SGS Economics & Planning

OPEN SPACE FUTURE PROVISION STRATEGY: TECHNICAL APPENDIX

FOR ADOPTION
MAY 2021

Prepared for
City of Ryde
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This report has been prepared for

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Version	Date
Final Draft	27th July, 2020
Final	7th September, 2020
For Public Exhibition	24th November, 2020
For Adoption	15th April, 2021

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EXECUTIVE SUMMARY

Current context

The City of Ryde currently has a range of open spaces and recreation facilities including Lane Cove National Park, Meadowbank Park and Field of Mars, as well as a significant number of other smaller spaces and facilities.

The LGA's open space network provides places for the community to play organised sport, experience nature, or enjoy informal play and exercise. Each area is unique and people use these assets in different ways depending on their location, size and character.

Council currently manages 351 hectares of open space at 204 sites – around nine per cent of the LGA. Of a further 288 hectares of open space (not managed by Council), 272 hectares is national park and 16 hectares are private sports fields.

This report

This report identifies demand for these facilities currently and in the future, the scale and location of gaps in the current network, and priorities for addressing these gaps. The report provides important context for both the design of facilities (including masterplans), as well as facility specific management strategies.

Planning and policy context

There are a range of State, Regional and Local strategic plans and policies that inform the future provision of open space and recreation in the City of Ryde.

These include:

- *Greener Places: Draft Greener Places Design Guide*, Government Architect Office (GAO) NSW which aims to improve community access to recreation and exercise, walking and cycling connections
- *Greater Sydney Regional Plan – A Metropolis of Three Cities* which notes the importance of green space in providing for a growing city, including enhancing open space so it can meet a wider range of community needs
- *North City District Plan, Greater Sydney Commission* which supports increased urban tree canopy; expanding Sydney Green Grid; protecting and enhancing bushland and biodiversity; protecting and enhancing scenic and cultural landscapes; and delivering high quality open space,
- *Community Strategic Plan, City of Ryde* vibrant and liveable; active and healthy; natural and sustainable; smart and innovative; connected and accessible; diverse and inclusive; and open and progressive
- *Ryde Local Strategic Planning Statement (LSPS), 2019* which identifies an open space structure plan (including future proposed open space) which prioritises providing sufficient open space to support a growing, active and healthy community to ensure long term quality of life. The Plan also aims to diversify and increase active recreation opportunities (for example, through the provision of walking and cycling paths and indoor recreation facilities). It also notes that while some potential opportunities have been identified, additional spaces will also be required, to support individual sites and localities.
- *The City of Ryde Integrated Open Space Plan, 2012* which identifies a vision for Open Space in Ryde*:*

'We have ample, accessible open space to meet our needs, shared and enjoyed by us all, founded on a healthy natural environment, conserving our rich history, culture and local character and managed sustainably now and for future generations'.

The plan is supported by 5 priorities:

- Optimisation: making more of what we have,
- Consolidation and acquisition: achieving more equitable access to our open spaces,
- Integration and adaptation: ensuring the whole is greater than the sum of the parts,
- Connection: linking our parks with our natural environment and history, and
- Organisation: planning from top down and bottom up.

The plan also identifies 5 objectives to inform future planning.

- Ample, Accessible Open Space
- Shared and Enjoyed by All
- Founded on a Healthy Natural Environment
- Conserving Our Rich History, Culture and Local Character
- Managed Sustainably Now and For Future Generations

These objectives are also used to inform this Strategy.

The City of Ryde's population is anticipated to grow by over 50,000 people between 2016 and 2036. This represents an increase of over 40% and will generate demand for additional recreation and open space.

Open space: supply and demand

The City of Ryde has 141 hectares of Council owned parkland and civic space, and many boundaries are natural areas. The open space network in the LGA includes the Lane Cove National Park along the north eastern boundary, Lane Cover River to the east and Parramatta River to the south. Terry's Creek, a tributary of Lane Cover River runs along part of the north-west boundary.

There is currently 350.65ha of open space in the City of Ryde. On a per capita basis, this equates to 2.89 hectares per thousand people, compared to the traditional benchmark of 2.83 hectares per thousand. By 2036, if no additional open space is provided, the provision rate will fall well below this benchmark to 2.04 hectares per thousand people.

