation of the infrastructure delivery framework as outlined in this IDP will support the efficient, timely and coordinated delivery of MPC infrastructure and help realise the Place Strategy vision.

The plan provides the detail on how the infrastructure to support development in the Stage 1 and Stage 2 Rezoning Areas can be provided.

Council, developers, and other stakeholders will be consulted on the proposed delivery arrangements presented in this plan. The IDP will be refined and adjusted following stakeholder consultation.

What is this plan about?

This plan sets out the various types of infrastructure proposed to support Macquarie Park's future development, and how that infrastructure is proposed to be delivered over time through various funding and delivery mechanisms.

This initial section of the plan elaborates on the role and purposes of this plan. It sets the scene for Macquarie Park infrastructure planning, including the events that have led to this plan being prepared, what is meant by infrastructure and why it is important to coordinate funding and delivery mechanisms at an early stage.

Later sections of the plan describe the infrastructure needed at Macquarie Park in more detail, the funding and delivery mechanisms that are available to implement the infrastructure, the way those mechanisms are to be used for Macquarie Park infrastructure.

Background

The Macquarie Park Corridor (MPC) comprises three distinct parts:

- North Ryde Station Urban Activation Precinct (re-zoned in 2013): is a mixed-use and residential precinct centred around the North Ryde Metro Station, across the M2 Motorway, connected by the Christopher Cassaniti pedestrian and cycle bridge.
- Macquarie University Station (Herring Road) Urban Activation Precinct (re-zoned in 2015): is a mixed used precinct surrounding the Macquarie University Metro station, comprising Macquarie University, Macquarie Shopping Centre, and the surrounds of Herring Road.
- 3. **Macquarie Park Innovation Precinct (MPIP)**: covers approximately 170 hectares of employment zoned land between the Macquarie Shopping Centre and Ivanhoe Estate through North Ryde Riverside Business Park. This area has not been rezoned and is the subject of a master planning process to facilitate potential future rezonings.

The Department of Planning, Housing and Infrastructure (The Department) led the preparation of the Macquarie Park Innovation Precinct (MPIP) Place Strategy in 2022.¹

The Place Strategy provides a strategic framework to guide future development in the MPIP to 2036. The strategy identifies opportunities to develop land and create attractive public spaces

¹ The MPIP and MPIA have the same boundary

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.

The Macquarie Park Strategic Infrastructure and Services Assessment (Greater Cities Commission, 2022) was prepared as a companion document to the Place Strategy. The 'SISA' as it is commonly referred to, contains various infrastructure projects that are required to support the implementation of the Place Strategy. More information on the Strategic Infrastructure and Services Assessment is included in section 1.5 of this plan.

The Department has adopted a staged approach to implementing the Place Strategy. Detailed master planning was undertaken as part of Stage 1 and Stage 2. The Stage 1 and Stage 2 Rezoning Areas are shown in **Figure 2**.

Purposes of this plan

The purposes of this Infrastructure Delivery Plan (IDP) are listed below:

- Provide details of what infrastructure will be needed to support development of the Macquarie Park Corridor up to 2036, specifically the infrastructure required to support the Stage 1 and Stage 2 Rezoning of the Precinct.
- 2. Describe how and when infrastructure and other Macquarie Park Corridor facilities will be provided.
- 3. Identify the infrastructure land needed to provide the Stage 1 and Stage 2 infrastructure, and whether it is to be acquired or dedicated.
- 4. Using the latest available information, respond to the infrastructure implementation matters, and update the schedule and timing of infrastructure delivery included in the Macquarie Park Strategic Infrastructure and Services Assessment.

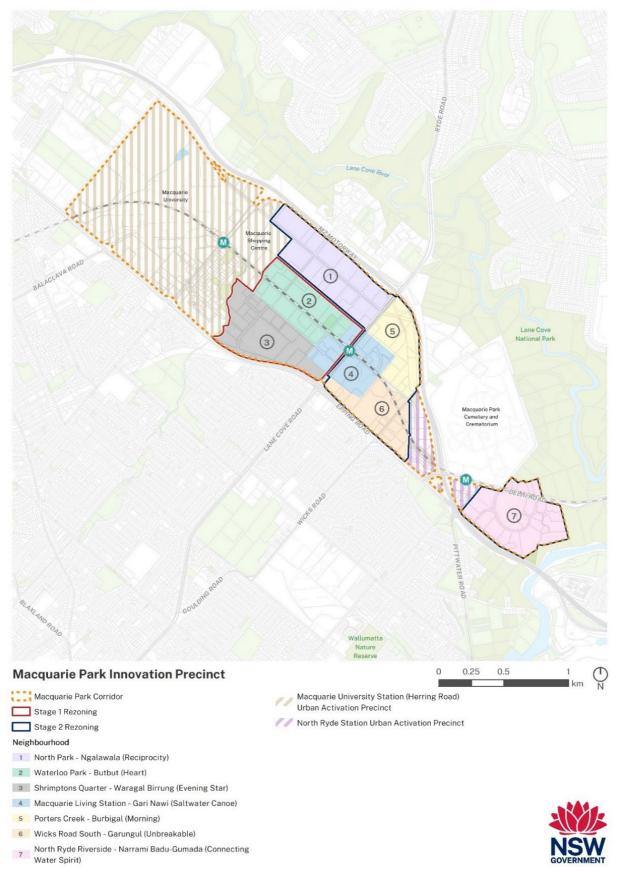


Figure 2 Macquarie Park Corridor and Stages 1 and 2 Rezoning Areas (Source: DPHI)

What is infrastructure?

This plan is about 'infrastructure' – an often-used technocratic term that is not always easily understood.

Infrastructure means the 'facilities', 'networks' and 'services' people need to live their everyday lives. This includes both:

- the economic infrastructure that makes land able to be used for urban purposes such as transport, water, energy and telecommunications, and
- the social infrastructure that supports the wellbeing of the people that live in cities such as schools, hospitals, parks and other community facilities. ²

The terms infrastructure, facilities, networks and services are used interchangeably throughout the report, but they all mean infrastructure.

The following diagram shows the infrastructure types that support well-functioning cities.

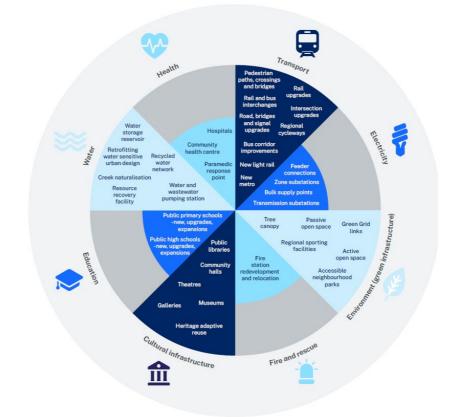


Figure 3 State infrastructure strategy

Source: Infrastructure NSW, State Infrastructure Strategy 2022-2042, p148, based on Greater Sydney Commission (2019)

² Infrastructure Australia (2018), Planning Liveable Cities A place-based approach to sequencing infrastructure and growth, p25

Why coordinate development and infrastructure?

Coordination of infrastructure, land use and service planning to meet future housing, employment, industry and community needs is one of the NSW Government's strategic directions for delivering value for money infrastructure (INSW's State Infrastructure Strategy 2022-2042).

Coordination of infrastructure and land use has become fundamental to justifying projects through place-based strategic business cases.

New housing supply and workplaces can only be delivered where infrastructure keeps pace with land use planning. Community acceptance of new development relies on good local amenity – transport connections, schools and health services, public civic and green spaces, protection of local character and access to services close to home. Achieving those outcomes requires timely planning, funding and delivery of local infrastructure in tandem with rezonings and subdivisions, based on well-developed master plans and a place-based planning approach.³

The Macquarie Park Innovation Precinct (or MPIP) is one of a number of areas where the NSW Government is refining and establishing place-based approaches to integrated planning. A common feature of the place-based planning approach is better coordinate prioritisation and sequencing of infrastructure and precincts delivery, in line with growth between and within identified new development areas and precincts.⁴

Stage 1 of the Place Strategy implementation focuses on the areas surrounding Macquarie Park and Macquarie University metro stations.

What is the SISA and how does this plan relate to it?

The Greater Cities Commission prepared the *Macquarie Park Strategic Infrastructure and Services Assessment* (SISA) as a companion document to the Place Strategy and the Master Plan.

Purposes and objectives of the SISA include:

- 1. To understand, at a strategic level, the infrastructure and services needed to support development in the Macquarie Park Corridor, including:
 - the already re-zoned precincts of North Ryde Station and Macquarie University (Herring Road) Urban Activation Precincts

³ Infrastructure NSW, State Infrastructure Strategy 2022-2042, p11

⁴ Infrastructure NSW, State Infrastructure Strategy 2022-2042

- potential additional mixed-use development in the MPIP.⁵
- 2. Guide detailed neighbourhood planning in, and strategic land use and infrastructure decision making affecting the Macquarie Park Corridor.⁶

This IDP provides more detail on how and when infrastructure identified in the SISA – particularly the infrastructure needed to align with Stage 1 implementation of the Place Strategy – will be provided.

Delivery and implementation considerations

The SISA also identified a range of matters to be followed up at implementation stage. The following table lists those matters and indicates whether they are addressed in this report or in other exhibition material relating to Stage 1 implementation of the Place Strategy.

SISA implementation matter	Addressed in IDP?
Meeting the needs of recent development that has already occurred in two mixed-use precincts, formerly referred to as Urban Activation Precincts (UAP): North Ryde Station to the south-east (re-zoned in 2013), and Macquarie University Station (Herring Road) in the north-west (re-zoned in 2015).	Table 16 of this IDP shows current infrastructure funding commitments, including new schools, intersection upgrades and public transport initiatives that will address backlog needs as well as future growth.
The land acquisition requirements,	Yes
particularly for sports facilities, open space, roads and active transport, and schools are significant.	Additional land for open space has been identified for acquisition or dedication. Refer to sections 2.3 and 4.4 of this plan.
Land required projects to be delivered in the medium and the longer term (beyond 2036) should be reserved to reduce future acquisition costs and avoid further deficits in service provision.	Land for new roads, road widening and active transport has been identified for acquisition or dedication. Refer to section 4.4 of this plan.
	Two of the three school projects identified in the infrastructure list have had funding committed to them. Refer to section 4.5 of this plan.
Further work is required to optimise government owned land. More detailed scoping work should be undertaken to minimise acquisition where possible.	The Department is working with Ryde City Council to identify opportunities where government owned land can be owned and/or managed by Council to provide additional opportunities to deliver infrastructure services and facilities to Council. In particular, land specific to

