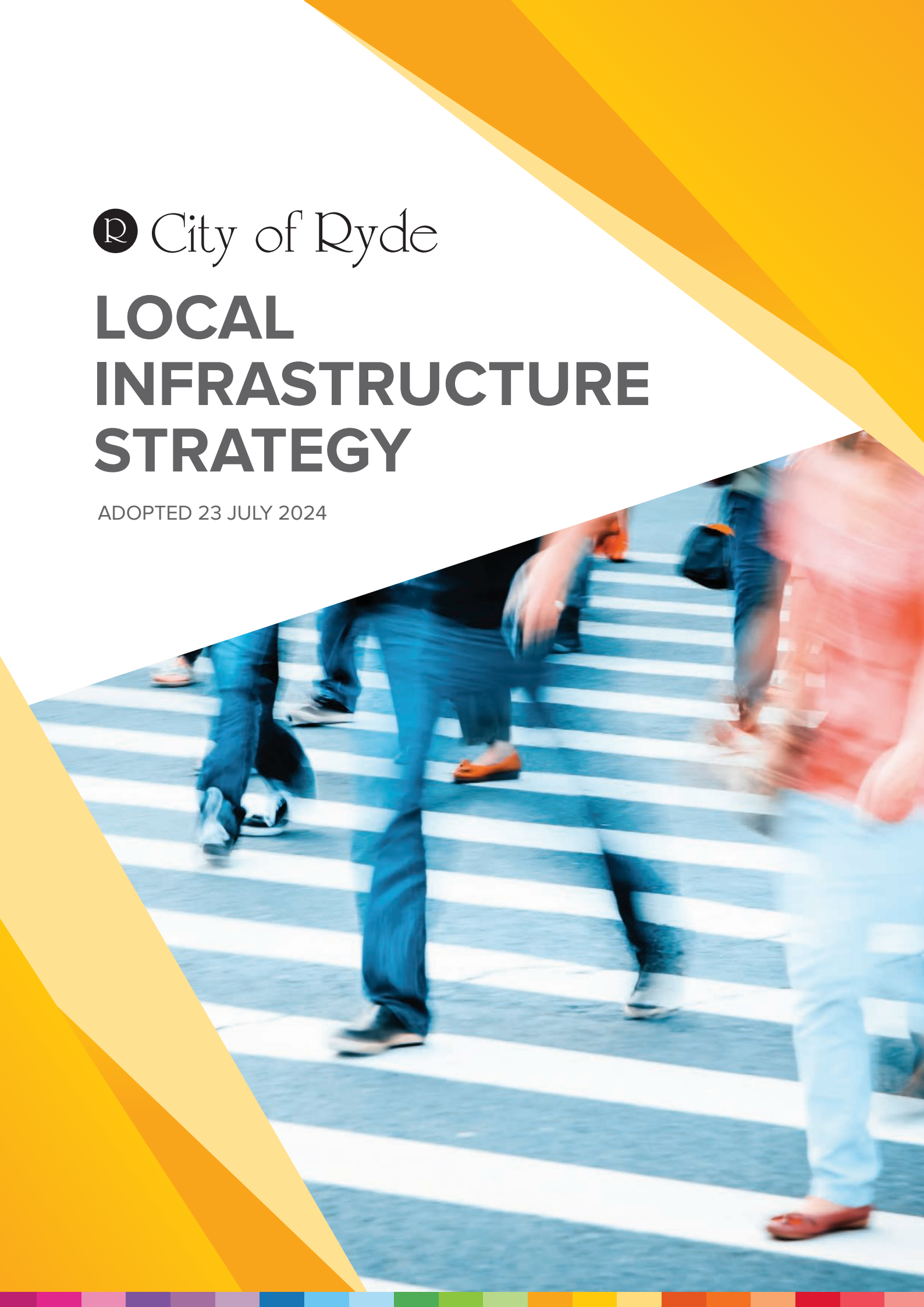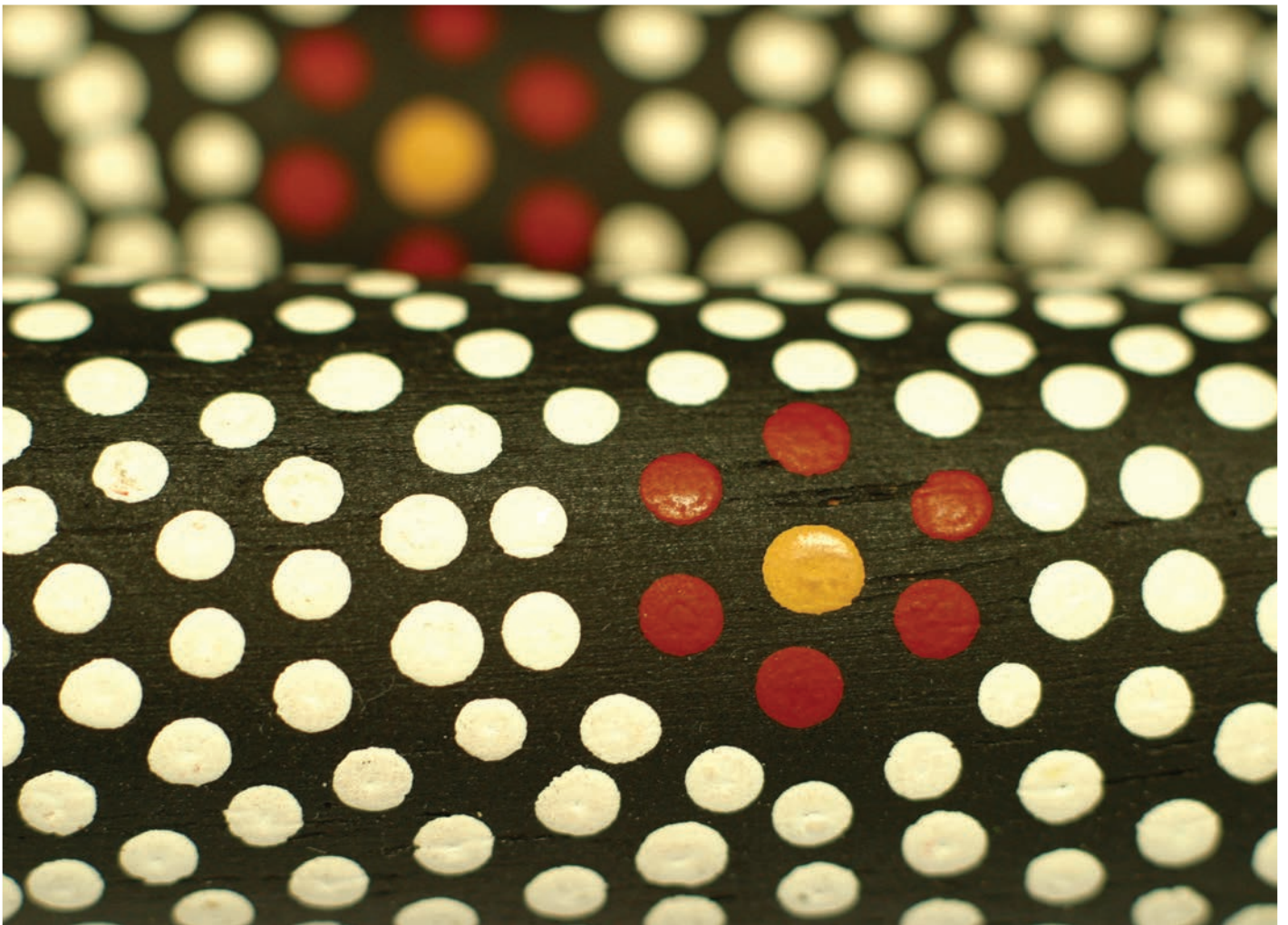# City of Ryde

LOCAL INFRASTRUCTURE STRATEGY

ADOPTED 23 JULY 2024

ACKNOWLEDGEMENT OF COUNTRY

The City of Ryde values the unique status of Aboriginal people as the Traditional Custodians of the lands and waterways across the Ryde Local Government Area. The City of Ryde acknowledges the Traditional Custodians of the lands and waterways across Ryde, the Wallumedegal Clan of the Darug nation. We pay our respects to Elders both past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples across Australia.

CONTENTS

A MESSAGE FROM OUR MAYOR

As the Mayor for the City of Ryde, it is my pleasure to introduce the City of Ryde's Local Infrastructure Strategy.

Our core vision for this strategy is to deliver the right infrastructure for the right people at the right time and we have a dedicated and highly skilled team of professionals to help make that happen.

This Local Infrastructure Strategy has been created to not only capitalise on infrastructure opportunities created through the current rezoning proposals, but to ensure that the City of Ryde encapsulates all the critical features of infrastructure planning.

This will be achieved by creating collaborations with government and non-government partners, preparing for anticipated growth, focusing on revitalising existing assets, using sustainability principles in the delivery and maintenance of infrastructure, and being innovative in the use of technological advances.

The City of Ryde prides its itself on being an agile and dynamic organisation that can successfully address the changes and challenges to our infrastructure requirements posed by factors like population growth, the impact of State Government housing strategies, and climate change.

This is a strategy that will ensure City of Ryde remains the place to be for lifestyle and opportunity at your doorstep.

Clr Trenton Brown
City of Ryde Mayor

A MESSAGE FROM OUR CEO

With forecasts that City of Ryde's population will continue to grow exponentially over the next 2 decades, the City's infrastructure needs are at front of mind in Council's forward planning, and I commend to you this strategy, which presents a clear pathway to meeting the challenges of striking the right balance that are ahead of us.

This is a thriving, busy, eclectic City – a place of prosperity, harmony, and diversity. We have an economic powerhouse in the Macquarie Park Innovation District, a world-class educational facility, enviable open space and recreational areas, beautiful foreshores and a strategic location between the Sydney CBD and rapidly growing Greater Western Sydney.

This makes us one of Sydney's premiere live, work, and play destinations.

It's no surprise that the State Government has identified City of Ryde as one of the metropolitan areas it expects to do the heavy lifting in its radical housing policies, both in terms of its Transport Oriented Development (TOD) and Diverse and Well-located Housing strategies, as well as a proposed rezoning of Macquarie Park to accommodate Sydney's ever-growing population.

This is why Council must work collaboratively with the State Government in striking the right balance of providing appropriate housing with increased open space, community and civil infrastructure, and increased employment opportunities.

These housing strategies will be the main drivers of that expected population growth and with it comes a renewed focus on the City's infrastructure, which must keep pace with the extra demand that will be imposed upon it by the weight of more people, more development, more traffic.

This Local Infrastructure Strategy is an essential first step as we plan our City's future in order to maintain the high quality of life that all residents have come to expect and enjoy.

Wayne Rylands
City of Ryde Chief Executive Officer

2. BACKGROUND ON THE LOCAL INFRASTRUCTURE STRATEGY

The City of Ryde Local Government Area (LGA) is a metropolitan Council located 12km from the Sydney CBD. It covers an area of approximately 40 square kilometres and is bordered by several different Councils and two main rivers. The current population within the City of Ryde is approximately 136,000[1] residents. This is anticipated to grow exponentially to over 325,000 residents by the year 2041 which will place an increased demand for infrastructure to meet the needs of the growing community.

One of the greatest risks to the expansion of population within a brownfield's area is the limitations to upgrade or expand infrastructure assets in order to meet the needs of the growing community. Infrastructure of this nature also needs to be phased at the appropriate time to ensure that it is constructed or developed when it is required, not too early or too late.