As well as the overall quantum of open space, best practice open space planning also emphasises the **accessibility** and **quality** of open space.

Reflecting this, the GAO's draft *Greener Places Design Guide* identifies a range of performance-based accessibility and quality criteria, including that the majority of residents should be within 400 metres of usable open space (i.e. open space of a minimum size of 1,500m^2) in low and medium density areas, and within 200 metres in high density areas. This benchmark has been adopted in Council's LSPS and also provides the accessibility benchmark in this study.

Sport and recreation: supply and demand

The City accommodates a range of publicly accessible recreation facilities and these are complemented by other public facilities (e.g. within government owned schools and Macquarie University) and private facilities (e.g. North Ryde RSL and two privately run golf courses).

The current capacity of the City of Ryde's recreation facilities, current demand and demand at 2036 are indicated in Table 1.

TABLE 1: CURRENT CAPACITY SUMMARY BY FACILITY TYPE

Facility type	Number of facilities	Demand 2019	Demand 2036
Full size outdoor field and oval – summer	38	19	26
Full size outdoor field and oval – winter	38	38	51
Junior outdoor field and oval – summer	19	5	7
Junior outdoor field and oval – winter	19	9	13
Outdoor court	108	71	97
Indoor court	6	15	20
Bowls & croquet	13	6	8
Golf course	2	2	3
Swimming (m^2 swimming area)	3,835m^2	3,365m^2	4,532 m^2

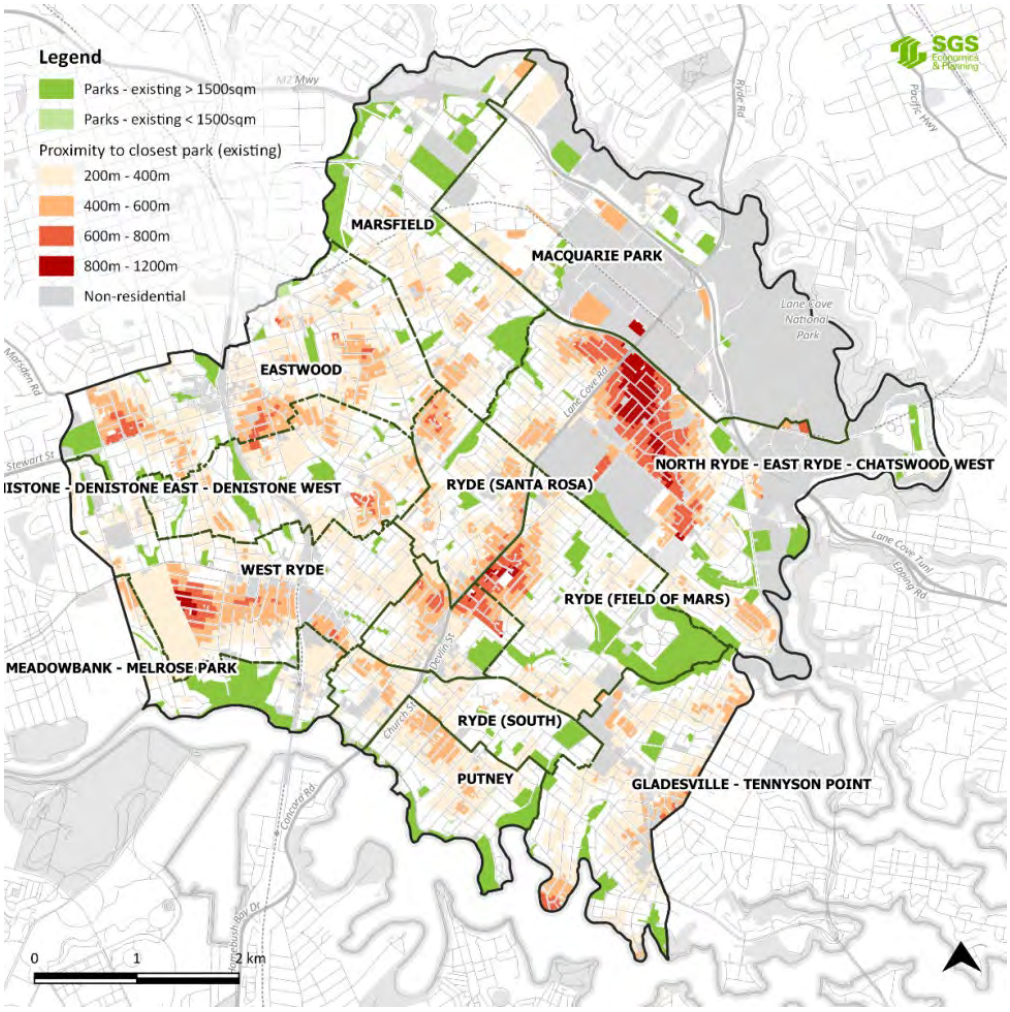
Source: City of Ryde, SGS Economics and Planning 2020