Table 2 Specific implementation matters identified in the SISA

⁵ Macquarie Park Strategic Infrastructure and Services Assessment, p11

⁶ Macquarie Park Strategic Infrastructure and Services Assessment, p9

	delivering on open space and active recreation needs, which by virtue of their nature, require significant tracts of land. Land at Tennis World North Ryde, which supports 10 full size courts and 4 mini courts is planned to be transferred to Council in 2024 to support growing needs of the community. This transfer also enables Council to better integrate the facility with adjoining public open space at Blenheim Park. In addition, a further 1.388 hectares of government owned land near Christie Park is being explored for its potential opportunity to support the expansion of existing facilities, which currently include two full size football fields (subject to further ecological studies). Further, a study is being prepared in conjunction with Ryde Council to consider how existing public open space can be best embellished and/or expanded to deliver additional facilities.
Further investigations to support re-zoning at the neighbourhood level and to determine the final quantum of gross floor area (GFA) for residential, retail, commercial and community uses, infrastructure prioritisation and funding sources in consultation with stakeholders.	No. These investigations included in other exhibition material.
More detailed work on development controls on a block-by-block basis to define the desired land use and built form outcomes for the area, as well as more accurate forecasts of the number of dwellings and building floorspace for employment.	Stage 1 and Stage 2 Detailed Master Plans were prepared to determine appropriate block by block land uses and built form outcomes across the Precinct. For Stage 1it is proposed that an additional 3,060 dwellings be delivered and capacity for 1,610,000sqm of commercial floor space including office and retail premises, with capacity for 40,053 jobs. For Stage 2 it is proposed that an additional 4,622 dwellings be delivered and capacity for 1,989,815 sqm of commercial floor space with capacity for 66,327 jobs.
More detailed investigation, including the use of transport modelling, to develop and validate the scope of individual transport	The preparation of a draft Detailed Transport Study (Transport Study), led by TfNSW (With WSP) in collaboration with

proposals and their contribution towards	the Department, validates the transport
creating a safe, efficient and reliable	recommendations of the SISA, and
transport system that manages and	proposes additional measures to support
balances access with the movement and	the place and transport vision.
place functions on the street network.	The Transport Study also found that the fine grain road network plays a key role in managing traffic operations and enables additional improvements for public and active transport customers.

SISA p9

What facilities are needed to support development at Macquarie Park?

Development and population projections

The areas most relevant to the infrastructure planning and delivery framework described in this plan are shown in the following table:

Area	Description	Relevance
Macquarie Park Corridor	All of the land south of the M2 Motorway and Delhi Road, east of Vimiera Road, north of Epping Road, and west of the Lane Cove National Park, as shown on Figure 1.	The amount and type of expected development in the entire MPC will inform the calculation of reasonable local infrastructure contributions in a new contributions plan.
MPIP Stage 1 Rezoning Area	 Neighbourhood 2 – Butbut (Heart) - Waterloo Park Neighbourhood 3 - Waragal Birrung (Evening Star) - Shrimptons Quarter Western portion of Neighbourhood 4 - Gari Nawi (Saltwater Canoe) - Macquarie Living Station As shown on Figure 1. 	The layout and scale of maximum development potential in the Stage 1 area both integrates with and informs the location and size of areas required for local infrastructure provided using local infrastructure contributions or 'incentive clause' provisions.
MPIP Stage 2 Rezoning Area	 Neighbourhood 1 - Ngalawala (Reciprocity) - North Park Eastern portion of Neighbourhood 4 Gari Nawi (Saltwater Canoe) - Macquarie Living Station Neighbourhood 5 - Burbigal (Morning) - Porter's Creek Neighbourhood 6 - Garungul (Unbreakable) - Wicks Road South Neighbourhood 7 - Narrami Badu-Gumada (Connecting Water Spirit) - North Ryde Riverside As shown on Figure 1. 	The layout and scale of maximum development potential in the Stage 2 area both integrates with and informs the location and size of areas required for local infrastructure provided using local infrastructure contributions or 'incentive clause' provisions.

Table 3 Macquarie Park Corridor and Neighbourhoods

The development projected in the Macquarie Park Corridor, on which the need for local and regional infrastructure is based – is shown in the table below.

	2021	2023*	2036	Growth 2023- 36
Dwellings	5,450	6,000	17,750	11,750
Residents	12,800	14,000	38,050	24,050
Workers	72,850	73,500	83,500	10,000

Table 4 Macquarie Park population and dwelling projections 2021-2036

* GLN Planning estimate

Source: Macquarie Park Strategic Infrastructure and Services Assessment, p26 and GLN Planning

The Stage 1 Rezoning area is proposed to have the following development characteristics:

- Residential development: 3,060 dwellings (compared to zero currently)
- Employment GFA capacity: 1,610,000m² (maintains existing potential)
- Worker capacity: 40,053 jobs (maintains existing potential)

The Stage 1 detailed master plan (**Figure 4**), developed in the Urban Design Framework, locates streets and open spaces, and establishes indicative built form to support proposed planning controls.



Figure 4 Detailed Master Plan (source: AJC Tract)

The Stage 2 Rezoning area is proposed to have the following development characteristics:

- Residential development: 4,066 dwellings (compared to zero currently)
- Employment GFA capacity: 1,989,815m²
- Worker capacity: 66,327 workers

The Stage 2 detailed master plan (**Figure 5**), developed in the Urban Design Framework, locates streets and open spaces, and establishes indicative built form to support proposed planning controls.



Figure 5 Detailed Master Plan (source: AJC Tract)

Infrastructure required to meet development

Essential to realising the vision for the MPIP is the provision of high-quality infrastructure in a timely and coordinated manner. This section of the plan discusses the particular infrastructure required to meet the projected development in the MPIP and wider Macquarie Park Corridor area.

Infrastructure identified in the SISA

The SISA infrastructure schedule was the result of a collaborative effort between state agencies, utility providers and local councils to examine the relationship between growth and infrastructure.

The methodology for developing the schedule comprised the following steps:

Table 5	Infrastructure schedule methodology
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Step No.	Details	Notes
1	Scenario development and land use forecasting	
2	Preliminary infrastructure and services identification for initial scenarios and forecasts	
3	Targeted stakeholder engagement on future scenarios	
4	Multi-criteria analysis to select a preferred scenario	
5	Preferred scenario sector infrastructure and service needs, land requirements and cost evaluation	SISA is the output of these steps
6	Consolidation of infrastructure and service needs, spatially and temporally	
7	Inputs to Place Strategy and Master Plan.	IDP provides SISA implementation details

Source; SISA p13

The SISA identified 190 individual infrastructure items that would be needed to serve the future Macquarie Park Corridor developments. **Table 6** is an excerpt from the SISA showing a summary of infrastructure categories, examples of works, and responsibilities.

Table 6 SISA infrastructure overview

Category	Туре	Responsible
Cultural and community infrastructure	 Gallery Performance space Museum Library Community centre 	State government Local government
Education	 Primary school Secondary school Support facilities 	State government
Green and blue infrastructure	 Public open space (local and regional) Passive open space Tree planting Blue infrastructure (stormwater, riparian areas, riparian corridor planting) 	State government Local government
Health, justice, police and emergency services	 Hospital Ambulance station Community health facility Courthouse / tribunal Fire station Police station 	State government
Public transport	 Rail/metro Interchange and stations (including bus stops, layovers) Fleet (e.g. buses, trains) 	State government Local government
Roads and active transport	 State road (e.g. Lane Cove Road) Local road (e.g. Cottonwood Crescent) Cycleways Footpaths Electric vehicle charging stations 	State government Local government
Sport and active recreation	 Active open space / recreation facility Sporting field Indoor / outdoor court 	State government Local government
Water and electricity	 Wastewater treatment plant / recycling plant Water pumping station Reservoir Stormwater infrastructure Electrical zone substation 	State government Local government Utilities

Source; SISA p12

State and local infrastructure needs

The SISA identified infrastructure types according to whether they were the State (or regional) infrastructure, or local infrastructure, as shown in **Table 7** below.

Table 7 State, regional, and local infrastructure needs

Public transport	State or regional	Local
Bus Priority Infrastructure Program (BPIP Stage 1A, 1B and 2)	•	
New strategic bus corridor and bus priority facilities	•	
Macquarie University Bus Interchange (MUBI)	•	
Macquarie Park northern and southern bus layovers	•	
New and upgraded bus stops		•
Upgrade Ryde bus depot	•	
Investigate mass transit links	•	
Increase Sydney Metro services through MP Corridor	•	
Roads and active transport	State or regional	Local
Fine grain road network		•
Land acquisition for road widening		•
Pedestrian bridge crossings of Lane Cove Road	•	
New or upgraded pedestrian crossings and signals		•
Intersection improvements on State road network	•	
Intersection improvements on local road network		•
New and upgraded footpaths on existing roads	•	•
Traffic management facilities on local road network		•
Lower speed limits		•
Electric vehicle charging stations		•
New and upgraded cycle links (within Stage 1)		•
New and upgraded cycle links (outside Stage 1 and regional works)	•	•
Comprehensive network of dedicated cycle & micro-mobility connections		•
Publicly accessible bicycle parking		•
Active transport link through Browns Waterhole		•
Sports and active recreation	State or regional	Local
Active open space within MPIP (144 Wicks Rd) - land	TBD	TBD
Active open space within MPIP (144 Wicks Rd) - works	TBD	TBD
Outdoor sports courts		•
Indoor Multi-use courts		•
Upgrades to existing active open space outside MPIP		•
Green and blue infrastructure	State or regional	Local

Waterloo Road Forest Zone (linear park)		۲
Embellishment of existing parks outside MPIP		•
Open space within Stage 1 neighbourhood plan - land and works		•
Open space within Stage 2 neighbourhood plan - land and works		•
Shared path upgrades		•
Street tree planting		•
Improving waterways / water quality devices		•
Park and open space tree planting		•
Health, education, police and emergency services	State or regional	Local
New primary schools	•	
New secondary school	•	
New North Ryde fire station	•	
Ryde Hospital Redevelopment	•	
New ambulance station (8 bays)	•	
Community health facility	•	
New Ryde PAC Multipurpose Policing Centre		
Cultural and community infrastructure	State or regional	Local
Multipurpose Indoor Recreation, Community and Youth Hub Centre		•
Macquarie Centre Library and Creative Hub Fitout		•
Ryde Central - Regional Community Facilities		•
Creative Gallery, Production and Event Space		•
Water and electricity	State or regional	Local
Wastewater - wet weather storage tank	Utility	
Wastewater main duplication-DN225, 200m long	Utility	
Reinstate existing disused Ryde to Pymble ('RP03') trunk drinking water main	Utility	
Marsfield Reservoir - new 10 mega litre reservoir	Utility	
Local water network duplication	Utility	
Waterloo Road Stormwater Works	Utility	

'TBD' – to be determined

Key Infrastructure identified in the Stage 1 and Stage 2 Rezoning Areas

The SISA identified that an additional 25 hectares of land would be needed to meet the MPIP's additional demands for sports fields and other active recreation, including 18 hectares for 'four ovals'.

The following additional facilities have been identified through detailed neighbourhood master planning of the Stage 1 and Stage 2 rezoning areas.

Open Space – 'Shrimptons Parklands'

Stage 1 identified the embellishment and expected dedication of approximately 2.3 hectares, including two multi-purpose sports courts for a major new local park referred to as 'Shrimptons Parklands'.