Funding of large amounts of new infrastructure presents a risk as Council needs to ensure that it has the available funding or sources available to ensure that infrastructure can be constructed and maintained at the desired level of service.
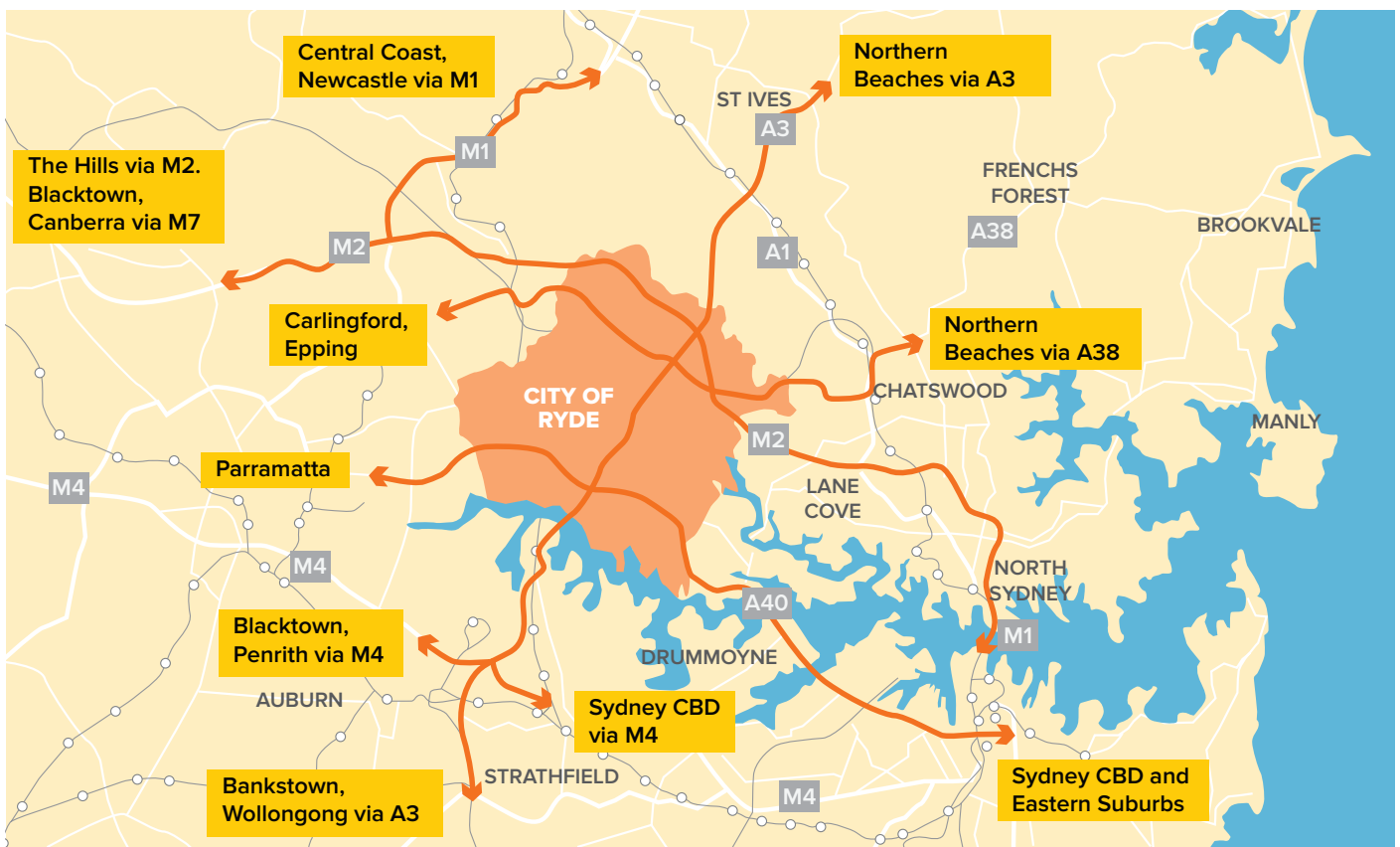
Proximity of the City of Ryde Local Government Area within Sydney.

2.1 / INFRASTRUCTURE INCLUSIONS

The City of Ryde has over $1.4 billion worth of infrastructure under its care and control. This strategy is intended to focus on and be applied to infrastructure which is within the Ryde LGA which will assist in delivering the strategies desired vision and outcomes.

Road infrastructure

Includes carparks, kerb and gutter as well as all road infrastructure.

Roadside infrastructure

Includes footpaths, cycleways, bridges and tunnels, bus stops and roadside structures.

Traffic and parking

Includes traffic control devices as well as signs, lines and parking meters.

Stormwater drainage

Includes waterway lining, trunk drainage, road drainage and stormwater devices.

Sport and recreation facilities

Includes aquatic centres, amenity blocks, and indoor recreational centres.

Parks and reserves

Includes landscaping and gardens, furniture, trees, seawalls, ramps, wharves and jetties.
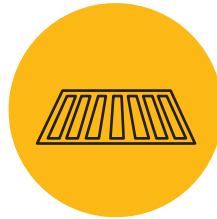
Buildings

Includes community facilities, amenity buildings, commercial buildings and the Ryde Aquatic Leisure Centre (RALC).

Play spaces and fields

Includes playing fields (grass, synthetic and hardcourts), tennis courts and playground equipment.

2.2 / VISION

This Local Infrastructure Strategy incorporates the different needs of the City of Ryde community in both the present as well as the needs of the future. This strategy is intended to be flexible, to be applicable to the unknowns of the future. It is through this ideal that the vision of this strategy is:

"To deliver the right infrastructure for the right people at the right time"

2.3 / OVERVIEW OF THE STRATEGY

Over the previous years, the City of Ryde has experienced significant growth across the entire LGA, with increased developer activities paving the way for additional infrastructure which plays a vital role in achieving outcomes of the Community Strategic Plan (CSP). In 2020, the City of Ryde exhibited and endorsed a new Local Strategic Planning Statement (LSPS). This document outlined the need for a collaborative approach to address the gaps identified as part of the current and future demand for infrastructure. Within the LSPS, the Infrastructure Strategy is identified to be involved in and contain several different outcomes.

This strategy will serve as a comprehensive framework for addressing infrastructure gaps, enhancing service delivery, and promoting resilience in the face of future challenges. This strategy breaks the key ideas into five main outcomes. These outcomes have objectives listed under them which are the key to the success of this document. Some of the key factors which were used to derive the outcomes and objectives include:

Sustainable Growth:

The strategy will support growth in a sustainable manner, aligning with district and state planning frameworks to accommodate population growth while minimising environmental impact and preserving the natural assets of the LGA.

Enhanced Community Amenities:

Infrastructure investments will focus on providing amenities that are accessible, inclusive, and responsive to the diverse needs of the community. This includes parks, recreational facilities, community and cultural centres, and public spaces designed to foster social interaction and civic engagement.

Optimised Service Delivery:

The strategy will establish and maintain appropriate levels of service across all infrastructure sectors, ensuring equitable access and reliability for residents and businesses throughout the LGA.

Population Growth Support:

Infrastructure planning will anticipate and accommodate the needs of a growing population, with a particular emphasis on key areas within the LGA such as innovation districts, education precincts, and commercial hubs.

Strategic Supply, Funding, and Delivery:

The strategy will set clear objectives related to the supply, funding, and delivery of key infrastructure projects, leveraging partnerships and innovative financing mechanisms to maximise resources and achieve desired outcomes.

Integration with Planning Processes:

The strategy will play a crucial role in informing Council's assessment of planning proposals, voluntary planning agreements (VPAs), and development applications (DAs), ensuring that proposed developments align with infrastructure needs and community priorities.

Resilience and Adaptation:

Recognising the increasing risks posed by natural hazards and climate change, the strategy will prioritise resilience-building measures and adaptive strategies to safeguard infrastructure assets and enhance community preparedness.

Innovation and Technology:

Embracing innovation and technological advancements, the strategy will explore opportunities to integrate smart city solutions, digital connectivity, and sustainable practices into infrastructure planning and development processes.

The Infrastructure Strategy for the City of Ryde will provide a robust and forward-thinking framework for guiding infrastructure investment and development, ultimately fostering a thriving, resilient, and inclusive community for current and future generations.

2.4 / OUTCOMES

To achieve the vision set out in the preceding section, five key outcomes have been identified which will allow for City of Ryde to meet the growing needs of the community into the future. These outcomes include:

1. Create partnerships to deliver key infrastructure within the City of Ryde

2. Align anticipated growth with land use zoning, infrastructure, and service planning to support future populations

3. Focus on revitalising assets to ensure the existing asset base is maintained to a satisfactory level

4. Deliver and maintain resilient infrastructure using sustainability principals

5. Investigate and utilise innovative physical and virtual digital infrastructure to assist in asset planning and delivery

3. CITY OF RYDE ASSET SUMMARY

This section contains a high-level summary of the current City of Ryde asset portfolio. A snapshot of this infrastructure is shown on the following page. The City of Ryde groups all asset classes into four major infrastructure asset portfolios. These include:

- Transport Infrastructure
- Stormwater Drainage
- Buildings
- Open Space and Recreational Assets

Each asset group has a summary which includes the financial replacement cost, asset condition summary and infrastructure backlog. These parameters help City of Ryde understand the overall current state of our assets and where funding is required to improve our assets to ensure it is meeting the requirements for the community.

Foreshore walk near Ryde Wharf, Meadowbank.

CITY OF RYDE ASSET SUMMARY 2024

Roadside structures
Replacement value:
$54.00M over 3,500 units

Other Open Space/Recreational Assets
Replacement value:
$110.53M 97 units within the LGA

Bridges & Culverts
Replacement value:
$21.33M over 60 bridges in the LGA

Seawalls, Ramps, Wharves & Jetties
Replacement value: $18.19M over 2,600m of seawall

Carpark
Replacement value:
$19.91M over 186,000 m2

Buildings
Replacement Value: $440.32M several facilities including:
- Community Facilities
- Leisure and Aquatic Facilities
- Libraries
- Multi-Storey Carparks
- Operational Buildings
- Commercial Buildings
- Parks Buildings and Facilities

Footpaths & Cycleways
Replacement value: $151.88M over 807,000 m2

Kerb and Gutter
Replacement value: $138.1M over 665,000 m

Sealed road pavement
Replacement value: $293.45M over 2,624,000 m2

Stormwater Drainage
Replacement value: $393.85M over 11,730 pits over 253,071 m pipes

3.1 / INFRASTRUCTURE SNAPSHOT

Infrastructure Assets Portfolio

Gross Replacement Cost
$1,443,081,434.00

Written Down Value
$902,766,000.00

Annual Depreciation
$23,766,270.00

Infrastructure Backlog
$32,843,705.00

Gross Replacement Cost (GRC)

Assets Class	
Stormwater Drainage	$394M
Roads and Car Park	$313M
Buildings	$243M
Footpaths and Cycleways	$152M
Kerb and Gutter	$138M
Other Open Space/Recreational Assets	$109M
Roadside Assets and Traffic Facilities	$54M
Bridges	$21M
Foreshore Assets	$18M

Annual Depreciation

Assets Class	
Buildings	$6.3M
Roads and Car Park	$5.1M
Stormwater Drainage	$3.9M
Other Open Space/Recreational Assets	$3.1M
Footpaths and Cycleways	$2.0M
Roadside Assets and Traffic Facilities	$1.5M
Kerb and Gutter	$1.4M
Bridges	$0.3M
Foreshore Assets	$0.2M

Condition of Assets as % of Gross Replacement Cost

Con 5: 3%
Con 4: 7%
Con 1: 27%
Con 3: 34%
Con 2: 28%

Figure 1 – Snapshot of the City of Ryde's Infrastructure Portfolio.