Service gaps and issues

Open space accessibility

Figure 1 illustrates the current profile of access to open space in the City of Ryde.

FIGURE 1: OPEN SPACE ACCESSIBILITY: EXISTING NETWORK

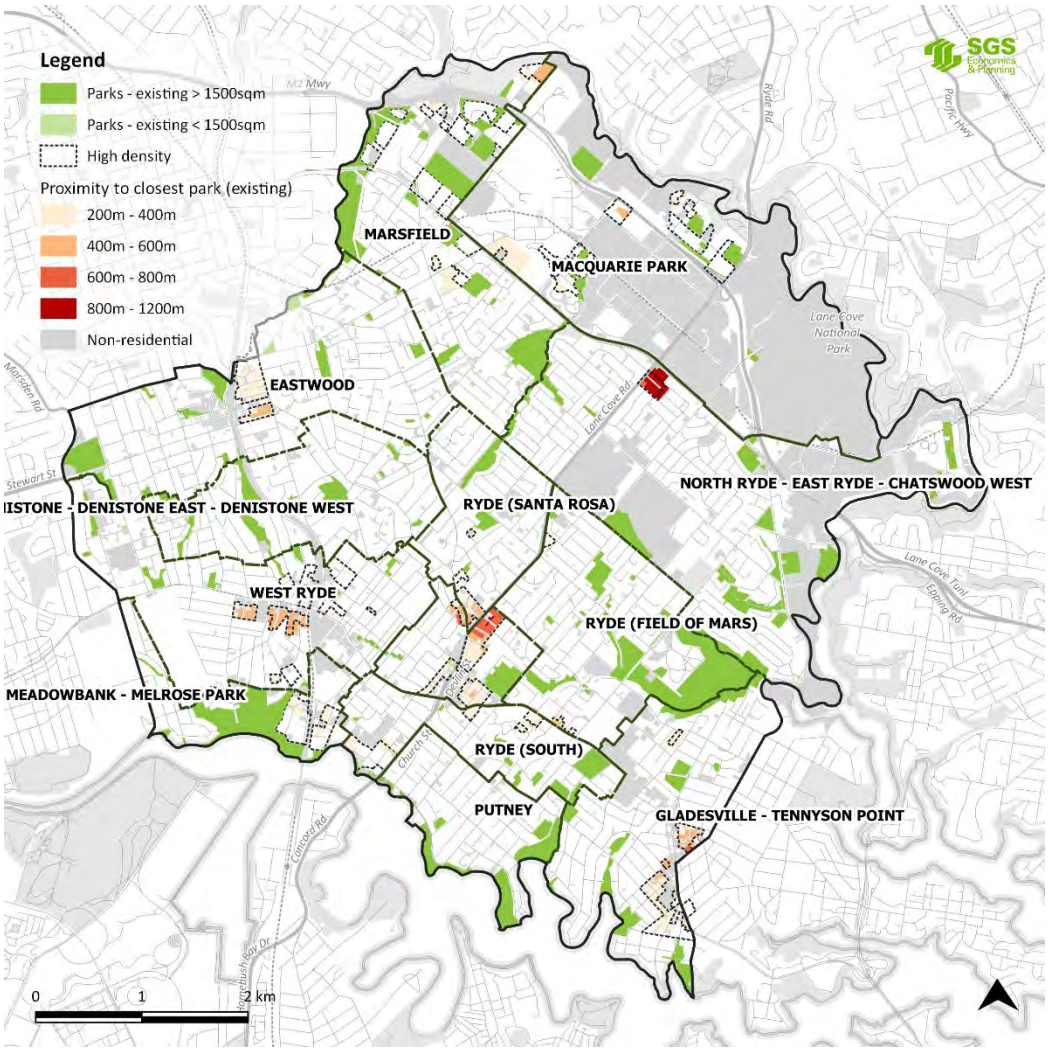


Source: SGS Economics and Planning

Areas with poorer access (i.e. open space is further than 400m to open spaces greater than 1,500m²) include Gladesville – Tennyson point, North Ryde – East Ryde – Chatswood West, Top Ryde and West Ryde.