Active recreation land - 'Wicks Park'

Stage 2 identified the embellishment and expected dedication of approximately 2.8 hectares for public open space ('Wicks Park') at 144 Wicks Road. This is proposed to be designed for active recreational uses and is beneficially located adjacent to a hockey field owned by the Office of Sports. This provides the potential opportunity for future renewal of both sites together to achieve the best overall outcome for delivering active recreation open space.

Embellishment of existing open space land

Ryde City Council has identified projects listed in **Table 8** that are proposed to absorb extra demand for outdoor sports by making existing parks 'work harder' – i.e., embellishment of existing open space land to increase carrying capacity.

Facility type	Location and description									
Sports field	Marsfield Park - Conversion of two fields to synthetic turf									
	Pidding Park - optimisation to create 1 new natural full-size field and 2 new natural junior fields									
	Magdala Park masterplan delivery - optimisation to create 1 new natural full-size field									
	Waterloo Park - optimisation to create 1 new natural full-size field									
Outdoor courts	Meadowbank Park masterplan delivery - stage 6 - 2 new modified multipurpose courts									
	Waterloo Park - 1 new modified multipurpose court									
	Porters Park - 1 new modified multipurpose court									

 Table 8
 Additional open space projects identified by Ryde City Council

Multi-purpose indoor facility

Stage 1 identified a large community facility, a 5,300 sqm GFA multi-purpose indoor facility, in the podium of a mixed-use development with towers above. It is proposed to provide large multi-purpose spaces appropriate to both indoor sports (4 x court indoor hall), as well as corporate functions, such as trade shows and poster sessions. The community facility is also proposed to include multipurpose rooms – makerspaces and community tech lounge.

Land required for infrastructure

The SISA identified that approximately 60ha of land would need to be acquired to provide new and expanded infrastructure to meet the demand generated by the anticipated development within the Macquarie Park Corridor. The majority of this land is required for the following infrastructure types:

- Sporting facilities 25ha
- Roads and active transport 11ha
- Green & blue infrastructure 10ha
- Public transport 6ha
- Education 5.5ha

The land requirements do not include land already owned by the NSW government or the Council.

Section 4.4 of the IDP discusses the extent of land for infrastructure that will be acquired or dedicated, and the mechanisms to be used to obtain the land.

Land ownership

The relatively few land owners and the moderate to large sites that are a feature of Macquarie Park provide the opportunity for developers to directly provide infrastructure land and works that are integral to the Place Strategy outcomes while reducing the infrastructure obligations of State and local government.

For example, the ownership and lot pattern at Macquarie Park makes it possible for segments of the fine grain roads network and areas of local open space to be provided *in conjunction with* development on land held in one or few owners. In this way the infrastructure delivery is part of the developer's project and the cost and financial risk rests with the land owner.

A land owner will only do this if he is paid for the value of the works provided and the land forgone for infrastructure. This 'payment' need not involve cash but can be in terms of additional development potential (such as extra floor space) or rezoning the land to allow a change of land use that increases the residual value of the land.

This approach to providing urban infrastructure is the basis of the 'incentive clause' mechanism that is available to owners and developers of certain land in the MPIP and that is discussed later in the report.

Consolidated infrastructure schedule and infrastructure costs

Development of the Stage 1 Neighbourhoods Master Plan has resulted in rationalisation of the infrastructure list and minor adjustments to the total costs of infrastructure.

The total estimated cost of infrastructure in this IDP is \$6.3 billion, slightly below the \$6.4 billion total apportioned cost in the SISA. However, the costs of several items are yet to be determined, and the total costs are likely to increase.

Most of the total infrastructure cost (\$4.2 billion) is for investment in strategic public transport projects that are not anticipated to be incurred until after 2036.

Figure 7, Figure 8 show a breakdown of the number of infrastructure items and the infrastructure cost by sector. **Figure 6** shows the breakdown of costs by jurisdictional responsibility (i.e., the costs of State (ore regional) infrastructure, utility infrastructure, and local infrastructure.

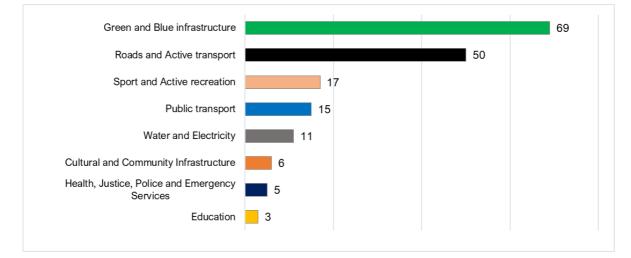


Figure 6 Macquarie Park Corridor number of infrastructure items by sector

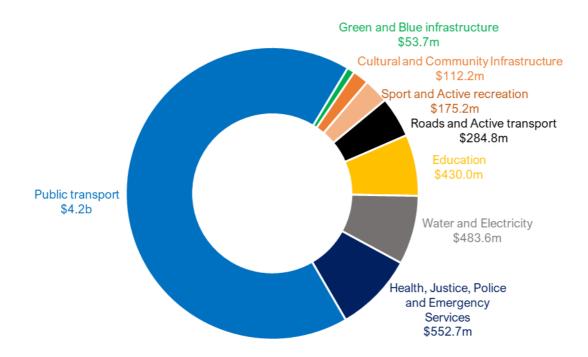


Figure 7 Macquarie Park Corridor infrastructure costs by sector

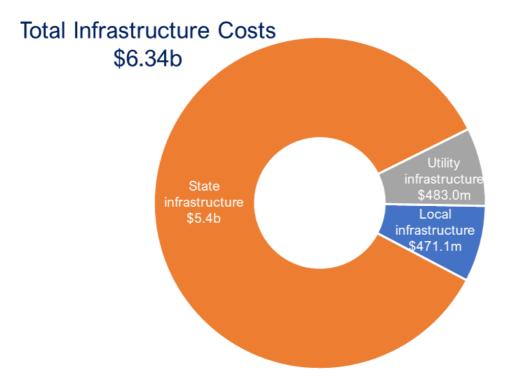


Figure 8 Macquarie Park Corridor infrastructure costs by jurisdictional responsibility

Funding and delivery mechanisms

Summary of mechanisms

New or augmented infrastructure that is needed to support the growth of urban redevelopment areas in a built-up urban context can be provided through several mechanisms.

Potential planning system and other mechanisms that that are available to deliver infrastructure that is linked to development growth, and that could be used to deliver MPIP infrastructure are shown in the table below. Mechanisms in bold text are more fully discussed in section 3.2.

Mechanism	Brief description of mechanism
Planning system mechanisms	
S7.11 contributions	A contribution of money or land imposed as a condition on a development consent or complying development certificate. The contribution cannot be more than an amount that reflects the relationship (or nexus) between the particular development and the infrastructure the subject of the contribution.
S7.12 levies	Fixed rate levy imposed as a condition on a development consent or complying development certificate. Maximum levy rate is set by regulation and is generally 1% of development cost, however there are numerous areas where this maximum has been increased through EP&A Regulation amendments.
S7.28 Housing and Productivity Contributions (or HPC contributions)	Contribution of money or land imposed as a condition on a development consent or complying development certificate to be applied toward the provision of state and regional infrastructure determined by the Minister for Planning.
S7.4 Planning agreements (State and Local)	An agreement voluntarily negotiated between a developer and the one or more planning authorities in which the developer commits to providing contributions of land, works or money for public purposes.
	In the MPIP there is potential for planning agreements to be used to formalise LEP incentive clause arrangements in Stage 1 (refer to section 4.1), and in out of sequence neighbourhood planning proposals in Stage 2.
LEP 'incentive clause' provisions	An arrangement where a developer provides infrastructure on or adjacent the development site that has a broader public benefit, in exchange for the right to develop the site for alternative and/or more intense land use. The developer

Table 9 Potential infrastructure funding and delivery mechanisms

	commitments are usually formalised through a planning								
	agreement.								
	Land in the MPIP is already subject to an incentive clause (refer to section 3.2.								
Direct developer provision through planning controls	The developer is required to provide, replace or upgrade infrastructure as a condition on a development consent. The works are usually required directly as a result of the development works. For example: in-street drainage and upgrades of street adjoining their development.								
Other mechanisms									
Council General fund	Ordinary rates revenue that is collected by the council on an annual basis to fund the operations of the council. The use of general funds to fund infrastructure needs to be agreed and endorsed by Council.								
Special rate variation (LGA)	Additional council rates pursuant to section 495 of the Local Government Act 1993 for works or services that will service the LGA. An application is required to be made and approved by Independent Pricing and Regulatory Tribunal (IPART). The use of special rate variations need to be agreed and endorsed by Council.								
Local area special rate	Additional council rates pursuant to section 495 of the Local Government Act 1993 for works or services limited to a specific area (e.g. land release or suburb) that will benefit from the proposed infrastructure. An application is required to be made and approved by IPART.								
	A local area special rate has operated in Macquarie Park for 15 years. More information on its potential use in Macquarie Park to fund future infrastructure is included in section 3.2 of this plan.								
State or Commonwealth Budget allocations	Amounts allocated from NSW or Commonwealth government consolidated revenue.								
User fees and charges	One-off and recurrent payments made by users of a facility or service, such as connection and usage fees charged by utility authorities for utility services. For example, NSW water supply authorities in issuing a certificate of compliance for a development consent, can first require the developer to pay headworks contributions under a Developer Servicing Plan (DSP).								
State and Commonwealth Government grants	Funds that are available for the provision of infrastructure via an application process. Most schemes require co- funding/cash contribution for projects. Projects without co- funding tend to score lower against the merit criteria.								
Non council providers of similar service	Facilities and services that have been traditionally provided by councils but are also provided by other organisations. Examples include childcare centres (increasingly provided by for-profit companies), indoor recreation centres (increasingly provided by registered clubs and Non-Government Organisations (NGOs) such as Police and Community Youth Clubs (PCYC)).								

Local infrastructure

S7.11 and s7.12 contributions

Much of the infrastructure identified as being needed to support the Place Strategy's implementation is local infrastructure that Ryde City Council is responsible for delivering and/or owning and managing.

The primary funding and delivery mechanism available to councils to fund local infrastructure is local infrastructure contributions, comprising section 7.11 or section 7.12 contributions.

The main difference between the two contribution types is that a s7.11 contribution must be reasonable, meaning that it must meet the tests of nexus and apportionment:

- Nexus is the connection between proposed development and the demand created for infrastructure included in a contributions plan.
- Apportionment is the share of the total demand that the developer must pay.

That is, the s7.11 contribution amount levied on a development must reflect its share (or portion) of the total demand it generates for infrastructure items in the plan it has some nexus (or connection) with.

A s7.12 contribution is a fixed rate levy on the cost of development. A s7.12 amount need not have any connection with the facilities the contribution is proposed to fund.

Section 212 of the EP&A Regulation requires a contributions plan to specify the relationship between the expected types of development and the demand for additional public amenities and public services. As such, while there may not need to be a connection between an individual development and the infrastructure provided using the contribution from that development, there still should be a connection between the types of development on which the levy is imposed and the infrastructure being funded by the levy.