3.2 / TRANSPORT INFRASTRUCTURE

Council currently manages approximately 325km of road network. The infrastructure which forms the transport infrastructure includes road pavement and surface, bridges, car parks, kerb and gutter, pathways and cycleways, roadside assets, and traffic facilities.
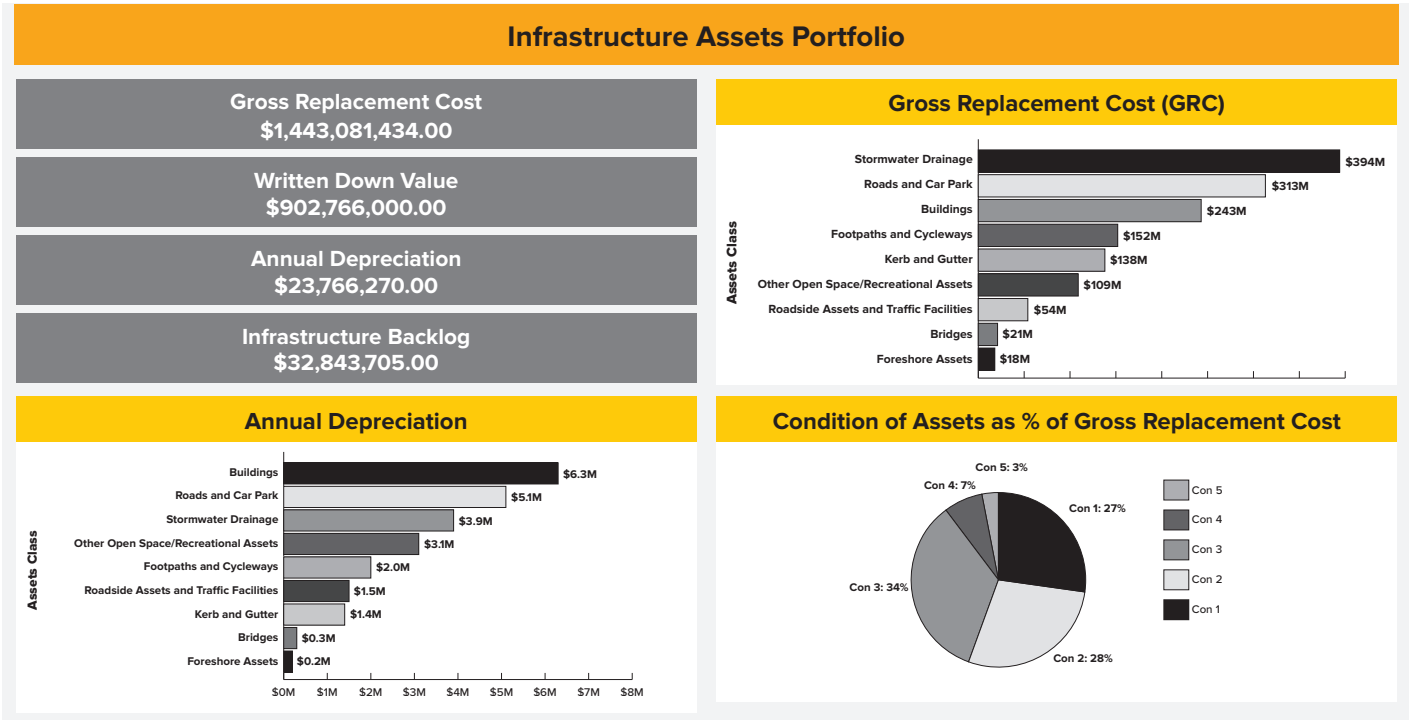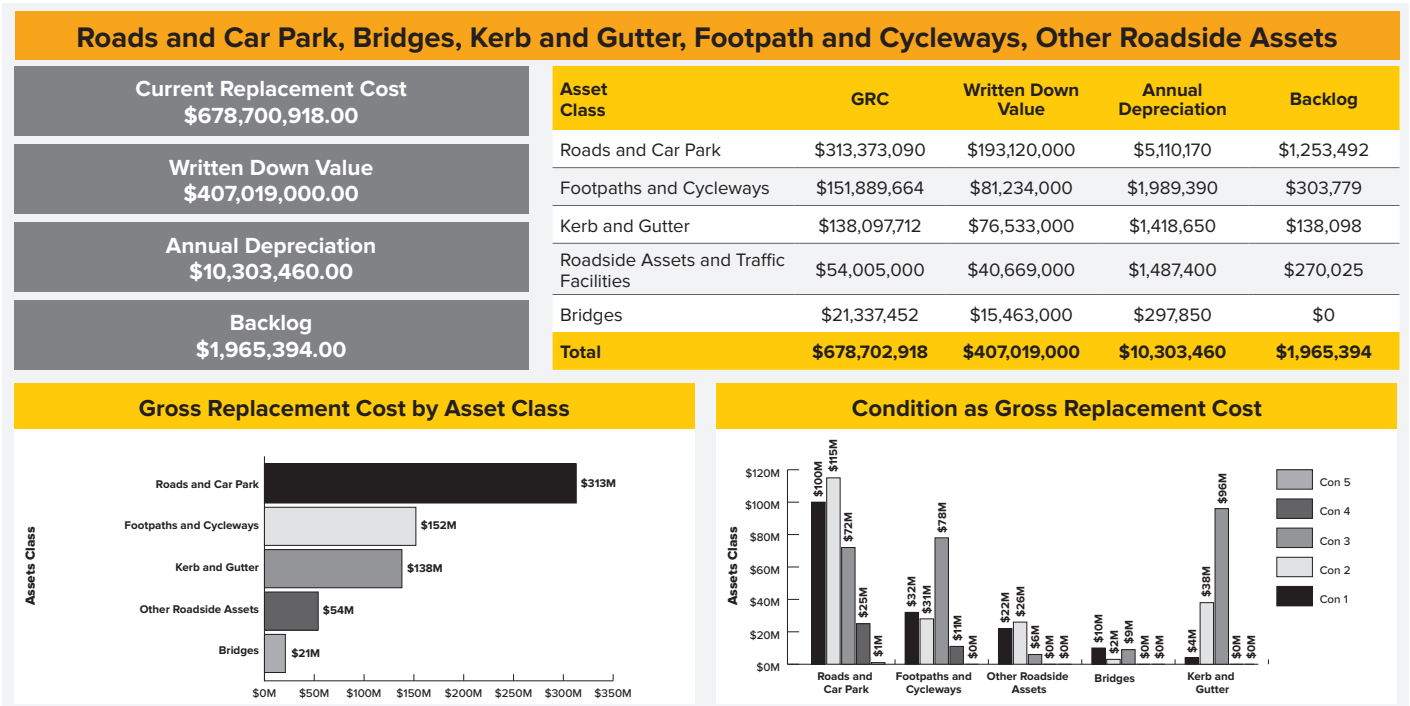
Roads and Car Park, Bridges, Kerb and Gutter, Footpath and Cycleways, Other Roadside Assets

Current Replacement Cost
$678,700,918.00

Written Down Value
$407,019,000.00

Annual Depreciation
$10,303,460.00

Backlog
$1,965,394.00

Asset Class	GRC	Written Down Value	Annual Depreciation	Backlog
Roads and Car Park	$313,373,090	$193,120,000	$5,110,170	$1,253,492
Footpaths and Cycleways	$151,889,664	$81,234,000	$1,989,390	$303,779
Kerb and Gutter	$138,097,712	$76,533,000	$1,418,650	$138,098
Roadside Assets and Traffic Facilities	$54,005,000	$40,669,000	$1,487,400	$270,025
Bridges	$21,337,452	$15,463,000	$297,850	$0
Total	**$678,702,918**	**$407,019,000**	**$10,303,460**	**$1,965,394**

Gross Replacement Cost by Asset Class

Assets Class	
Roads and Car Park	$313M
Footpaths and Cycleways	$152M
Kerb and Gutter	$138M
Other Roadside Assets	$54M
Bridges	$21M

Condition as Gross Replacement Cost

Roads and Car Park: $100M, $115M, $72M, $25M, $1M
Footpaths and Cycleways: $32M, $31M, $78M, $1M, $0M
Other Roadside Assets: $22M, $26M, $5M, $0M, $0M
Bridges: $10M, $2M, $9M, $0M, $0M
Kerb and Gutter: $4M, $38M, $96M, $0M, $0M

Con 5, Con 4, Con 3, Con 2, Con 1

Figure 2 – Snapshot of the City of Ryde's Transport Infrastructure Portfolio.

3.3 / STORMWATER DRAINAGE

The City of Ryde provides stormwater services to its resident through a stormwater drainage network consisting of pipes, pits, open channels, and other stormwater quality improvement devices. Council currently manages approximately 275km of stormwater pipes and over 10,000 pits. Stormwater drainage currently includes pipes, pits, and other stormwater assets (open channels, headwalls, culverts, and stormwater quality improvement devices).
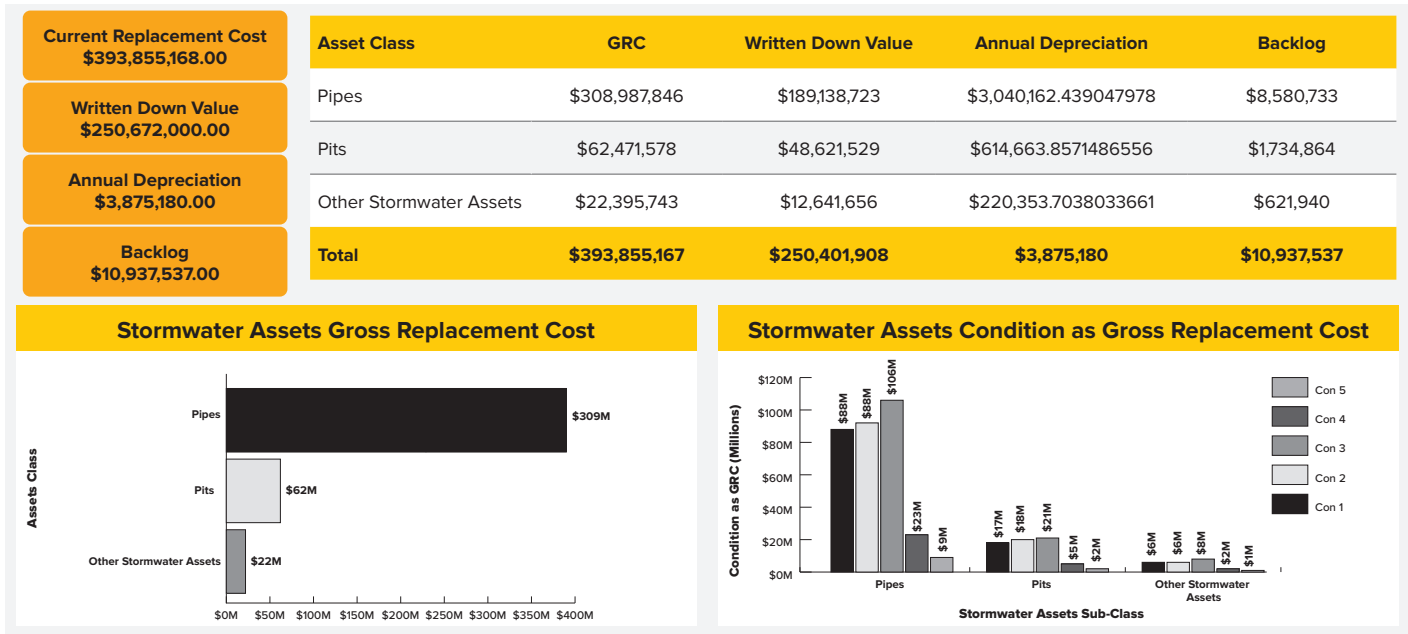
	Asset Class	GRC	Written Down Value	Annual Depreciation	Backlog
Current Replacement Cost $393,855,168.00	Pipes	$308,987,846	$189,138,723	$3,040,162.439047978	$8,580,733
Written Down Value $250,672,000.00	Pits	$62,471,578	$48,621,529	$614,663.8571486556	$1,734,864
Annual Depreciation $3,875,180.00	Other Stormwater Assets	$22,395,743	$12,641,656	$220,353.7038033661	$621,940
Backlog $10,937,537.00	**Total**	**$393,855,167**	**$250,401,908**	**$3,875,180**	**$10,937,537**

Figure 3 – Snapshot of the City of Ryde's Stormwater Infrastructure Portfolio.

3.4 / BUILDINGS

The City of Ryde currently manages 160 buildings which includes community facilities, libraries, commercial buildings, recreational buildings, and a specialised Aquatic Centre (Ryde Aquatic Leisure Centre).
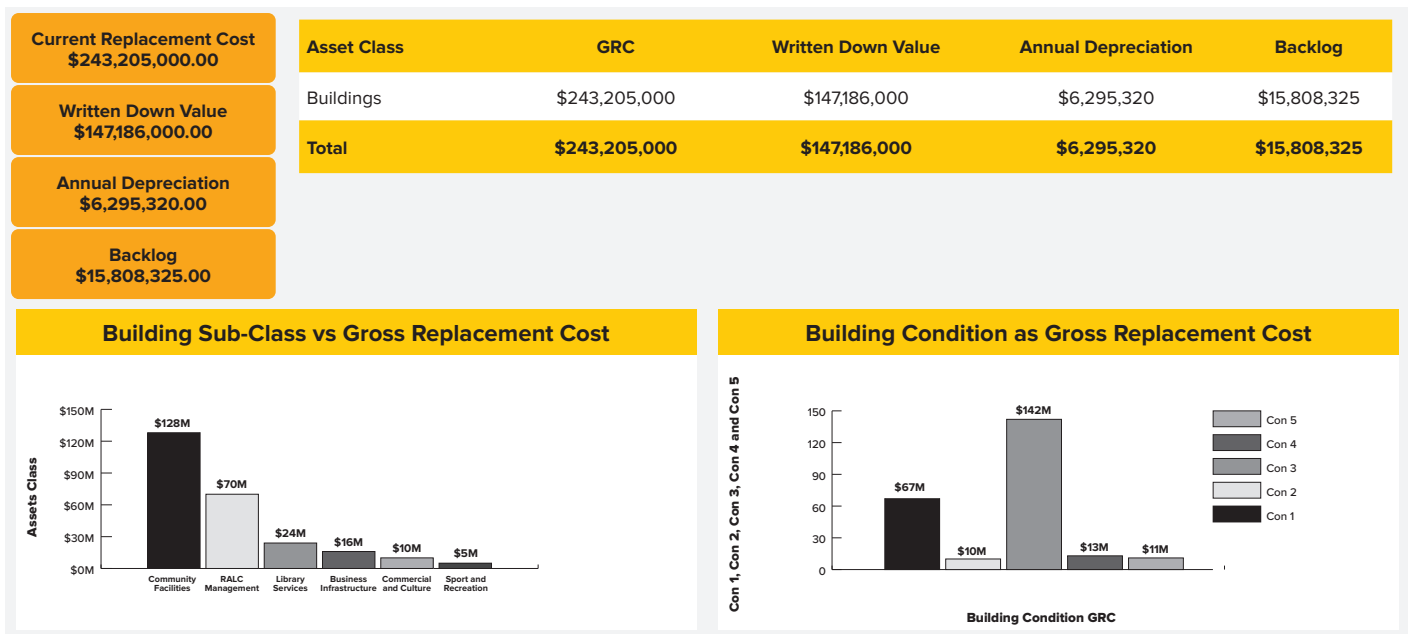
	Asset Class	GRC	Written Down Value	Annual Depreciation	Backlog
Current Replacement Cost $243,205,000.00	Buildings	$243,205,000	$147,186,000	$6,295,320	$15,808,325
Written Down Value $147,186,000.00	**Total**	**$243,205,000**	**$147,186,000**	**$6,295,320**	**$15,808,325**
Annual Depreciation $6,295,320.00					
Backlog $15,808,325.00					

Figure 4 – Snapshot of the City of Ryde's Buildings Portfolio

3.4 / OPEN SPACE AND RECREATIONAL INFRASTRUCTURE ASSETS

Open Space/Recreational assets includes a large variety of different assets. Some of these include playgrounds, sporting fields and foreshore assets (seawalls and wharves and jetties).
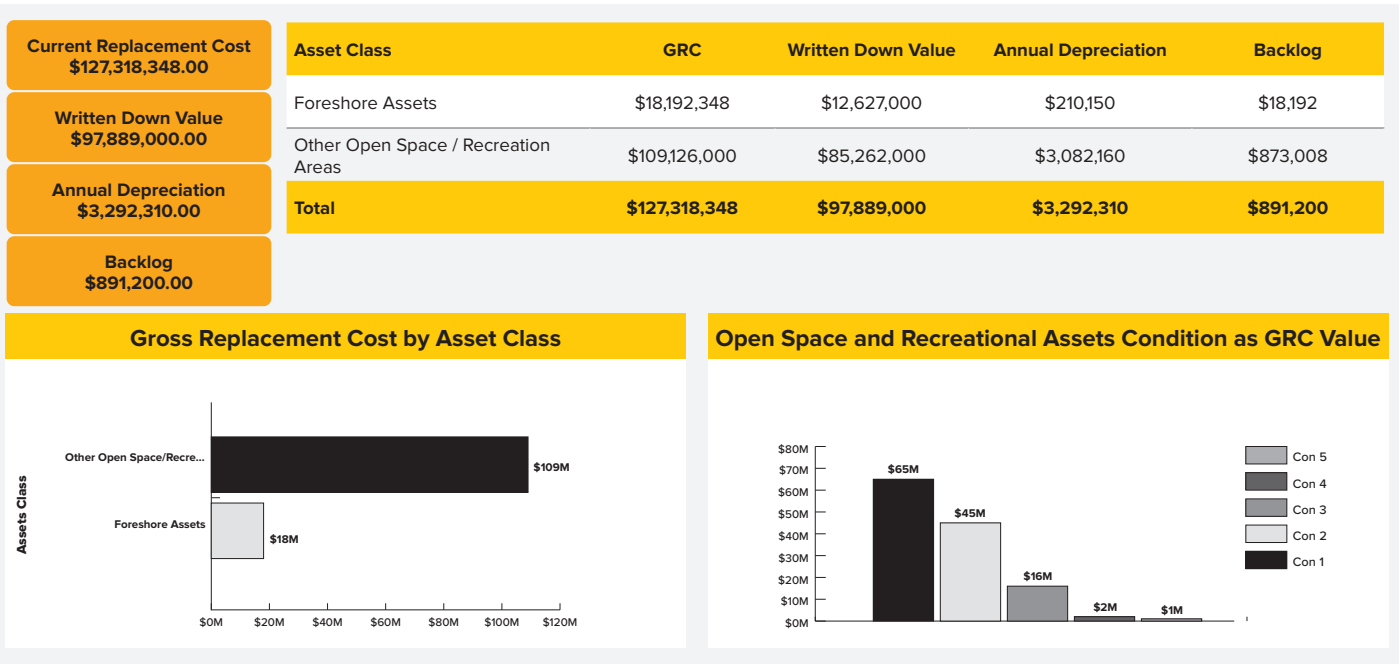
	Asset Class	GRC	Written Down Value	Annual Depreciation	Backlog
Current Replacement Cost $127,318,348.00	Foreshore Assets	$18,192,348	$12,627,000	$210,150	$18,192
Written Down Value $97,889,000.00	Other Open Space / Recreation Areas	$109,126,000	$85,262,000	$3,082,160	$873,008
Annual Depreciation $3,292,310.00	**Total**	**$127,318,348**	**$97,889,000**	**$3,292,310**	**$891,200**
Backlog $891,200.00					

Gross Replacement Cost by Asset Class

Open Space and Recreational Assets Condition as GRC Value

Figure 5 – Snapshot of the City of Ryde's Open Space and Recreational Portfolio.

3.5 / ASSET RISKS

There are always risks when managing infrastructure assets. Some of the risks relate directly to the assets themselves and their usage. Others relate to the whole of lifecycle costing that is incurred when constructing or renewing an asset. These costs include the future renewal of the asset and operating and maintenance costs. Identified major risks to infrastructure assets include:

- Identifying critical assets within the LGA and devising a critical asset management plan to mitigate the risk to Council and the community. This will allow Council to proactively inspect and maintain its known critical assets on a periodic basis.

- Current operation and maintenance shortfall, which is the funding required to manage existing assets. The more infrastructure that is constructed the greater the maintenance and renewal liability is. Additionally, if there are shortfalls with the funding of the maintenance of assets, it will create a greater renewal requirement in the future as the assets' useful life is reduced. This will generate a backlog in renewals if there is insufficient funding.

- High asset data confidence including current, accurate and completeness of assets information such as condition and functional performance are important for well informed decision making and sustainable management assets within financial constraints. Some assets have lower data confidence as it is more costly to collect and update information.

- Impacts of climate change and extreme weather – in recent years rainfall patterns have been changed to more frequent highly intensive and short duration rain. Council assets such as the stormwater drainage system may not be able to cope with the influx of water based on the existing capacity of the network.

4. INFRASTRUCTURE STRATEGY OUTCOMES

The LSPS listed several infrastructure planning priority actions including the creation of this strategy itself. These form the basis for the infrastructure strategy objectives and tie into Council's existing strategies. The different objectives and strategic outcomes, both newly created and derived from the LSPS, include:

4.1 COLLABORATION

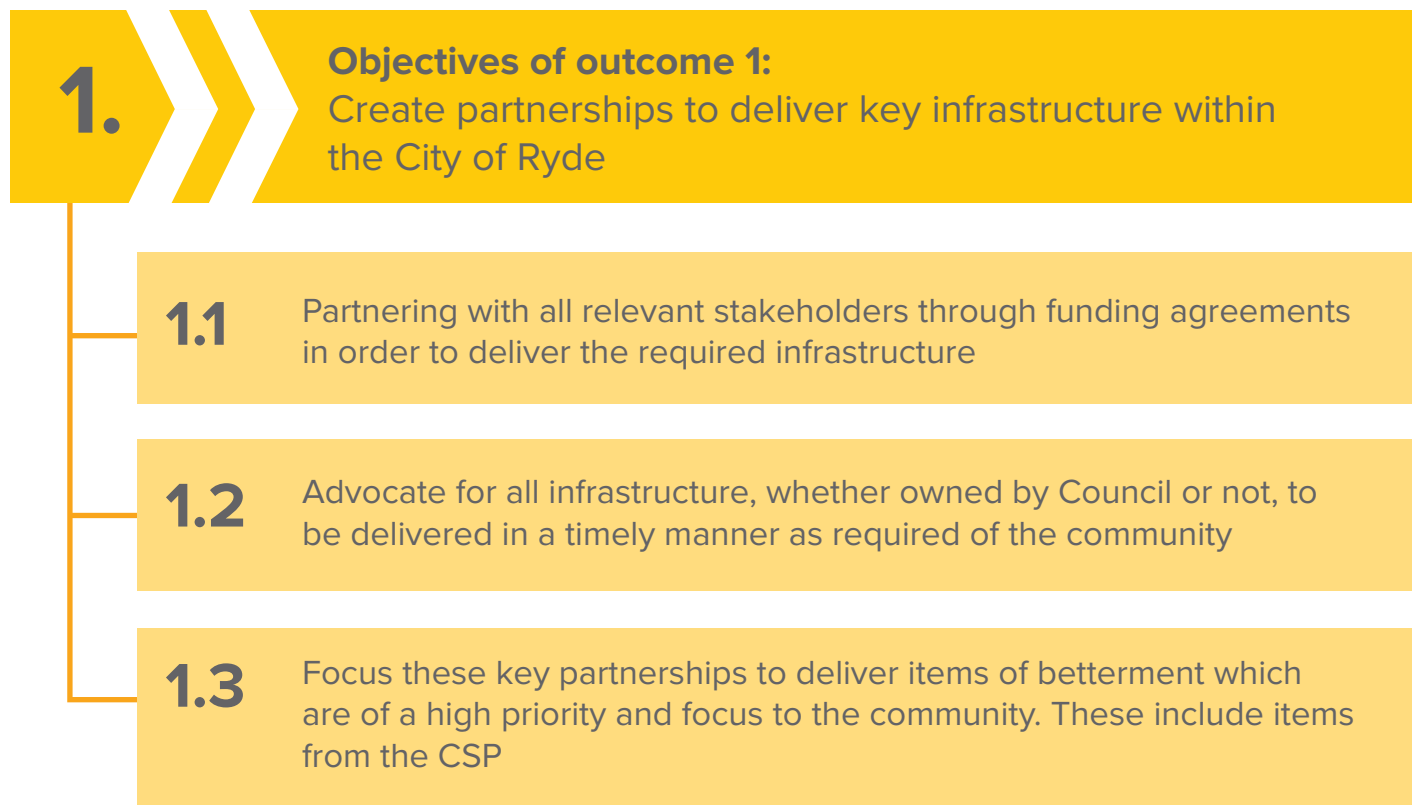**Create partnerships to deliver key infrastructure within the City of Ryde.**

New and upgraded infrastructure is constructed based on the changing needs of the community. Over recent years Council has advocated for and utilised alternative fundings sources provided by government and non-government organisations.