S7.11 and s7.12 contributions can fund 'public amenities and public services'. Public amenities and public services can be any infrastructure or facilities apart from water supply and sewerage services.⁷ Convention, case law and practice notes however has led to these contributions being limited to meet the capital costs of infrastructure that is the responsibility of local government. Has meant Typical infrastructure items that may be part or fully funded, depending on the population growth, includes:

- local road improvements, pedestrian crossings, and cycleways
- local and district park upgrades
- local and district community facilities upgrades and expansions

⁷ S7.1 Environmental Planning and Assessment Act 1979

- public domain works including footpath widening and street tree planting (where these facilities are not proposed to be required as developer works in conditions of consent)
- recreation and sport facilities including courts, swim centres, sports fields
- trunk stormwater drainage facilities.

Under the current planning framework, councils and local planning panels as consent authorities are restricted on the amount of contributions can be imposed on residential development. For section 7.11 contributions, the current State government policy is that unless a contributions plan has been reviewed by the Independent Pricing and Regulatory Tribunal (IPART), the maximum amount applying to residential development in infill areas is \$20,000 per dwelling or lot. Presently no corresponding limit applies to contributions imposed on nonresidential development.

The IPART review process is extensive and the infrastructure in a plan must be on the 'essential works' list to be funded by developer contributions. Essential works do not include community buildings, indoor sports centres, and streetscape works not linked to traffic improvements.

Alternatively, a section 7.12 plan may be applied to development - that is, a single development can be subject to either a section 7.11 contribution or a section 7.12 levy, but not both.

The section 7.12 levy is generally restricted to a maximum of 1 per cent of the cost of development, although higher levies are permitted in certain areas.⁸

The Secretary has published a practice note setting out the criteria that the Minister for Planning will apply when considering any request from a council seeking to impose higher levy rates on development.⁹

LEP 'incentive clause'

Ryde Local Environmental Plan 2014 includes provisions that links additional height and floor space on certain land within the Macquarie Park Innovation Precinct with the provision of roads, pedestrian linkages, and open space.

For example, standard FSRs applying to employment zoned land in Macquarie Park range between 1:1 and 3:1; and the LEP allows further FSR of between 0.5:1 and 2:1 depending on location.

⁸ Areas where section 7.12 levies above 1 per cent of the development cost are currently permitted include Land in Burwood LGA (Burwood town centre), Land in Willoughby LGA (Chatswood town centre), Land in Liverpool LGA (Liverpool city centre), Land in Newcastle LGA (Newcastle city centre), Land in Parramatta LGA (Parramatta CBD), Land in Wollongong LGA (Wollongong City Council), Land in Randwick LGA (Kensington and Kingsford town centres), Land in City of Sydney LGA (Central Sydney), Land in The Hills LGA (Norwest innovation area)

⁹ Section 7.12 fixed development consent levies - Practice note – February 2021

Approval for increased FSR and / or height can only be granted where the consent authority is satisfied that:

- (a) there will be adequate provision for recreation areas and an access network, and
- (b) the configuration and location of the recreation areas will be appropriate for the recreational purposes of the precinct, and
- (c) the configuration and location of the access network will allow a suitable level of connectivity within the precinct.¹⁰

The scheme is predicated on developers being able to choose between developing in accordance with the base floor space ratio and height of buildings requirements; or in accordance with the incentive requirements if they can meet requirements (a) to (c) above.

The requirements can be met by directly providing recreation or access infrastructure in accordance with the DCP or making a cash contribution in lieu of provision. All developer commitments in relation to development approved under the incentive clause of the LEP are formalised in a planning agreement between the developer and the council.

The LEP provisions enable the following to be provided at no cost to Council:

- the construction of and/or the dedication of land to enable construction of a 'fine grain' road network set out in the DCP
- the embellishment of and/or the dedication of land to enable embellishment of new open space areas identified in the DCP
- the embellishment of through-site links identified in the DCP

The current LEP provisions aim to deliver the following local infrastructure:

- 4.1 km of 20m wide roads
- 3.6 km of 14m wide roads
- 3.4 km of 8m wide pedestrian links
- 111 m of road widening; and
- 3.5 hectares of open space.

Macquarie Park Special Rate

A special rate administered by City of Ryde currently applies to all properties within the Macquarie Park Corridor. The funds have in the past been used by the council to provide public domain works, road improvements and cycleways.

¹⁰ Clause 6.9, Ryde LEP 2014

The levy has raised approximately \$20 million since it commenced in 2006-07. In the financial year ending June 2022 the special rate fund collected about \$1.8 million in revenue, and had a closing balance of \$2.3 million.

This source can continue to fund new and upgraded Macquarie Park infrastructure, particularly:

- facilities that are not able to be fully funded by the other funding sources available to Ryde City Council, or
- where co-funding with other funding sources is needed because of the scale or high cost of the of the project (land or works), or
- meeting unforeseen or unfunded infrastructure delivery costs, such as service relocations.

State and regional infrastructure

Housing and Productivity Contributions

The Environmental Planning and Assessment Amendment (Housing and Productivity Contributions) Act 2023 was passed by the NSW Parliament. This Act introduces a new State infrastructure contribution known as the Housing and Productivity Contribution (HPC). It will replace the previous Special Infrastructure Contribution (SIC) in the NSW planning legislation in October 2023.

The purpose of the HPC is to facilitate the provision of regional infrastructure that supports and promotes housing and economic activity in a region by enabling a contribution (a housing and productivity contribution) to be required (s7.24(1) EP&A Act).

Contributions will go towards the provision of state and regional infrastructure, such as roads, parks, hospitals and schools.

The HPC can contribute towards the following growth-enabling types of infrastructure:

- Active transport
- Transport
- Education
- Health
- Emergency
- Justice
- Open Space and conservation

Funds will also be provided to support councils in delivering infrastructure that supports housing and productivity.

Funds collected through the HPC are set to apply in October 2023 to Greater Sydney, the Illawarra-Shoalhaven, Lower Hunter and the Central Coast to the following development:

- residential development that intensifies land-use where new dwellings are created, such as houses, apartments, terraces and dual occupancies.
- commercial and retail development such as shops, neighbourhood shops, supermarkets, and commercial office buildings where new floorspace is created.
- industrial development such as warehouses and industrial buildings, where new floorspace is created.

The 'base' HPC rates applicable to the following development types within the Greater Sydney region, after they are fully phased in by 2025 are as follows:

- Houses (detached, semi-detached and townhouses): \$12,000 per dwelling
- Other residential accommodation (residential flat buildings and units): \$10,000per dwelling
- Industrial: \$15 per square metre of new gross floor area
- Commercial: \$30 per square metre of new gross floor area
- Retail: \$30 per square metre of new gross floor area

The following discounts will apply in the period prior to 1 July 2026:

- HPC paid before July 2024 50% of the full rate
- HPC paid before July 2025 25% of the full rate
- HPC paid from July 2025 full rate will apply

These rates are proposed to be indexed quarterly using ABS PPI index. Moneys collected will be held in a Housing and Productivity Fund administered by NSW Treasury. Payments of the HPC will be held by Treasury in a Special Deposits Account.

The disbursement of Fund monies will be through a process that includes:

- Preparation of an Infrastructure Opportunities Plan that will contain 20-year growth projections and projects eligible for funding throughout the 4 regions.
- Construction data, dwelling forecasts and inputs from stakeholders will inform a set of infrastructure priorities will be recommended for each region.
- Further refinement of the infrastructure priority list by a Government Coordination Group will inform government funding allocation decisions.

The Act provides that contributions collected in a region must be spent in the same region. Therefore it is likely that the HPC funds directed towards regional infrastructure in Macquarie Park will be a different amount to the contributions collected in Macquarie Park.

Matching infrastructure to delivery mechanisms

The types of infrastructure required to meet future development was compared against the array of possible funding and delivery mechanisms described in **Table 8**.

Table 10 on the following pages is a matrix analysis showing the potential for different mechanisms to provide the infrastructure that is required in the development area. Potential mechanisms and a suggested primary mechanism are shown for each infrastructure type.

Table 10: Macquarie Park Corridor infrastructure and potential delivery mechanisms (Source: GLN Planning)

INFRASTRUCTURE TYPE

			\$ \$ /	2. J.		<i>s</i> .	larie	£ / .	2 ^e / 2	^{\$} "/ &	§ \$	25 × 55	
	Develop	Local interest	_ / ·	Planning and	Council C	Rect.	* /	toursing 2	Sale or C	5 ° 394		· / ·	
	°0	/ \$	/	100	1 3	/ *	/	1 2	1 5	18	/ ~		
Public transport		(Í	í			Í	Í			Í	Í	
Bus Priority Infrastructure Program (BPIP) Stage 1A, 1B and 2 (funding committed)									0				
New strategic bus corridor and bus priority facilities								•	0				
Macquarie University Bus Interchange (MUBI)								•	0				
Macquarie Park northern and southern bus layovers								•	0				
New and upgraded bus stops		•			٠	0			٠	•			
Upgrade Ryde bus depot									0				
Investigate mass transit links								•	0				
Increase Sydney Metro services through MP Corridor									0				
Roads and active transport													
Fine grain road network	•	•	0	0		•							
Land acquisition for road widening		0	•			•							
Pedestrian bridge crossings of Lane Cove Road								•	0				
New or upgraded pedestrian crossings and signals		•	•	•		0			•				
Intersection improvements on State road network													
Intersection improvements on local road network		•	•	•		0			•				
New and upgraded footpaths on existing roads	•	•	•	•	•	0				•			
Traffic management facilities on local road network		•	•	•	•	0				•			
Lower speed limits					•	0			•	•			
Electric vehicle charging stations			•	•		•			•	0	•	•	
New and upgraded cycle links (within Stage 1)	•	•				•		•	0	•			
New and upgraded cycle links (outside Stage 1 and regional works)		•				•			0				
Comprehensive network of dedicated cycle & micro-mobility connections		•						•	0				
Publicly accessible bicycle parking		0											
Active transport link through Browns Waterhole	-								0				
Sports and active recreation		-											
Active open space within MPIP (144 Wicks Rd) - land		•						•	0				
Active open space within MPIP (144 Wicks Rd) - works		•		•		•		•	0	•			
Outdoor sports courts	•	0		•						•		•	
Indoor Multi-use courts	•	•	•	•		•				•		•	
Upgrades to existing active open space outside MPIP		0	•	•	•			•		•			
Aquatic facility					•				0	•		•	