The aim of this objective is for Council to ensure is proactively engaging in partnerships with other stakeholders such as other government bodies (Local, State and Federal Governments), as well as other non-government bodies such as developers. These partnerships will allow Council to continue to deliver the right infrastructure at the point it is required.

This will be through such avenues such as:

- Grants
- Developer contributions
- Voluntary Planning Agreements
- Government constructed projects
- Partnership capital works projects

There are also key pieces of infrastructure that are required to be delivered for the betterment of the community but are to be delivered by a separate entity. This objective will highlight a key focus of Council to make it our responsibility to lobby for the timely construction of these key infrastructure pieces.

1.

Objectives of outcome 1:
Create partnerships to deliver key infrastructure within the City of Ryde

1.1 Partnering with all relevant stakeholders through funding agreements in order to deliver the required infrastructure

1.2 Advocate for all infrastructure, whether owned by Council or not, to be delivered in a timely manner as required of the community

1.3 Focus these key partnerships to deliver items of betterment which are of a high priority and focus to the community. These include items from the CSP

4.2 / ALIGNMENT OF FACTORS

Align anticipated growth with land use zoning, infrastructure and service planning to support future populations.

The population of the LGA is growing at an unprecedented rate. This is due to the increase in developments which are coming online after a reduction in growth was experienced during COVID-19 and current State Government policy for housing growth.

This growth in population through development is only set to increase within the coming years due to additional planning measures implemented by the State Government which are outside the scope of Council's control.

This includes but is not limited to:

- Macquarie Park Innovation District Stage 1 and 2
- Transport Orientated Development Program
- Diverse and Well-located Homes draft reform
- State Significant Developments

Council, through its current land zonings, can only respond to changes outside of its control after it is informed and provided transparent details of the impacts. This allows Council to adequately respond to any changes in policy and zonings and can therefore plan infrastructure and services accordingly.

2.

Objectives of outcome 2:
Align anticipated growth with land use zoning, infrastructure, and service planning to support future populations

2.1 Base requirements for infrastructure on a benchmarked population increase based on current land zonings

2.2 Review population projections and required infrastructure:
- On a yearly basis at a minimum
- If any major changes are announced by government bodies

2.3 Understanding base requirements for new infrastructure

4.3 / MAINTENANCE OF CURRENT ASSET BASE

Focus on revitalising assets to ensure the existing asset base is maintained to a satisfactory level.
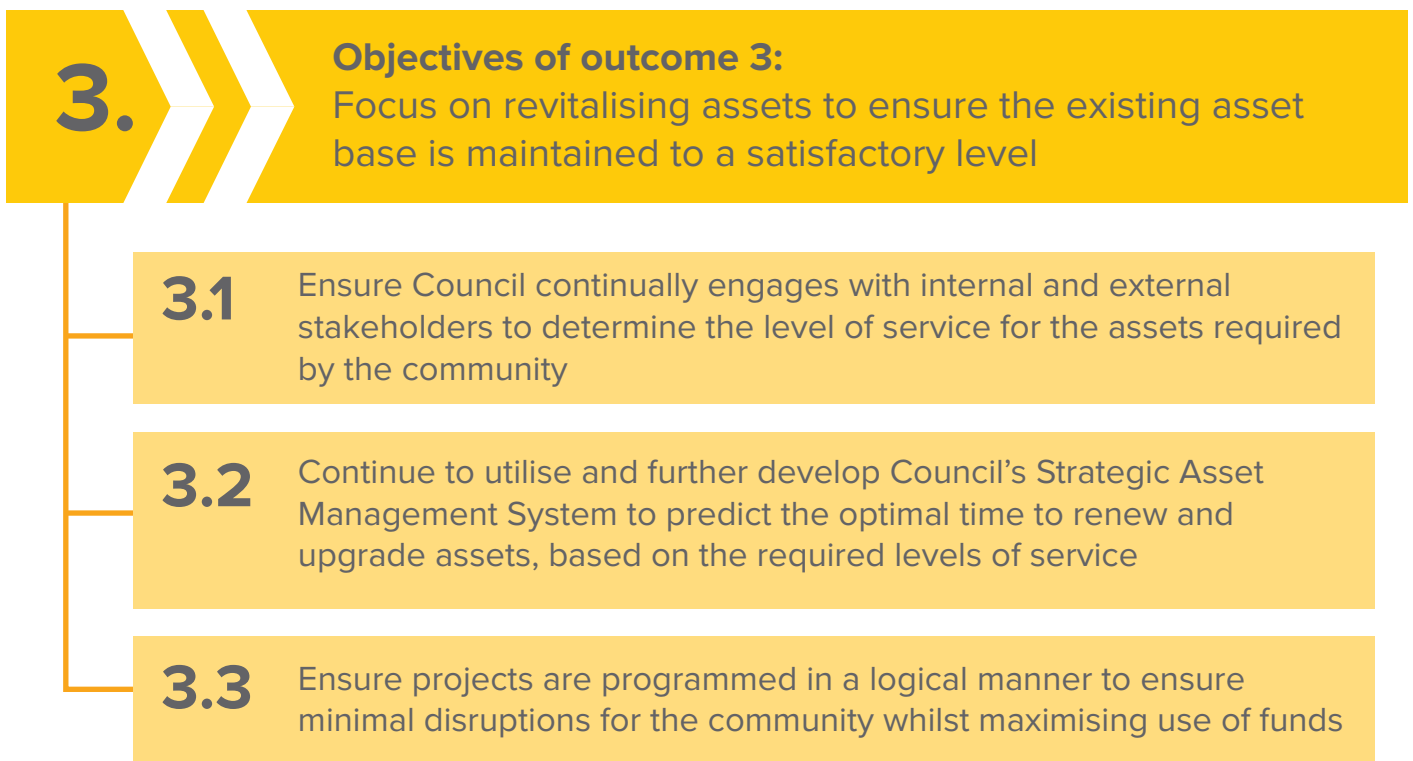
One of Council's core responsibilities is for the maintenance and renewal of existing infrastructure. It must be remembered that with the creation of new infrastructure to meet the demand of increasing population, the existing ageing infrastructure will need to be revitalised and upgraded to meet the requirements of the community.

This objective seeks to ensure that whilst the construction of new infrastructure is inevitable, existing infrastructure already under the care and control of Council is renewed, upgraded and disposed at the same time. The focus on the increase in infrastructure will be for:

- All infrastructure within the five Major Town Centres (Macquarie Park, Ryde (Top Ryde), West Ryde, Eastwood and Gladesville

- All regional infrastructure across the LGA

This objective also applies to Council's Capital Works Program – to ensure that the funding for renewal and upgrade works is applied consistently across all aspects of infrastructure works (including works undertaken by Council, state and developers) and is used to targets assets in poor condition or reaching end of life.

The determination for how the asset will be replaced – either with like for like or with upgrades based on the needs of the community – will be determined at that time.

3.

Objectives of outcome 3:
Focus on revitalising assets to ensure the existing asset base is maintained to a satisfactory level

3.1 Ensure Council continually engages with internal and external stakeholders to determine the level of service for the assets required by the community

3.2 Continue to utilise and further develop Council's Strategic Asset Management System to predict the optimal time to renew and upgrade assets, based on the required levels of service

3.3 Ensure projects are programmed in a logical manner to ensure minimal disruptions for the community whilst maximising use of funds

4.4 / RESILIENCE AND SUSTAINABILITY

Deliver and maintain resilient infrastructure using sustainability principles.

The impacts of urbanisation and climate change are accelerating impacts throughout cities globally and will continue to rapidly evolve how cities plan for growth and resilience of its citizens long term. These impacts affect the way we do things; such as planning and interacting with our infrastructure.

This means it is critical that our infrastructure is resilient enough to withstand these changes and considerations are made for when new and renewed infrastructure is planned

Resilient infrastructure is defined within the City of Ryde Resilience Plan 2030 by Resilient Sydney 2028 as:

"The capacity of individuals, communities, businesses and systems to survive, adapt and thrive in the face of whatever chronic stresses and acute shocks they experience."

Some examples of acute shocks include:

- Storms
- Floods
- Heatwaves
- Bushfires

Longer term chronic stresses generated by climate change include:

- Sea level rises
- Urban heat island effect

Within the City, Ryde has the highest vulnerability for exposure to the impacts of urban heat, flash (and) flooding and bushfire risk.

Resilience goes far beyond the context of infrastructure; however, this objective only seeks to address the ideas from the City of Ryde Resilience Plan from an infrastructure point of view. This includes planning for future anticipated requirements of infrastructure, such as increased height of seawalls due to sea level rises, the planting of street trees to provide more tree canopy coverage and offset the effects of the urban heat island effect into the future as well as the implementation of stormwater harvesting systems to improve water resilience for sportsfields during periods of drought.
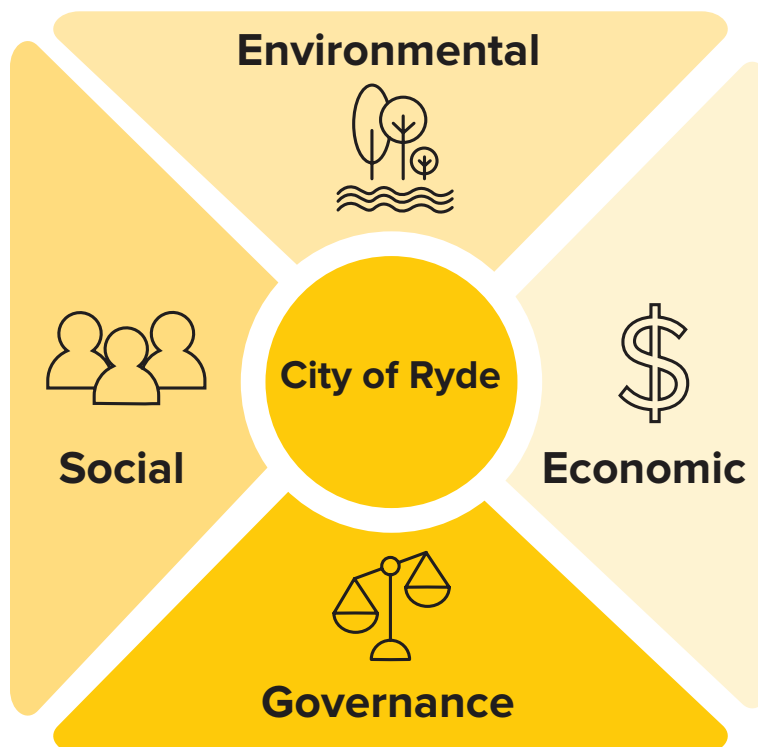

Figure 6 – Quadruple-bottom-line sustainability from City of Ryde's Resilience Strategy.

4.4 / RESILIENCE AND SUSTAINABILITY CONTINUED

Sustainability also plays a major role in being resilient. City of Ryde bases its Resilience Plan on quadruple bottom line principles shown in the figure on the previous page including economic, environmental, governance and social. These components align with works undertaken by other councils, State Government, national and international organisations, and is consistent with the framework undertaken by Resilient Sydney for preparing and planning for shocks and stresses that will have impacts on councils and community, including infrastructure.