¹Drol

INFRASTRUCTURE TYPE	Contraction of the second	Landing Constitution	5:17 0, 5:10000	Panning and Calue	Council Concert such million	Mag.	Millio Part Special P.	Stornwater levy	Jaco Control Control	Sato or C. allocation brace.	Contraction of the contract of	Mon reas and changes	Southonicology
Green and blue infrastructure													
Waterloo Road Forest Zone (linear park)	•	0	•	•		•				•			
Embellishment of existing parks outside MPIP		0	•	•	•			•		•			
Open space within Stage 1 neighbourhood plan - land and works		•	0	•	•					•			
Open space within Stage 2 neighbourhood plan - land and works		•	0	•						•			
Shared path upgrades		0			•					•			
Street tree planting	•	•			•	0				•			
Improving waterways / water quality devices	•	•				•	0			•			
Park and open space tree planting	_	0				•				•			
Health, education, policy and emergency services													
New primary schools								•	0			•	
New secondary school								•	0			•	
New North Ryde fire station								•	0				
Ryde Hospital Redevelopment								•	0				
New ambulance station (8 bays)								•	0				
Community health facility								•	0				
New Ryde PAC Multipurpose Policing Centre								•	0				
Cultural and community infrastructure													
Multipurpose Indoor Recreation, Community and Youth Hub Centre		0	•	•	•	•			•	•		•	
Macquarie Centre Library and Creative Hub Fitout		0			•	•							
Ryde Central - Regional Community Facilities		•			•					•			
Top Ryde Community Services Hub		•			•					•			
Creative Gallery, Production and Event Space	_						_		٥	٠		•	
Water and electricity													
Wastewater - wet weather storage tank											0		
Wastewater main duplication-DN225, 200m long											0		
Reinstate existing disused Ryde to Pymble ('RP03') trunk drinking water main											0		
Marsfield Reservoir - new 10 mega litre reservoir											0		
Local water network duplication											0		
Waterloo Road Stormwater Works		•				0	•						

Potential mechanism Suggested primary mechanisms (s)

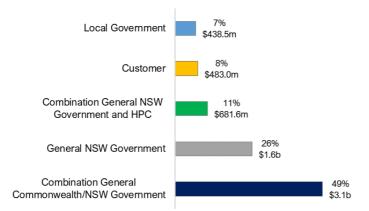
Infrastructure funding and delivery plan

Overview of funding sources

Section 3.4 of the SISA identified indicative primary funding sources for all the infrastructure required for the MPC. The categories have been adjusted slightly for this IDP to simplify the funding picture and to recognise the introduction of the HPC in October 2023. Water utility DSP funding source has not been specifically identified but is a source that can meet some of the costs in the 'Customer' category. Despite the adjustment, there has been no change to the reality that the NSW Government will inevitably be responsible (with the Commonwealth) for the overwhelming majority of the costs.

The broad funding source categories are listed below, and estimated funding responsibility shares are included in **Figure 9**:

- General NSW Government
- Combination General Commonwealth/NSW Government
- Combination General NSW Government and HPC
- Customer
- Local Government





Local infrastructure

A range of mechanisms to be used

An assessment of the suitability of different funding / delivery mechanisms was undertaken for the items categorised in the infrastructure list as local infrastructure.

The Department and Council reviewed each local infrastructure item, and decided whether they could be reasonably delivered using the following mechanisms:

- (a) provided by the developer as a condition of consent
- (b) provided through the provisions included in the Ryde LEP requiring the developer to provide infrastructure
- (c) provided by contributions made by developers under a contributions plan prepared under s7.11 or s7.12 of the EP&A Act
- (d) provided by Council using funds received under the Macquarie Park corridor special rate or the stormwater levy authorised by the Local Government Act 1993.

The following table shows a summary of the mechanisms and the type and total cost of local infrastructure included in that mechanism.

Mechanism	Examples of local infrastructure types to be delivered using this mechanism	No. of items	Total value of works using this mechanism ª
Contributions plan	Open space and recreation Streetscape and other	77	\$293.6 million ^b
	embellishments Open space embellishment		
	Traffic and transport facilities – land acquisition and works		
	Access points to open space Active transport facilities		
	Community facilities		
Planning agreement (including use of incentive provisions in	Community facility Civic squares near metro station Street planting	13	\$77.1 million ^ь
LEP)	Passive open space Fine grain roads network		
Macquarie Park Special Rate	Improving waterways Lowering speed limits Electric vehicle charging stations	28	\$29.6 million
	Stormwater facilities		

How local infrastructure is to be provided

Table 11

General NSW Government funding / State grants	Creative Production Space Creative Gallery and Event Space Aquatic facility 1x50m pool Herring Road: Intersection improvements Active transport link through Browns Waterhole	9	\$70.3 million
Stormwater levy	Herring Road stormwater works Waterloo Road stormwater works	3	\$450,000
Conditions of consent	Riparian corridor works	1	\$100,000

Notes:

a Infrastructure list and costs not yet finalised - for example the proposed aquatic centre

b This is the total cost of the items. The reasonable, apportioned cost of the list of contributions plan items is estimated at \$249.6m.

c Costs of open space embellishment and civic squares to be delivered by developer through LEP provisions are yet to be determined

Contributions plan

Development on land in the Macquarie Park Corridor is currently subject to the City of Ryde Section 7.11 Development Contributions Plan 2020.

The plan applies to all land in the City of Ryde, and authorises the following contributions to be imposed on development in the 'Macquarie Park' area that increases demand for public amenities and public services:

- \$15,812 per 0-1 bedroom dwelling
- \$20,000 per 2 bedroom dwelling
- \$20,000 per 3 or more bedroom dwelling
- \$1,759 per additional worker

Details of the contributions plan are currently being discussed between the Department and Council.

LEP provisions

Current provisions in Ryde Local Environmental Plan 2014 that allow additional (i.e., 'incentive') floor space in exchange for the developer providing components of the fine grain road network situated on the development site would be expanded upon to implement certain infrastructure outcomes in Stage 1 and Stage 2 of the detailed master plans.

The provisions will enable mixed use development (including dwellings) to be approved on certain land only if the development includes specific infrastructure. The affected lands (i.e. 'key sites') are shown in **Figure 10** and the specific infrastructure to be provided by the developer of each site are shown in **Table 12**.



Macquarie Park Innovation Precinct Key Site Areas

Figure 10 Proposed Key Sites Areas for rezoning Stages 1 and 2 (Source: DPHI)

Table 12Proposed LEP 'key sites' and infrastructure requirements to be met as part of the sitedevelopment

Key site #	Infrastructure to be provided to council's satisfaction as part of the development
Area 1	1. At least 23,975 square metres for a recreation area and riparian corridor, which includes approximately 2,800 square metres for the purposes of state water infrastructure.
	2. Pedestrian access between the new Shrimptons Parklands and Wilga Park for the purposes of a 30m pedestrian bridge over Shrimptons Creek.
Area 2	At least 7,310 square metres for a recreation area.
Area 3	 At least 3,470 square metres for a recreation area. At least 5,300 square metres for a multipurpose indoor recreation community facility
Area 4	At least 3,435 square metres for a metro plaza.
Area 5	At least 5,805 square metres for a recreation area.
Area 6	 At least 2,685 square metres for a recreation area. At least 1,000 square metres will be used for the purpose of delivering access to a pedestrian and cyclist bridge over Lane Cove Road.
Area 7	At least 3,690 square metres for a recreation area.
Area 8	 At least 1,385 square metres for a recreation area. At least 850 square metres for the purpose of delivering access to a pedestrian and cyclist bridge over Land Cove Road.
Area 9	At least 13,380 square metres for a recreation area if the development includes residential accommodation.
Area 10	At least 28,100 square metres for a recreation area.
Area 11	At least 9,700 square metres for a recreation area.
Area 12	At least 2,980 square metres for a recreation area if the development includes residential accommodation.

The provision of infrastructure in exchange for additional incentive floor space is in addition to any requirement for land developers to make local infrastructure contributions to the Council under section 7.11 or s7.12 of the EP&A Act. These contributions go towards other infrastructure in the Ryde LGA which have a nexus with the Macquarie Park development.

Macquarie Park special rate

The scale of investment needed to provide all the local infrastructure required in the Macquarie Park corridor is expected to be beyond the sum of all the other funding sources, and so the special rate will be an integral part of the suite of delivery mechanisms.

A business-as-usual approach to the rate would generate approximately \$30 million in revenue for Macquarie Park infrastructure.

Ryde City Council should investigate the merit of increasing the rate at some point in the future to reduce potential local infrastructure funding shortfalls. Matters for council consideration include:

- The level of the rate having regard to the amount of infrastructure investment needed.
- The expected shortfall in funds available to deliver all the local infrastructure requirements in Macquarie Park.
- The Macquarie Park special rate income has not increased at the same pace as general business rates in the City of Ryde. Whereas rates for all business classed land have increased 7.3% pa over the 15 years to 2022, the Macquarie Park Special Rate increased 5.2% pa over the same period. If the rate was brought into line, the rate would have generated \$2.2m in the 2021-22 financial year (instead of \$1.8m).

State and regional infrastructure

New development in the Macquarie Park corridor will be required to make contributions toward State and regional infrastructure through the HPC.

In regard to HPCs, **Table 13** below shows the estimated HPC payable by the expected development in the Macquarie Park Corridor from the time of its full implementation from July 2025 (excluding indexation).

Development type	HPC base rate	Development projection	HPC Contribution
Residential	\$10,000 per dwelling	11,750 dwellings	\$117,500,000
Commercial	\$30 per sqm of GFA	300,000 sqm GFA	\$9,000,000
		TOTAL	\$126,500,000

Table 13	Greater Sydney Region HPC amount
----------	----------------------------------

Notes:

a. Calculation based on full HPC rates that will apply from July 2025

b. HPC amounts are paid into a Housing and Productivity Fund containing contributions from developments across the Sydney region. The amounts shown are an estimate of payments into the Fund and they do not represent the funds available to deliver Macquarie Park Corridor regional infrastructure

Utility infrastructure

The costs of utility infrastructure are met by user fees and charges and potentially, in the case of water supply authorities, through headworks charges imposed on developers under Development Servicing Plans (DSPs).

The NSW Government set the developer charge to zero in 2008 for the water utilities Sydney Water and Hunter Water in response to low development activity during and immediately following the Global Financial Crisis.

Following a review of infrastructure contributions and recommendations made by the NSW Productivity Commissioner that were adopted by the NSW Government in 2021, Sydney Water and Hunter Water are currently exhibiting draft DSPs that propose to reintroduce charges on new development towards the provision of drinking and wastewater infrastructure works.

The site is located within the Greater Sydney Drinking Water DSP and Sydney Coastal Wastewater DSP which proposes the base charges proposed per Equivalent Tenement (ET) as outlined in **Table 14**.

Table 14 Water and wastewater DSP charges per ET

DSP	Rate per ET
Water infrastructure	\$5,311
Wastewater infrastructure	\$2,060
Total	\$7,371

ET = Equivalent tenement

1 ET is equal to the annual total demand of an average detached, single residential dwelling.

To calculate an infrastructure contribution price, the total number of ETs each year is the sum of:

- 1. The number of new single residential dwellings, where one dwelling is one ET (by definition); and
- 2. The number of new dwellings in multi-unit residential lots (e.g., apartments), converted to ETs based on the difference in annual volume compared to a single residential dwelling; and
- 3. The total annual volume of new non-residential lots, converted to ETs based on the difference in annual volume compared to a single residential dwelling.

The proposal includes a mix of multi-unit residential and non-residential development. The DSP charges for these development types are calculated as a proportion of the single ET rate included in the DSP. The proportional rates and likely DSP charges are show in **Table 15** below.

Table 15 Anticipated water and wastewater charges

Category	Rate Per 1 ET	Rate Per Multi-unit residential (0.58 ET)	Rate per Multi: Single (0.004 ET)
Water infrastructure	\$5,311	\$3,080	TBC
Wastewater infrastructure	\$2,060	\$1,195	TBC
Total charge	\$7,371	\$4,275	TBC
Number of anticipated dwellings / Employees	0	11,750	TBC
Total charges	\$0	\$50,231,250	ТВС

Subject to final adoption by Sydney Water and IPART, the DSP contributions will be gradually reintroduced from 1 July 2024 when they will be capped at 25 per cent of the full charge in 2024-25; then capped at 50 per cent in 2025-26, with full contributions applying from 1 July 2026.

Land acquisition and dedication

Table 16 shows the breakdown of the SISA land requirements, and how they could be delivered.

Table 16	SISA Infrastructure lan	d requirements

Additional land required for	Land area identified in SISA	Potential provision strategies
Sporting facilities	25ha	 Approximately 2.8ha of a site within the MPIP at 144 Wicks Road is expected to be dedicated to Council when the lot is developed. Potential for Crown land east of Christie Park to be formed and embellished for sports uses to be investigated. Local infrastructure contributions for embellishment of existing parks outside the MPIP to increase their capacity for active recreation Expand current shared use agreement with Macquarie University for public use of university sports facilities.
Roads and active transport	10ha	 Incentive clause (for fine grain roads land in MPIP) HPC State government budget allocation
Green and blue infrastructure (including local and district open space)	6ha	 Incentive clause (for open space in MPIP) State government budget allocation
Public transport	5ha	HPCState government budget allocation
Primary schools (2) and a high school	5.5ha	 Macquarie Park Education Campus comprising 1 primary school and 1 high school has funding committed

Source: SISA

The infrastructure land areas will be either:

- (a) identified in a DCP that addresses Stage 1 development and is dedicated free of cost by the developer to the council as part of an overall development of the residue of the lot or lots that is approved under the incentive clause provisions of the Ryde Local Environmental Plan 2014, or
- (b) identified in the Land Acquisition Reservation map in an LEP or other environmental planning instrument to be acquired by either the NSW government or Ryde City

Council. Acquisitions would be subject to the NSW Land Acquisition (Just Terms Compensation Act) 1991.

Table 17 provides a summary of the detailed neighbourhood master planning infrastructure land requirements for implementing Stage 1 of the Place Strategy, and whether the lands are to be obtained by acquisition or dedication.

Table 17	Store 1 Perening	Area infrastructura	land requirements
	Stage i Rezonling	Area infrastructure	land requirements

Infrastructure purpose for the land	Land area to be dedicated by developer as part of development (m ²)	Land area to be acquired from the land owner by State or local government (m ²)	Other areas
Waterloo Road widening for pedestrian amenity and active transport		4,160	
Fine grain road network - new road reserves (including widenings)	38,515	4,150	
Fine grain road network in current DCP - Existing privately owned road reserves	20,040		
Public open space (new within Stage 1 neighbourhoods)	51,520		
Multi-purpose Indoor community facility (in sqm GFA, potentially to be provided in stratum)			5,300

Table 18 provides a summary of the neighbourhood infrastructure land requirements for implementing Stage 2 of the Place Strategy, and whether the lands are to be obtained by acquisition or dedication.

Infrastructure purpose for the land	Land area to be dedicated by developer as part of development (m²)	Land area to be acquired from the land owner by State or local government (m ²)	Other areas
Waterloo Road widening for pedestrian amenity and active transport		1,415	
Fine grain road network - new road reserves (including widenings)	66,035	3,210	
Fine grain road network in current DCP - Existing privately owned road reserves	5,160		
Existing road reserves retained			130,430
Public open space	71,190		

 Table 18
 Stage 1 Rezoning Area infrastructure land requirements

Figure 11, **Figure 12** shows the location of land proposed to be acquired and land expected to be dedicated when a lot develops across rezoning Stages 1 and 2.

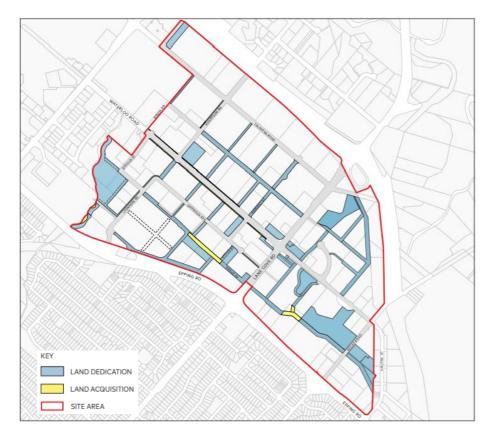


Figure 11 Infrastructure land as part of rezoning Stages 1 and 2 (Source: AJC)

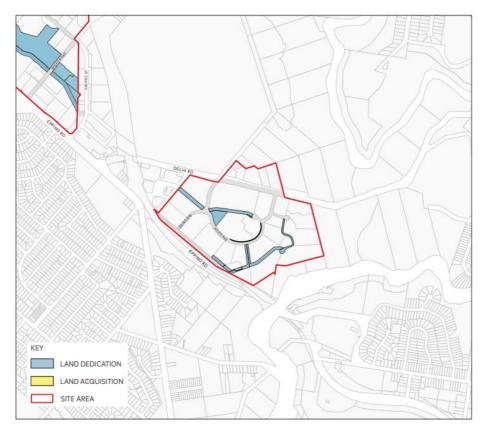


Figure 12 Infrastructure land as part of rezoning Stages 1 and 2 (Source: AJC)

Timing of infrastructure delivery

Section 5 contains indicative delivery timeframes of infrastructure items and updates the timing that appears for infrastructure in the SISA. Delivery timeframes are shown as being either:

- Short term (0-5 years from the date that the updated Stage 1 planning controls take effect)
- Medium term (6-12 years from the date that the updated Stage 1 planning controls take effect)
- Long term (after 2036)
- More than one of the above

The SISA identified current deficiencies in the infrastructure networks and recommended that implementation plans address existing backlogs as well as future needs.

Table 19 shows 'committed and funded' initiatives. These are projects which have beenpublicly announced and to which public funding has been committed.

These initiatives – comprising at least \$1.07 billion of the total \$6.3 billion infrastructure costs in Macquarie Park - are in various stages of delivery, and some are considered to be critical to delivering the service capacity required by the projected growth. They are also to help ease existing backlogs arising from the rapid growth that occurred in the last decade.

Table 19 Committed funding initiatives - State and regional infrastructure					
Project	Description				
State and regional infrastructure					
Lane Cove Rd & Waterloo Rd intersection	Improvement of bus travel by reducing congestion and travel times. It is expected to be completed in late 2024. It is part of a \$240 million investment to support economic growth and create jobs.				
Macquarie Park Precinct & Bus Interchange Upgrade	The upgrade of the Macquarie University Station Bus interchange to optimise bus operation and pedestrian access. It will connect people to Macquarie University, Macquarie Centre, Macquarie Business Park and residential and commercial areas. The Australian and NSW Governments are investing nearly \$200 million to improve transport in Macquarie Park and help create a vibrant 'heart' for the precinct.				
Macquarie Park Bus Priority and Capacity Stage 2	The State Government is improving the road network in Macquarie Park as part of the Bus Priority Infrastructure Program to increase reliability and efficiency of services.				

Table 19 Committed funding initiatives - State and regional infrastructure

Macquarie Park Education Campus Herring Road improvements	Two new public schools will be built within the Macquarie Park Education Campus. The new primary school and high school are proposed to be delivered as part of an integrated mixed-use development in partnership with the private sector. Improvement of public transport in Macquarie Park to ease congestion and improve travel times.				
Ryde Hospital Redevelopment	The existing Ryde Hospital Campus is to become a major health facility with an investment of \$479 million. It will include a new road and expanded medical imaging department, new expanded intensive care unit, operating theatres, overnight inpatient beds, an ambulatory care centre, paediatric short stay unit.				
Talavera Road Bus Layover	A new layover near the intersection with Culloden Road to increase the efficiency of the bus network.				
New Ryde Fire Station	A new \$8.3 million fire station to replace the existing station at Blaxland Road.				
Lachlan's Line and Midtown schools	The Department of Education has secured sites for the delivery of the new primary school within the Midtown development area and for a new primary school and high school in the Lachlan's Line development area. The final business case for these schools has been approved.				
	The Macquarie Park Education Campus around Lachlan's Line will provide a new 1,000 student primary school and 2,000 student high school to be completed during 2028.				
	A project is underway for a new primary school in Midtown Macquarie Park to meet anticipated enrolment growth in the area. The school will accommodate 750 students from Kindergarten to Year 6 and is anticipated to be completed during 2026.				

Many local infrastructure items are likely to be delivered in the short term but have not necessarily had funding committed by Ryde City Council.

Infrastructure lists

This section contains updated information on the SISA infrastructure list.

The list is arranged in the same way as the items appear in the SISA – that is, on the following geographic areas shown in **Figure 13**.