4. >>> Objectives of outcome 4:
Deliver and maintain resilient infrastructure using sustainability principles

4.1 Council assets, including critical infrastructure and the local natural environment, are adapted to withstand climate risks with resilience integrated into all decision-making processes

4.2 Promote and utilise supply chains who use recycled or environmentally friendly materials to be consistent with Council's sustainability principles for all Council's operations

4.3 Construct or install infrastructure that is tailored to meet Council's Net Zero 2050 policy

4.5 / INNOVATION AND TECHNOLOGY

Investigate and utilise innovative physical and virtual digital infrastructure to assist in asset planning and delivery.

Over the past five years, technology has advanced in leaps and bounds which has assisted the world in data collection, decision making, and the creation of innovative infrastructure and technology. This objective focuses on the implementation and use of innovative digital infrastructure from both the physical world as well as the virtual.

This can be obtained through several ways, such as:

- The use of a digital twin. This is a digital representation of an asset or process from the physical world, enabling an increased ability to gain deeper insights and make better decisions through processing vast volumes of big data, identifying intricate patterns and correlations, and automating decision-making.

- Use of artificial intelligence (AI) to determine the condition and defects within an asset. Council currently utilises AI to condition rate its stormwater pit and pipe network and has trialled the use of mobile phone cameras to identify pavement defects in the road.

- The use of innovative infrastructure such as liquid trees where areas cannot support the planting and growth of natural trees. Liquid trees use algae to take carbon dioxide from the air and produce oxygen at the same rate as two 10-year-old trees or 200 meters square of lawn.

5.

Objectives of outcome 5:
Investigate and utilise innovative physical and virtual digital infrastructure to assist in asset planning and delivery

5.1 Utilise technology by adopting a digital by default approach to infrastructure planning, delivery and operations

5.2 Partnering with university groups, local and regional technology and innovation businesses and to assist delivery on the outcomes

5.3 Research other local and state governments and other countries around the world for innovative infrastructure which could also be delivered by City of Ryde to benefit the community

Pittwater Road shared user path

5. BASELINE IN CREATING THIS STRATEGY

5.1 / ALIGNMENT AND DEPENDENCIES

This Local Infrastructure Strategy seeks to draw reference from all of Council's plans and strategies and align outcomes for infrastructure with current State and Federal plans such as:

- **North District Plan:**
  This plan focuses on infrastructure, liveability, productivity, and sustainability in the northern Harbor Zone within the Greater Cities Commission's (now dissolved) Metropolis of Three Cities. The City of Ryde forms a pivot point for this area in terms of infrastructure and connectivity (light rail, heavy rail, and state roads); productivity, with Macquarie Park identified as a health and education precinct; liveability, again with Macquarie Park being identified as a part of the Transport Orientated Development (TOD); and productivity, with the northern portion of the LGA being identified as an economic corridor.

- **The 2022–23 State Infrastructure Plan (SIP):**
  The 2022–23 State Infrastructure Plan (SIP) delivers on the requirement of the *Infrastructure NSW Act 2011* (the Act) 2 to produce an annual infrastructure plan for NSW.

- **Future Transport 2056:**
  This is a NSW Government overarching strategy, supported by a suite of plans to achieve a 40-year vision for the NSW transport system.

- **State Infrastructure Strategy 2022-2042:**
  The State Infrastructure Strategy (SIS) is a 20-year infrastructure investment plan for the NSW Government that places strategic fit and economic merit at the centre of investment decisions. The strategy assesses infrastructure problems and solutions, and provides recommendations to best grow the state's economy, enhance productivity and improve living standards for our NSW community. It is updated every five years.

- **2021 Australian Infrastructure Plan:**
  The plan is focused on reforms and policy recommendations that will deliver better infrastructure outcomes for Australian communities.

- **NSW Government Infrastructure Pipeline:**
  The NSW Infrastructure Pipeline provides a forward view of infrastructure under development by the NSW Government. It includes infrastructure projects with a minimum capital value of $50 million.

Council strategies and plans which inform and influence this strategy include but are not limited to:

- City of Ryde Community Strategic Plan 2028
- Planning Ryde Local Strategic Planning Statement March 2020
- Ryde Council Communications and Engagement Strategy
- Section 7.11 Development Contributions Plan 2020
- Fixed Rate Levy (Section 7.12) Development Contributions Plan 2020
- Ryde Development Control Plan 2014
  - 4.1 Eastwood Town Centre
  - 4.2 Shepherd's Bay Meadowbank
  - 4.3 West Ryde Town Centre
  - 4.4 Ryde Town Centre
  - 4.5 Macquarie Park Corridor
  - 4.6 Gladesville and Victoria Road Corridor
- City of Ryde Public Domain Technical Manual
- City of Ryde Strategic Asset Management Plan
- Ryde Resilience Plan 2030
- Halls and Facilities Strategy 2020-2041
- Open Space Future Provision Strategy 2021
- Social and Cultural Infrastructure Framework 2020-2041
- Pedestrian Accessibility and Mobility Plan (PAMP)
- Integrated Transport Strategy 2041
- City of Ryde Bicycle Strategy 2022-2030

5.2 / STRATEGY ASSUMPTIONS

In formulating the outcomes for this strategy for the City of Ryde, several key assumptions have been made to guide planning and decision-making processes. These assumptions are considered current at the time of the strategy's endorsement and will be subject to modification or removal as required. City of Ryde has described the assumption, what the uncertainties are around the assumption and the risk mitigation strategies.
The current assumptions used include:

- **Expected Levels of Service (LoS):**
  Infrastructure provision will align with required service levels outlined in the current Community Strategic Plan 2028. Any changes to the management of services will be assumed to maintain the same standard as the current level of service, ensuring continuity and reliability for residents.

- **Funding Availability:**
  Financial resources for infrastructure projects will be consistent with the current Long-Term Financial Plan (LTFP) funding projections, with adjustments made to accommodate inflationary trends. It is assumed that the LTFP will be fully funded by existing sources, providing a stable financial framework for infrastructure development and maintenance.

- **Population Growth:**
  Projected population growth within the LGA will follow the estimates outlined in the City of Ryde Population Forecast, with the population expected to exceed approximately 325,000 by 2041 (this includes previously projected growth combined with the NSW State Government's changes to zonings for the Macquarie Park and greater Ryde LGA such as the Macquarie Park Innovation District Stage 1 and 2, the Transport Orientated Development). Infrastructure planning will account for this growth trajectory to ensure that essential services and amenities adequately meet the needs of residents.

- **Demographics:**
  Demographic patterns within the LGA are expected to remain stable throughout the duration of this plan, with infrastructure planning based on existing requirements. Any significant demographic changes will be reviewed and addressed in subsequent iterations of the strategy.

- **Zoning of Land:**
  While acknowledging the dynamic nature of land zoning, the Infrastructure Strategy will be based on the current zoning of land within the LGA. Changes resulting from planning proposals or state programs will be monitored and reflected in subsequent revisions of the strategy to maintain alignment with evolving land use policies.

- **Transportation and Mobility:**
  Infrastructure planning will prioritize safe, efficient, and accessible transportation networks to accommodate diverse modes of travel, including public transit, walking, cycling, and emerging mobility solutions. Investments will focus on improving connectivity, reducing congestion and emissions, and enhancing overall mobility within the LGA.

5.3 / STRATEGY UNCERTAINTIES

Uncertainty	Level of Uncertainty (L,M,H)	Potential Consequences
Projections of growth	M	This strategy will plan requirements for infrastructure based on estimated growth patterns which may not be reflected by actual population growth patterns. This document will be updated based on updated growth patterns, and the timing for the delivery of infrastructure will be modified as required.
Changes to condition of assets	L	If conditions of assets are found to be changing more quickly than anticipated, the timing and requirement for new infrastructure will need to be modified to suit the replacement of old infrastructure. This may cause changes to services provided.
Changes to legislation	M	Changes to state legislation will always be an uncertainty when creating new strategies. Changes to legislation could lead to increased funding requirements based on the nature of the works required and the requirements of the legislation.
Changes to Level of Service	L	Level of service for the community will change at every review of the CSP. The major trends for the needs of the community have not changed over the previous 10 years, however, it can be considered to be an uncertainty especially when planning for infrastructure over a long period.
Technology	H	Advancements in technology is an uncertainty in the current economic environment. City of Ryde will consider utilising technologies to improve the way the Council tracks, delivers and manages its assets and infrastructure through its current strategies (e.g. Net Zero for reducing Ryde's carbon emissions), when planning for infrastructure in this space. This field will be dynamic and will be updated as required.

Ryde Aquatic Leisure Centre (RALC).

5.4 / CURRENT CHALLENGES FACED BY CITY OF RYDE

Many of the current challenges faced by City of Ryde are similar to those faced by all Council's. These include:

- **Project Costs –** Project costs have been increased across the board for infrastructure within Australia. Material import cost coupled with wage increases means that City of Ryde is unable to deliver the same quantity of projects with previously anticipated budgets. This ties into the importance of the next points which is;

- **Coordinating Capital Projects with Development Opportunitie**s – this is important to tie into project costs, to ensure that Infrastructure upgrades can be delivered by developments. However, a challenge seen with this is timing of works, as new infrastructure may not be required at this time, but will be required in the medium to long term

- **Use of developer contributions** – This would allow Council to undertake many more projects, however, this would require an update of the City of Ryde Contributions Plan to detail infrastructure projects, timings and budgets in accordance with infrastructure required within this strategy.

- **State Significant Developments (SSD)** – Council has little to no control over the approval of SSDs within the City of Ryde. This means that Council has limited power when negotiating infrastructure required due to increase population and vehicular movements brought upon by SSDs.

- **State rezoning and zoning control modifications (EIE, TOD etc.)** – State rezonings, whether a part of a planning proposal or from other state initiatives, has an effect on the type and quantity of infrastructure required in certain areas. Also, the changes to local zonings to allow the Diverse and Well-located Housing reforms will change the requirement for local infrastructure and put greater burden on existing infrastructure.

- **Ageing Infrastructure:** Many of the City of Ryde's existing infrastructure assets are ageing and in need of repair, replacement, or upgrades. Addressing the maintenance backlog and ensuring the resilience and reliability of critical infrastructure systems pose significant challenges for the Council.

- **Population Growth Pressure:** The rapid population growth in the City of Ryde puts pressure on existing infrastructure and services, leading to increased demand for transportation, housing, utilities, and community facilities. Balancing the needs of a growing population with limited resources and infrastructure capacity is a key challenge for the Council.

- **Traffic Congestion and Transportation Issues:** Traffic congestion, inadequate public transport options, and limited road capacity present significant challenges for the City of Ryde. Improving transportation infrastructure and mobility options while mitigating congestion and improving road safety are pressing issues for the Council.

- **Environmental Sustainability:** Ensuring environmental sustainability and mitigating the impacts of climate change pose challenges for the City of Ryde. Protecting natural habitats, reducing carbon emissions, promoting renewable technologies, and enhancing resilience to extreme weather events require concerted efforts and ongoing strategic planning by the Council.

- **Affordable Housing:** The City of Ryde faces challenges in providing affordable housing options for residents, particularly in the context of rising property prices and housing affordability pressures. Addressing housing affordability issues and promoting diverse housing options are critical priorities for the Council.

- **Community Engagement and Participation:** Enhancing community engagement, participation, and trust in the decision-making process is a challenge for the City of Ryde. Increasing transparency, fostering meaningful dialogue, and involving residents in planning and decision-making processes are essential for building stronger community relationships and addressing local concerns.

6. FUNDING OF REQUIRED INFRASTRUCTURE

6.1 / CURRENT FUNDING OPTIONS

Fundings options for the delivery of all the infrastructure will most likely remain unchanged over the years. The current funding options for the investment for infrastructure can be split into 'planning' and 'non-planning' mechanisms.