- (a) Herring Road UAP and Macquarie University
- (b) North Ryde Station UAP
- (c) Within the Macquarie Park Innovation Precinct
- (d) Multiple Precincts (meaning infrastructure located in one or more precincts described in(a) to (c) above
- (e) Outside Macquarie Park Corridor

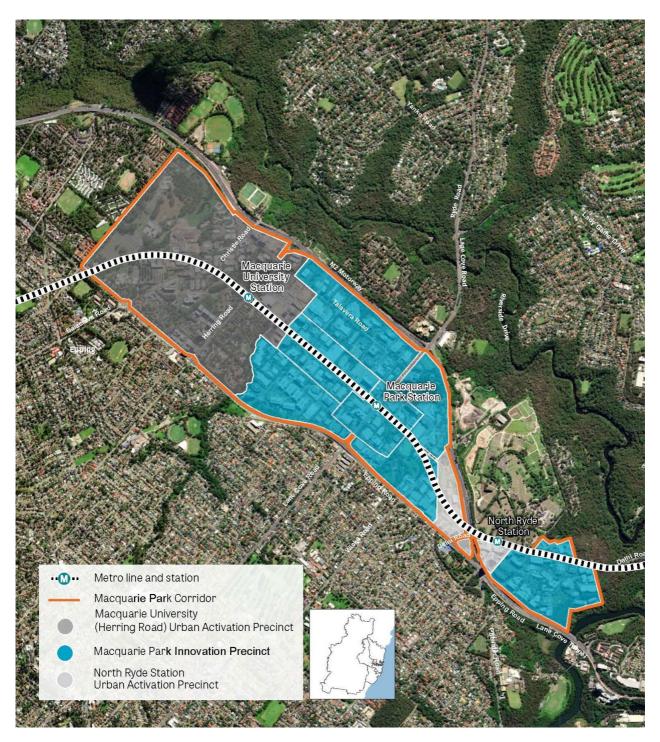


Figure 13 SISA Infrastructure Areas (Source: SISA, GCC 2022)

Infrastructure and service proposals located in Macquarie University (Herring Road) UAP

Project Name	Sector category	Primary funding source	Year 0-5	Year 6- 12	Post 2036
Public transport		-			
Bus Priority Infrastructure Program (BPIP) Stage 1B: Upgrades to Herring Road and the intersections with Waterloo Road, Epping Road and Ivanhoe Place.	Public Transport	Combination General Commonwealth/NSW Government	•		
Macquarie University Bus Interchange (MUBI)	Public Transport	Combination General Commonwealth/NSW Government	•		
Northern bus layover	Public Transport	General NSW Government	•		
Roads and Active transport					
Introduce electric vehicle charging stations: Herring Road UAP	Roads and cycleways	Local Government	•		
Talavera Road/Christie Road: Ensure pedestrian crossings on all legs of intersection	Roads and cycleways	Combination General NSW Government and HPC	•		
Talavera Road/Macquarie Park Shopping Centre: Ensure pedestrian crossings on all legs of intersection for Alma Road / Talavera Road / Shopping Centre Access	Roads and cycleways	Combination General NSW Government and HPC	•		

Project Name	Sector category	Primary funding source	Year 0-5	Year 6- 12	Post 2036
Herring Road: Intersection improvements	Roads and cycleways	Combination General NSW Government and HPC	•		
Lower speed limits (Regional Road) - Herring Road	Roads and cycleways	Local Government	•		
Cultural and community infrastructure					
Macquarie Centre Library and Creative Hub Fitout	Cultural and Community Infrastructure	Local Government		•	
Green and blue infrastructure			l		
Improving waterways and water dependent ecosystems in Herring Rd UAP	Blue	Local Government	•	•	•
Street planting along new road layout (Herring Rd UAP - 131 trees)	Green	Local Government	•	•	
Open space canopy - plant existing local parks in Herring Rd UAP to 60% canopy (541 trees)	Green	Local Government	•	•	
Open space canopy - plant proposed local parks in Herring Rd UAP to 60% canopy (96 trees)	Green	Local Government	•	•	
Waterloo Road Forest Zone - passive open space - Herring Rd UAP (1,020sqm)	Green	Local Government	•	•	

Project Name	Sector category	Primary funding source	Year 0-5	Year 6- 12	Post 2036
Street planting along existing roads - Herring Rd UAP (2164 trees)	Green	Local Government	•	•	
Additional access points to existing parks - Herring Rd UAP (51 access points)	Green	Local Government	•		
New passive open space area in Herring Rd UAP (15,0033sqm)	Green	Local Government	•	•	
Quandong Reserve, Cottonwood Reserve and Wilga Park shared user path upgrade	Roads and cycleways	Local Government	•		
Water and electricity					
Herring Road Stormwater Improvements	Water and Electricity	Local Government	•		
Lachlan Avenue Stormwater	Water and Electricity	Local Government	•		
Macquarie Shopping Centre Culvert GPT	Water and Electricity	Local Government	•		

Infrastructure and service proposals located in North Ryde Station UAP

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Roads and active transport					
Introduce electric vehicle charging stations: North Ryde UAP	Roads and cycleways	Local Government	•		
Epping Road/Delhi Road: Ensure pedestrian crossings on all legs of intersection	Roads and cycleways	Combination General NSW Government and HPC	•		
Green and blue infrastructure					
Improving waterways and water dependent ecosystems in North Ryde UAP	Blue	Local Government		•	•
Street planting along new road layout (North Ryde UAP - 263 trees)	Green	Local Government	•	•	
Open space canopy - plant existing local parks in North Ryde UAP to 60% canopy (198 trees)	Green	Local Government	•	•	
Open space canopy - plant proposed local parks in North Ryde UAP to 60% canopy (93 trees)	Green	Local Government	•	•	
Additional access points to existing parks - North Ryde UAP (4 access points)	Green	Local Government	•		
New passive open space area in North Ryde UAP (3,298sqm)	Green	Local Government	•		

Infrastructure and service proposals located in Macquarie Park Innovation Precinct

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Public transport	-		-		
Southern bus layover	Public Transport	General NSW Government	•		
Bus Priority Infrastructure Program (BPIP) Stage 1A: Waterloo Road & Lane Cove Road Intersection upgrade	Public Transport	General NSW Government	•		
Bus Priority Infrastructure Program (BPIP) Stage 2: Waterloo Road (Lane Cove Road and Herring Road)	Public Transport	General NSW Government	•		
Investigate Macquarie Park to South-East Sydney Transit / Train Link (incl Transport Hub)	Public Transport	Combination General Commonwealth/NSW Government			•
Roads and active transport					
Deliver Finer Grain Street Network - North Park, Shrimptons Quarter, Porters Creek, Macquarie Park Living Station, Wicks Road South, Waterloo Park, North Ryde Riverside	Roads and cycleways	Local Government	•	•	•
Waterloo Road: Intersection improvements Byfield Rd, Khartoum Rd, Thomas Holt Dr.	Roads and cycleways	Local Government	•		
Waterloo Road: New and upgraded paths	Roads and cycleways	HPC	•		
Waterloo Road: Additional traffic management measures	Roads and cycleways	HPC	•		
Talavera Road: Reallocation of road space	Roads and cycleways	HPC		•	
Lower speed limits (Local Road) - Waterloo Road, Khartoum Road, Wicks Road	Roads and cycleways	Local Government	•		

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Introduce electric vehicle charging stations: Shrimptons Quarter, Waterloo Park, Macquarie Park Living Station, North Park, Porter's Creek, Wicks Road, North Ryde Riverside	Roads and cycleways	Local Government	•		
Provide more signalised pedestrian / cyclist crossings across Waterloo Road, Talavera Road	Roads and cycleways	Combination General NSW Government and HPC	•	•	
Khartoum Road/Banfield Road intersection improvements	Roads and cycleways	Combination General NSW Government and HPC		•	
Waterloo Road / Eden Park Drive, Macquarie Park - Intersection improvements	Roads and cycleways	Local Government		•	
Lower speed limits (State Road) - Lane Cove Road	Roads and cycleways	General NSW Government		•	
Lane Cove Road: Intersection improvement at Talavera Rd (at grade)	Roads and cycleways	HPC	•		
Epping Road: Intersection improvement at Wicks Rd (at grade)	Roads and cycleways	HPC	•		
Pedestrian bridge crossing of Lane Cove Road in vicinity of Hyundai Drive, Dirrabari Road, Waterloo Road	Roads and cycleways	Combination General NSW Government and HPC		•	
Lane Cove Road/Waterloo Road: Ensure pedestrian crossings on all legs of intersection	Roads and cycleways	Combination General NSW Government and HPC		•	
Lane Cove Road/Talavera Road: Ensure pedestrian crossings on all legs of intersection	Roads and cycleways	Combination General NSW Government and HPC		•	

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Epping Road/Lane Cove Road: Ensure pedestrian crossings on all legs of intersection	Roads and cycleways	Combination General NSW Government and HPC		•	
Health, justice, police and emergency services					
New Ryde PAC Multipurpose Policing Centre	Police	General NSW Government	•	•	
Sports and recreation					
Indoor court/Youth Rec facility (e.g., 4 indoor courts and associated youth recreation facilities)	Sports	Local Government	•	•	
Sports fields	Sports	Local Government		•	
Cultural and community infrastructure	•				
Multi-purpose Indoor Facility – 5,300 sqm GFA, facility to include 4 x court indoor hall, multipurpose rooms – makerspaces, community tech lounge.	Cultural and Community Infrastructure	Local Government	•	•	
Green and blue infrastructure					
Improving waterways and water dependent ecosystems in ARUP Neighbourhood's 2,3,6,7	Blue	Local Government	•	•	
Waterloo Rd street canopy - North Park – Ngalawala ('Reciprocity') (198 trees)	Green	Local Government	•		
Waterloo Rd street canopy - Shrimptons Quarter – Waragal Birrung ('Evening Star') (34 trees)	Green	Local Government	•		
Waterloo Rd street canopy - Macquarie Living Station – Gari Nawi ('Saltwater Canoe') (34 trees)	Green	Local Government	•		

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Waterloo Rd street canopy - North Ryde Riverside – Narrami Badu-Gumada ('Connecting Water Spirit') (114 trees)	Green	Local Government	•		
Street planting along new road layout (North Park – Ngalawala ('Reciprocity') - 164 trees)	Green	Local Government	•	•	
Street planting along new road layout (Waterloo Park – Butbut ('Heart')- 408 trees)	Green	Local Government	•	•	
Street planting along new road layout (Shrimptons Quarter – Waragal Birrung ('Evening Star')- 51 trees)	Green	Local Government	•	•	
Street planting along new road layout (Macquarie Living Station – Gari Nawi ('Saltwater Canoe') - 88 trees)	Green	Local Government	•	•	
Street planting along new road layout (Porters Creek – Burbigal ('Morning') - 182 trees)	Green	Local Government	•	•	
Street planting along new road layout (Wicks Road South – Garungul ('Unbreakable') - 201 trees)	Green	Local Government	•	•	
Street planting along new road layout (North Ryde Riverside – Narrami Badu-Gumada ('Connecting Water Spirit')	Green	Local Government	•	•	
- 183 trees)					
Open space canopy - plant existing local parks in North Park – Ngalawala ('Reciprocity') to 45% canopy (66 trees)	Green	Local Government	•		
Open space canopy - plant proposed local parks in North Park – Ngalawala ('Reciprocity') to 45% canopy (41 trees)	Green	Local Government	•		

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Open space canopy - plant proposed local parks in - Macquarie Living Station – Gari Nawi ('Saltwater Canoe') to 45% canopy (209 trees)	Green	Local Government	•		
Waterloo Road Forest Zone - passive open space - in North Park – Ngalawala ('Reciprocity') (15,236sqm)	Green	Local Government	•		
Waterloo Road Forest Zone - passive open space - Shrimptons Quarter – Waragal Birrung ('Evening Star') (1,584 sqm)	Green	Local Government	•		
Waterloo Road Forest Zone - passive open space - Macquarie Living Station – Gari Nawi ('Saltwater Canoe') (1,465 sqm)	Green	Local Government	•		
Waterloo Road Forest Zone - passive open space - North Ryde Riverside – Narrami Badu-Gumada ('Connecting Water Spirit') (1,696sqm)	Green	Local Government	•		
Street planting along existing roads - Wicks Road South – Garungul ('Unbreakable') (49 trees)	Green	Local Government	•	•	
Additional access points to existing parks - Waterloo Park – Butbut ('Heart') (24 access points)	Green	Local Government	•		
Additional access points to existing parks - Shrimptons Quarter – Waragal Birrung ('Evening Star') (2 access points)	Green	Local Government	•		
Additional access points to existing parks - Macquarie Living Station – Gari Nawi ('Saltwater Canoe') (2 access points)	Green	Local Government	•		
Additional access points to existing parks - Porters Creek – Burbigal ('Morning') (6 access points)	Green	Local Government	•		