These mechanisms include the below:

- **Council's Developer Contribution**

  - **7.11 Plan** – Section 7.11 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) authorises Councils and other consent authorities to require contributions of land or money from developments toward the provision, extension, or augmentation of local infrastructure (or towards recouping the costs of this work). Where the consent authority is a Council, planning panel or an accredited certifier, a contribution may be imposed on a development only if it is of a kind allowed by and determined in accordance with a contributions plan

  - **7.12 Plan** – From 1 July 2020, the City of Ryde Fixed Rate Levy (Section 7.12) Development Contributions Plan 2020 (Fixed Rate Plan) applies to non-residential development outside of the Macquarie Park precinct that propose an increase in GFA. The Fixed Rate Plan imposes a 1 percent levy on the construction value of all non-residential development consents for developments over a $350,000 construction value threshold. Any non-residential development with a proposed construction value of $350,000 or under will not be levied under the Fixed Rate Plan.

- **Housing and Productivity Contribution** – NSW State Government contribution that applies to development applications for new residential, commercial and industrial development (including complying development and State Significant Development) in the Greater Sydney, Illawarra Shoalhaven, Lower Hunter and Central Coast regions.

- **Voluntary Planning Agreements** – Voluntary Planning Agreements (VPAs) are common legal agreements between developers and planning authorities, such as Councils or the Department of Planning. VPAs are permitted under Section 7.4 of the *Environmental Planning and Assessment Act, 1979* (EPA Act). The *EPA Act* sets out clear guidelines that both the planning authority and developer have to follow when entering into a VPA. These agreements can be entered into as part of a major development application or as part of a request to amend an environmental planning instrument such as a Local Environmental Plan.

- Developer Contributed Infrastructure – The developer is required to provide, replace or upgrade infrastructure as a condition on a development consent under s4.17(1)(f) of the *EP&A Act*. The works are usually required directly as a result of the development works. Types of works typically required to be delivered by developers as part of their approval to develop land include footpath and streetscape works and undergrounding of power lines on public land adjoining the development site.

Non-planning system mechanisms	
Council's General fund	Ordinary rates revenue that is collected by the Council on an annual basis to primarily fund the operations of the Council, but which may also be used for capital works.
Other Council general income (fees, charges, rents etc)	Fees and charges for various services and facilities provided by the Council; many of which are set by regulation under the *Local Government Act* and other Acts.
Special rate variation	Additional Council rates pursuant to section s508, or s508A of the *Local Government Act* for works or services that will service the LGA. An application is required to be made and approved by IPART.
Special rate (Local)	Additional Council rates pursuant to section 495 of the *Local Government Act* 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.
Stormwater management levy	Levy imposed pursuant to section 496A of the *Local Government Act* for the provision of stormwater management services for each parcel of rateable land for which the service is available.
Redevelopment of State Government and Council land	Opportunities to have infrastructure, facilities, affordable housing or other public benefits incorporated into the redevelopment of State-owned or Council-owned land. Example opportunities include Ryde Civic Centre site redevelopment, redevelopment of Council-owned car parks.
Private providers	Infrastructure, services and facilities provided by non-government, not-for-profit or for-profit providers. Examples of facilities typically provided include long day child care, indoor recreation centres (e.g. PCYC), meeting rooms and event spaces at registered clubs.
Proceeds from asset sales	Sale of Council owned assets (usually land e.g. depots) that are surplus to needs or are otherwise redundant and are no longer required. Proceeds of sales are used to co-fund other Council projects.
State and Federal Government grants	Funds that are made available from primarily State Government for the provision of infrastructure via an application process. Schemes may require co-funding/cash contribution for projects. Examples of current State programs include: • Accelerated Infrastructure Fund • Public Spaces Legacy Program • Metropolitan Greenspace Program • Low Cost Loans Initiative.

6.2 / FUNDING GAPS AND FINANCIAL IMPLICATION

Current funding gaps within the organisation to meet the requirements of the Local Infrastructure Strategy outcomes relate to the cost to undertake all the infrastructure upgrades. Currently, Council must meet the Asset Renewal Ratio which is a requirement of the Office of Local Government. As it stands, the amount Council must commit to renewals is set at approximately $24 Million. Any funding of new infrastructure can only be budgeted once this commitment has been met.

The current estimated cost to implement all the required infrastructure for the LGA in line with the assumed growth is over $1 billion. Council is unable to fund this on its own, and will rely on other stakeholders to deliver, in conjunction with the funding sources noted above. These will include:

• Delivery by developers as a part of their conditions of consent

• Delivery by the State Government as a part of their own upgrade works

Furthermore, with the construction of these new assets, Council will need to account for their whole of lifecycle costs. As well as renewal costs, these new assets will significantly increase our maintenance and operating costs. This is funding that Council will need to allocate from its own revenue and cannot be funded from the sources listed above.

Asset lifecycle costing and the way assets are managed is a key indication of the financial sustainability of Council. As mentioned, there are existing commitments which Council is required to meet prior to the construction of new infrastructure. If Council is unable to meet these commitments, then it will be unable to fund new projects into the future.

7. FUTURE POPULATION PROJECTIONS AND INFRASTRUCTURE REQUIREMENTS

7.1 / POPULATION PROJECTIONS

The population in the City of Ryde has grown significantly in the last 10 years, growing to approximately 136,000 in 2023. Future projections have the City of Ryde population growing to over 325,000 by 2041. This figure is based on previously projected growth combined with the NSW State Government's changes to zonings for the Macquarie Park and greater Ryde LGA. This includes the Macquarie Park Innovation District Stage 1 and 2, the Transport Orientated Development and other zoning changes. In total, a maximum of 191,000 additional residents could be housed under these proposals within the Ryde LGA by 2041.

This sets the need for not only increased infrastructure, but also targeted infrastructure to need the needs of different age groups and demographics within the LGA. These outcomes are detailed within different City of Ryde strategies and action plans.
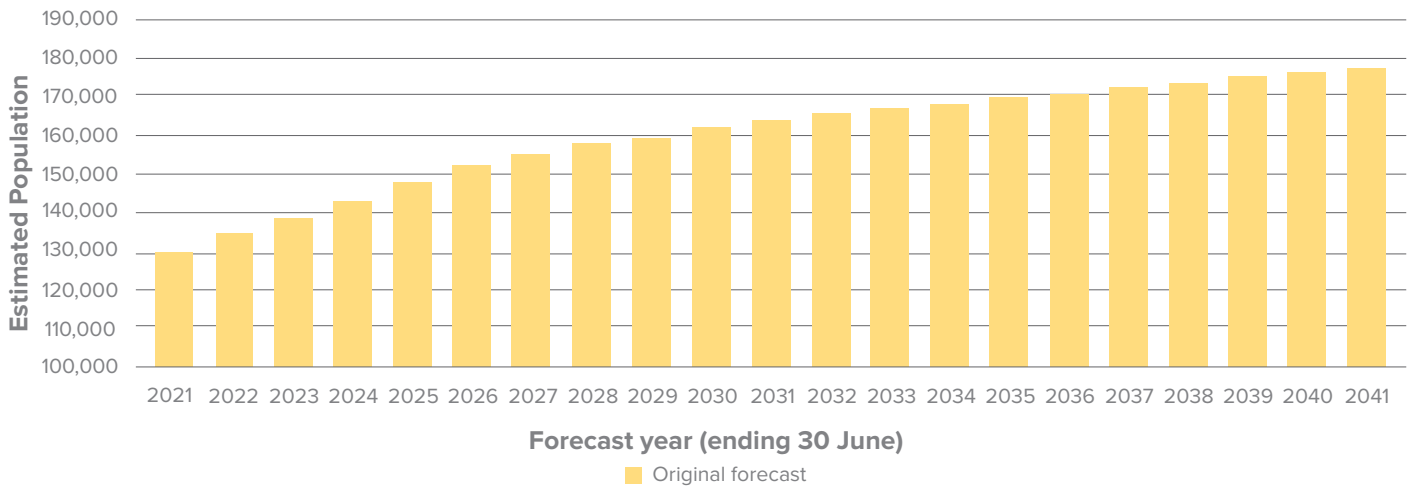
Forecast Population – City of Ryde

Figure 7 – City of Ryde Population Forecasts - https://forecast.id.com.au/ryde

The effects of all these changes will cumulate to place extreme stress on local infrastructure which will drive the need for change. The future requirements for open space, civil infrastructure and social and culture amenities are detailed in the following sections.

7.2 / FUTURE REQUIREMENTS FOR OPEN SPACE

The City of Ryde has many plans and strategies which can be used to determine future provisions for open space which will need to be activated once an increase in residents trigger a requirement to improve or increase infrastructure.

The overarching document to determine requirements for Open space is the City of Ryde Open Space Future Provision Strategy: Technical Report (OSFPS) adopted in May 2021. The objective of this document is to accommodate population growth and change through the planning of open space.

Facility	Benchmark	Additional facility requirements	
		Unit	Qty
Industry benchmarks – Number of parks			
All open space (total)[23]	15 percent of site area	Hectares	36.0
Access to open space in low-medium density	Open space within 400m of all dwellings	Park of minimum 3,000m^2	Sufficient to meet access benchmark
Access to open space in high density[24]	Open space within 200m of all dwellings	Park of 3,000m^2 acknowledging that a minimum of 1,500m^2 is required	Sufficient to meet access benchmark
Major/destination parks > 5ha[25]	1:20,000 people	No. of parks	1
District parks (average size > 5ha, minimum size 2ha)[26]	1:5,000 people	No. of parks	3.5
Local parks (average size > 0.5ha, minimum size 0.15ha)[27]	1:2,500 people	No. of parks	7
Recreation facility provision benchmarks[28]			
Full size fields and ovals	1 per 3,400 people	No. of full size fields and ovals	5.5
Junior/mod fields and ovals	1 per 13,000 people	No, of junior/mod fields and ovals	1.5
Outdoor court	1 per 1,8000 people[3]	No. of outdoor courts	10
Indoor court	1 per 9,500 people	No. of indoor courts	2
Lawn bowls and croquet	1 per 21,000 people	No. of lawn bowls/ croquet facilities	1
Golf course	1 per 56,000 people	No. of 18-hole golf courses	0.3
Swimming	1,000m^2 of pool space per 38,000 people[3]	m^2 of pool space	475

Figure 8 – Provision for larger open space assets.

The infographic below shows the benchmarks City of Ryde needs to achieve for open space infrastructure. This infrastructure includes requirements for parks within set distances from dwellings, provisions for outdoor courts and full size outdoor fields and ovals.
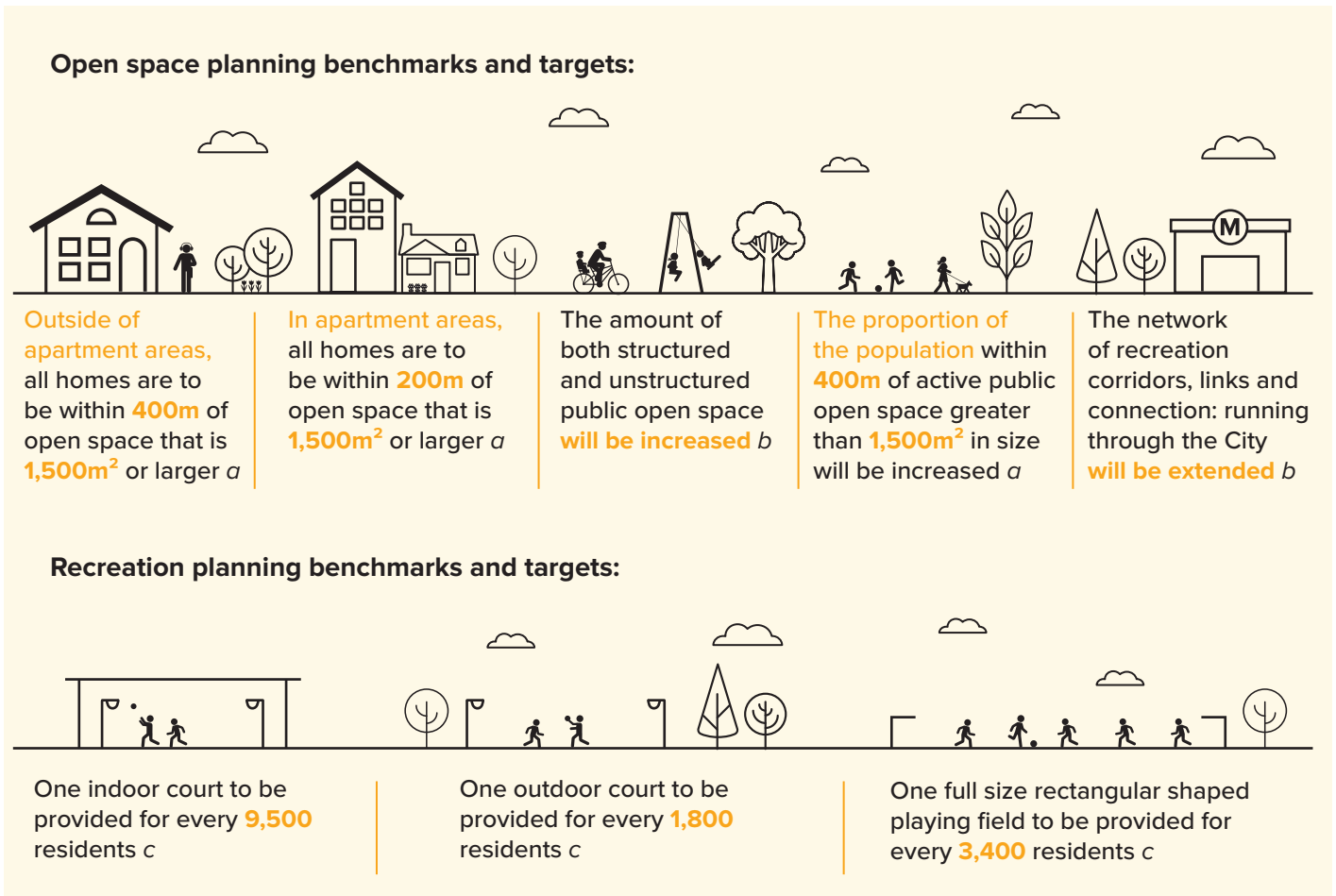
Open space planning benchmarks and targets:

Outside of apartment areas, all homes are to be within **400m** of open space that is **1,500m²** or larger *a*

In apartment areas, all homes are to be within **200m** of open space that is **1,500m²** or larger *a*

The amount of both structured and unstructured public open space **will be increased** *b*

The proportion of the population within **400m** of active public open space greater than **1,500m²** in size will be increased *a*

The network of recreation corridors, links and connection: running through the City **will be extended** *b*

Recreation planning benchmarks and targets:

One indoor court to be provided for every **9,500** residents *c*

One outdoor court to be provided for every **1,800** residents *c*

One full size rectangular shaped playing field to be provided for every **3,400** residents *c*

Figure 9 – Requirements for open space and recreation.

7.3 / FUTURE REQUIREMENTS FOR CIVIL INFRASTRUCTURE

As a brownfields site, there is a limitation to the expansion that civil assets (under the care and control of Council) can undertake in order to meet the needs of the population. The bulk of this requirement will be provided by the state government in the form of rail, bus services and upgrades to state roads and surrounding infrastructure (motorways, tunnels and ferry services etc.).

Drivers from a Council perspective which can be used to deliver upgrades to existing infrastructure come from a combination of existing plans and strategies such as the Disability Inclusion Action Plan (DIAP), the Integrated Transport Strategy (ITS) and the Bicycle Strategy.

The ITS states that while continuing to improve the efficiency and management of the road network, the capacity of the network is relatively fixed and efficiency gains will need to be prioritised towards commercial and service vehicles, emergency vehicles and active and public transport through the reallocation of road space.

Some new connections of infrastructure have been proposed within Macquarie Park as a part of the Development Control Plan 2014. This can be seen below in figure 10, and shows the proposal for new road networks to assist with the movement of traffic within the area.

Figure 10 – Proposed new road connections within the Macquarie Park corridor.

7.4 / FUTURE REQUIREMENTS FOR SOCIAL AND CULTURAL AMENITIES

The current social and cultural framework from the City of Ryde's Social and Cultural Infrastructure Framework 2020-2041 outlines the five different catchments which determine the requirement for community infrastructure based on population. These facilities provide various benefits to the community such as community hire, early childhood education, heritage buildings, libraries and other creative and performance spaces. The catchments include Southern catchment, Northern catchment, Western catchment, Ryde catchment, North Ryde catchment.

Within the framework, certain buildings are earmarked for disposal if there are other community buildings coming on-line that meet the needs of people within that area. This is supported by the 2020-2041 Halls and Facilities Strategy which highlight the following social and cultural provisions per catchment and is highlighted in figure 11 below.

Community space type		Description
Community centre space – hireable		Spaces for the community to hire that allow for a range of activities, meetings and events. These spaces are focal points for community gathering and connection.
Community services space – licensed		Affordable or subsidised office and meeting spaces to support community and not-for-profit organisations providing valuable community services.
Arts and cultural space		Spaces that support and foster arts and culture in the community. Places for creatives to meet and connect, as well as create and display their art.

Source: Elton Consulting (2019), City of Ryde Halls and Facilities Strategy, p35

53m²/1,000 people hireable community centre space

95m²/1,000 people total community facility space

21m²/1,000 people licenced community services space

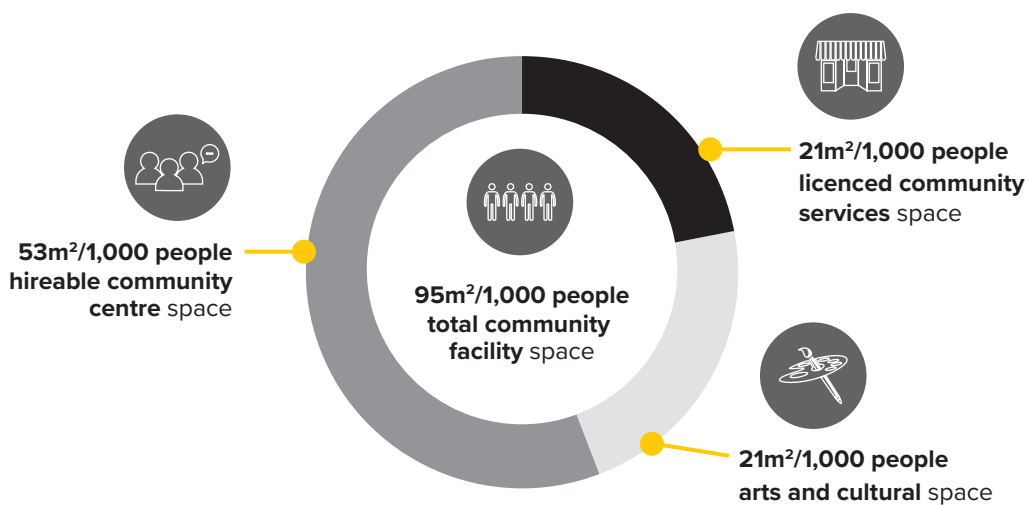**21m²/1,000 people arts and cultural** space

Figure 11 – Rate of current provision for community facility space.

8. ENGAGEMENT AND COLLABORATION

This strategy has been developed through consultation with internal and external stakeholders. In the initial development of this strategy, the City of Ryde has used inputs from internal and external stakeholders including Council subject matter experts and input from state bodies involved in infrastructure planning and delivery. This will be followed by endorsement of a draft infrastructure strategy for exhibition in which input from the community will be reviewed and incorporated into the framework of the strategy.

Stakeholder engagement is key for Council in drafting and the successful implementation of this strategy. Council seeks to have ongoing engagement and collaboration with residents, businesses, community groups, local government agencies, State Government departments, industry partners, and advocacy organisations. By engaging with stakeholders, partnering with relevant agencies, and leveraging existing studies and data, Council aims to establish a framework that will guide the future growth and development of the City.

Partnerships with Relevant Agencies: Infrastructure planning involves coordination with various government agencies, at the local, state, and federal levels. As part of our consultation process, we will engage with relevant agencies, including but not limited to Transport for NSW, Sydney Water, and the Department of Planning, Housing, and Infrastructure. These partnerships will ensure alignment with broader regional and state infrastructure priorities and facilitate the integration of our strategy into larger planning frameworks.

Consideration of Relevant Studies and Data: As part of the development of this strategy Council has considered existing studies, data, and research to inform the objectives and action items of this document. This includes but is not limited to population growth projections, demographic trends, transport studies, environmental impact assessments, technological improvements in infrastructure inspection and delivery. Incorporation of this research and information will ensure that Council's Infrastructure Strategy is evidence-based, forward-thinking, and responsive to current and future needs.

Accessibility and Transparency: Throughout ongoing collaboration and consultation we are committed to maintaining transparency and accessibility, specifically with reporting on items that are endorsed as part of the action plan. We will provide regular updates on our progress, share relevant documents and reports, and request for feedback through multiple channels. Additionally, we will ensure that our engagement activities are inclusive and accessible to all members of the community, including those from diverse backgrounds and with varying levels of accessibility needs.

9. STRATEGY IMPLEMENTATION AND REVIEW

This strategy will be implemented upon endorsement of the final strategy from Council. The strategy action and improvement plan will be reviewed yearly to track and report on priorities identified as part of the annual action plan, with the strategy being reviewed in its entirety every four years.

At the review period of four years, the entire strategy and its outcomes will be evaluated to determine the effectiveness and benefit it provided to local infrastructure and the community. Feedback for this will be sought from both internal and external stakeholders (including the community) with feedback to form the framework for the new strategy.

Trim Place, Gladesville.

10. GLOSSARY

Development Application (DA) – A Development Application is an application made to Council seeking consent to carry out development including construction, demolition, change of use of a property or premises, display of advertising, subdivision, or making alterations or additions to a property.

Voluntary Planning Agreement (VPA) – Voluntary Planning Agreements are legal agreements between developers and Council for the provision of funds or for works to be undertaken by the developer for infrastructure, services or other public amenities. These documents are created under the *Environmental Planning and Assessment Act 1979.*

Local Strategic Planning Statement (LSPS) – The LSPS was created by Council to set the 20-year vision for the area and guides Councils' more detailed plans, planning controls and policies.

Community Strategic Plan (CSP) – The Community Strategic Plan is the highest-level plan that the City of Ryde prepares. It is generally prepared within a year of a new Council being elected. The plan identifies the main priorities of the community and plans strategies to achieve the goals set out by the community.

Strategic Asset Management Plan (SAMP) – The Strategic Asset Management Plan forms part of the Resourcing Strategy within the Integrated Planning and Reporting framework. It accounts for and plans for all new and existing assets within Council's control and is used to support the CSP and the Delivery Plan.

Four Year Delivery Plan – The Delivery Program identifies activities which are to be undertaken by Council to meet the strategies of the CSP and to perform its functions. All plans, projects, activities and funding allocations must be directly linked to this Program.

Operational Plan – The Operational Plan is an annual plan which focuses on the details of the Delivery Plan - including the individual projects and actions which will be undertaken to meet the commitments of the Delivery Plan.

Greater Cities Commission (GCC) – Now dissolved – An independent agency of the NSW Governments who were responsible for land use planning across the six regions in NSW. This agency has been dissolved back into the Department Planning Housing and Infrastructure.

Brownfields – A brownfield site is defined as any land that has previously been built on.

Regional Infrastructure – Regional Infrastructure is infrastructure that is intended to be used by the entire LGA and surround area. Examples of this within City of Ryde can include community and sporting/aquatic facilities.