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Additional access points to existing parks - Wicks Road South – Garungul ('Unbreakable') (7 access points)	Green	Local Government	•		
Additional access points to existing parks - North Ryde Riverside – Narrami Badu-Gumada ('Connecting Water Spirit') (5 access points)	Green	Local Government	•		
New passive open space area in North Park – Ngalawala ('Reciprocity')(8,721sqm)	Green	Local Government	•		
New passive open space area in Waterloo Park – Butbut ('Heart') (5,694sqm)	Green	Local Government	•		
New passive open space area in Macquarie Living Station – Gari Nawi ('Saltwater Canoe') (32,537 sqm)	Green	Local Government	•		
New passive open space area in Shrimptons Quarter – Waragal Birrung ('Evening Star') (3,340sqm)	Green	Local Government	•		
Open space canopy - plant proposed local parks in Shrimptons Quarter – Waragal Birrung ('Evening Star') to 45% canopy (30 trees)	Green	Local Government	•	•	
Street planting along existing roads - Porters Creek – Burbigal ('Morning') (130 Trees)	Green	Local Government	•	•	
Open space canopy - plant existing local parks in Shrimptons Quarter – Waragal Birrung ('Evening Star') to 45% canopy (65 trees)	Green	Local Government	•	•	
Open space canopy - plant existing local parks in Macquarie Living Station – Gari Nawi ('Saltwater Canoe') to 45% canopy (4 trees)	Green	Local Government	•	•	

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Open space canopy - plant proposed local parks in Waterloo Park – Butbut ('Heart')	Green	Local Government	•	•	
to 45% canopy (51 trees)					
Street planting along existing roads - North Park – Ngalawala ('Reciprocity') (170 trees)	Green	Local Government	•	•	
Street planting along existing roads - Waterloo Park – Butbut ('Heart') (158 trees)	Green	Local Government	•	•	
Street planting along existing roads - Shrimptons Quarter – Waragal Birrung ('Evening Star') (47 trees)	Green	Local Government	•	•	
Street planting along existing roads - Macquarie Living Station – Gari Nawi ('Saltwater Canoe') (52 trees)	Green	Local Government	•	•	
Street planting along existing roads - North Ryde Riverside – Narrami Badu-Gumada ('Connecting Water Spirit') (193 trees)	Green	Local Government	•	•	
Acquisition of open space land - Wicks Road	Green	General NSW Government	•		
Embellishment of acquired open space land - Wicks Road	Green	General NSW Government	•		
Catherine Hamlin Park Embellishment - Macquarie Park of approx 1.5ha	Green	Local Government	•		
Water and Electricity					
Waterloo Road Stormwater Works	Water and Electricity	Local Government	•		
Wastewater main duplication-DN225, 200m long	Water and Electricity	Customer	•		

Infrastructure and service proposals – Multi-Precinct

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Public transport					
New and upgraded bus stops	Public Transport	Combination General NSW Government and HPC	•	•	
Increase Sydney Metro services through Corridor	Public Transport	General NSW Government		•	
Roads and active transport					
Deliver comprehensive network of dedicated cycle & micro-mobility connections	Roads and cycleways	Combination General NSW Government and HPC	•	•	
Deliver increased publicly accessible bicycle parking	Roads and cycleways	Local Government	•	•	
Complete missing links in Macquarie Park's centre- serving local / regional cycling network	Roads and cycleways	Combination General NSW Government and HPC	•	•	
Education					
Ryde Primary SCG: new primary school + 44 TS	Education	General NSW Government	•	•	
Ryde Secondary SCG: new high school +100 TS	Education	General NSW Government	•		
Health, justice, police and emergency services					
Community Health	Health	General NSW Government		•	

Ambulance	Health	General NSW Government	•		
Sports and active recreation					
Aquatic facility 1x50m pool	Sports	Combination General NSW Government and HPC	•		
Seven Outdoor Netball Courts	Sports	Local Government	•		
Community and Youth Hub Centre	Sports	Local Government		•	
Cultural and community infrastructure					
Creative Production Space	Cultural and Community Infrastructure	Local Government	•		
Creative Gallery and Event Space	Cultural and Community Infrastructure	Local Government	•		
Green and blue infrastructure					
Provision of senior's leisure needs - Embellishment of City Wide parks with additional seating, pathways and exercise equipment	Green	Local Government	•		
Water and Electricity					
New Zone Substation and Downstream Network Augmentations	Water and Electricity	Customer		•	
Recycled Water scheme - Macquarie Park	Water and Electricity	Customer	•		

Infrastructure and service proposals located outside the Macquarie Park Corridor

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Public Transport					
Investigate Parramatta to Epping Mass Transit / Train Link	Public Transport	Combination General Commonwealth/NSW Government			٠
Deliver Mona Vale to Macquarie Park public transport improvements (Mona Vale - Macquarie University Rapid route by 2036).	Public Transport	General NSW Government		•	
Deliver Strategic Bus Corridor from Macquarie Park to Parramatta via Eastwood (Rapid route by 2036)	Public Transport	General NSW Government		•	
Deliver Strategic Bus Corridor from Macquarie Park to Hurstville (Rapid route by 2036)	Public Transport	General NSW Government		•	
Deliver Strategic Bus Corridor from Macquarie Park to Blacktown via M2 (Rapid route by 2030)	Public Transport	General NSW Government		•	
Upgrade Ryde bus depot	Public Transport	Combination General NSW Government and HPC	•		
Roads and Active Transport					
Deliver active transport link through Browns Waterhole	Roads and cycleways	Local Government	•		
Provide footpath adjacent to Lane Cove Road from Talavera Road to Fontenoy Road	Roads and cycleways	Local Government	•		
Cycle link to Northern Beaches via A3	Roads and cycleways	Combination General NSW Government and HPC	•	•	
Education					

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Ryde Primary SCG: new primary school +32 TS	Education	General NSW Government	•		
Health, justice, police and emergency services					
New North Ryde fire station	Emergency Services	General NSW Government	•		
Sports and active recreation					
Indoor Outdoor Sports Facility - 4 indoor and 32 outdoor netball courts	Sports	General NSW Government	•		
Christie Park - Synthetic Sports Surfaces - Stage 2 six futsal/5-aside pitches with a car park extension	Sports	Local Government	•	•	
Christie Park - Synthetic Sports Surfaces - Stage 3 includes suspended slab with 3rd synthetic football field on top of car parking and a fitness facility/gym	Sports	Local Government	•	•	
North Ryde Park - Upgrade to playing surface, fencing and irrigation	Sports	Local Government	•		
Marsfield Park, Fields 1 & 2 Surface Renewal	Sports	Local Government	•		
Waterloo Park - Surface Renewal	Sports	Local Government	•		
ELS Hall Park - Master planned upgrades, youth space, and car park	Sports	Local Government	•		
ELS Hall Park - Indoor Facility	Sports	Local Government		•	
Marsfield Park - Conversion of two fields to synthetic turf	Sports	Local Government	•		
Pidding Park - optimisation to create 1 new natural full size field and 2 new natural junior fields	Sports	Local Government	•		

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Magdala Park masterplan delivery - optimisation to create 1 new natural full size field	Sports	Local Government	•		
Waterloo Park - optimisation to create 1 new natural full size field	Sports	Local Government	•		
Meadowbank Park masterplan delivery - stage 6 - 2 new modified multipurpose courts	Sports	Local Government	•		
Waterloo Park - 1 new modified multipurpose court	Sports	Local Government	•		
Porters Park - 1 new modified multipurpose court	Sports	Local Government	•		
Cultural and community infrastructure					
Library Public Multimedia Lab	Cultural and Community Infrastructure	Local Government	•		
Ryde Central - Regional Community Facilities (Apportioned cost to MP Corridor)	Cultural and Community Infrastructure	Local Government	•		
Green and blue infrastructure					
Improving waterways and water dependent ecosystems at Lane Cove River	Blue	Local Government		•	•
Fontenoy Park - Construction of Irrigation and drainage systems	Green	Local Government	•		
Tuckwell Park - Amenities Upgrade	Green	Local Government	•		
Blenheim Park - Design and Construction of Master planned works	Green	Local Government	•		
ELS Hall - Master planned Upgrades	Green	Local Government	•		

Project Name	Sector category	Primary funding source	Year 0-5	Year 6-12	Post 2036
Marsfield Park, Darvall Park and Waterloo Master planned upgrades	Green	Local Government	•		
Pioneer Park Master planned upgrades	Green	Local Government	•		
Waterloo Park - Amenities updates	Green	Local Government	•		
Dunbar Park - Master planned upgrades	Green	Local Government	•		
Health, justice, police and emergency services					
Ryde Hospital Redevelopment	Health	General NSW Government	•		
Water and electricity					
Marsfield Reservoir	Water and Electricity	Customer	•		
RP03 re-instatement	Water and Electricity	Customer	•		
Local water network duplication	Water and Electricity	Customer		•	
Wastewater - wet weather storage tank	Water and Electricity	Customer		•	

References

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Macquarie Park Innovation Precinct Place Strategy (August 2022), NSW Department of Planning and Environment

Macquarie Park Strategic Infrastructure and Services Assessment – Final report (September 2022), Greater Cities Commission

Macquarie Park Strategic Master Plan – Final Report (August 2022), Arup

Planning Liveable Cities: A place-based approach to sequencing infrastructure and growth (11 December 2018), Infrastructure Australia

Ryde Local Environmental Plan 2014, New South Wales State Government

Section 7.12 fixed development levies – Practice note (February 2021), NSW Department of Planning and Environment

Staying Ahead: State Infrastructure Strategy 2022-2042 (May 2022), Infrastructure NSW

Working Draft Rolling Issue Revision E - Macquarie Park Innovation Precinct – Stage 1 Neighbourhoods Detailed Master Plan (22 June 2023), AJC Architects and Tract Consulting

Glossary

Abbreviation	
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2021
GFA	Gross floor area
НРС	Housing and Productivity Contribution
IDP	Infrastructure delivery plan
LEP	Local environmental plan
LGA	Local government area
SISA	Macquarie Park Strategic Infrastructure and Services Assessment, prepared by Greater Cities Commission, September 2022
MPC	is the Macquarie Park Corridor – an area generally bounded by the M2 Motorway, Delhi Road, the eastern boundary of Riverside Corporate Park, Epping Road and Vimiera Road, and shown in Figure 3
MPIP	Macquarie Park Innovation Precinct, which comprises the Stage 1 Neighbourhoods and the Stage 2 Neighbourhoods, as shown in Figure 1
Place Strategy	Macquarie Park Innovation Precinct Place Strategy (August 2022), NSW Department of Planning and Environment
UAP	Urban Activation Precinct