Many higher density residences do not have access to open space within 200 metres, and some are 800 metres or more from open space. High density areas with poorer (i.e. more than 200m) access to local open space include parts of Top Ryde, Gladesville- Tennyson Point, Eastwood, North Ryde and West Ryde. These are indicated in Figure 2.

FIGURE 2: OPEN SPACE ACCESSIBILITY: EXISTING NETWORK AND HIGH DENSITY AREAS



Source: SGS Economics and Planning

Open space capacity

As noted above, there is currently a sufficient overall quantity of open space in the LGA, but there is projected to be an undersupply of open space by 2036. Using the traditional benchmark provision rate, the additional quantum of open space required is 135 hectares. It is not, however, realistic to expect this to be delivered in an established area with limited opportunities, like the City of Ryde.

Alternative solutions are required, including making the most of existing assets and space through increasing their capacity and ability to accommodate higher levels of use or more diverse activities, and improving access to them.

Recreation

Access to recreation facilities has also been assessed. As well as access via the road network, this analysis considers the spatial distribution of capacity across the LGA and where the demand is generated from (i.e. where people live). It is undertaken for summer and winter, to reflect the different sports played.

TABLE 2: GAPS IN RECREATION ACCESS

Current gaps in supply and access	
Full size outdoor fields	In summer, access is poor in the western part of the City, primarily Denistone-Denistone East-Denistone West. In winter, Denistone-Denistone East-Denistone-West, Eastwood, Ryde (Santa Rosa), and Ryde (Top Ryde) have poor access.
Junior outdoor fields	Some residents in the north of the City will have to travel further to reach facilities which are concentrated in the south. Given many of the junior fields and ovals are located within a regional facility, people are likely to travel to these higher order regional facilities and competitions. There is also the potential to access full size fields in these areas
Outdoor courts	Residents in Ryde-Santa Rosa, Denistone- Denistone East, Eastwood, and Gladesville – Tennyson Point have to travel further to access outdoor courts
Indoor courts	The majority of existing and future undersupply occurs in the areas to the west of Santa Rosa
Bowls and croquet	The northern end of the City of Ryde experiences an undersupply in bowls and croquet in the long term however neighbouring facilities located a short distance outside Ryde LGA (North Epping Bowling Club and West Pymble Bowling Club) can meet this demand
Golf courses	The north and the south of the LGA, including Marsfield, Macquarie Park, Eastwood, Ryde, Putney, and Gladesville, have poor access, although demand in these areas may be offset by golf courses in neighbouring LGAs such as the West Chatswood Golf Course
Swimming	Unmet demand in Eastwood and West Ryde can potentially be fulfilled by surrounding aquatic facilities, such as Epping Aquatic and Leisure Centre located north-west of Ryde and the proposed Parramatta Aquatic Centre close to the Parramatta CBD

Strategy for future facilities

A Strategy to guide the City's planning for recreation facilities and open space has been developed. It is based on the 2012 *Integrated Open Space Plan* strategic directions and proposes a number of objectives and strategies organised around the following desired outcomes:

- Ample and accessible open space and recreation
- Shared and enjoyed by all
- Founded on a healthy natural environment
- Conserving our rich history, culture and local character
- Managed sustainably now and for future generations

Planned Projects

Council has undertaken a range of planning activities (including the Local Strategic Planning Statement, LEP, masterplans and facility strategies) which have identified a range of future open space and recreation projects.

The planned projects include 20 open space acquisitions and/or expansions (such as an 8,000m^2 expansion of Ryde Park), new sports fields (6 senior and7 junior), new sports courts (9 indoor and 5 outdoor) and several facility improvement projects (e.g. floodlighting and synthetic surfacing).

The delivery of these projects will provide the City with an additional 28 ha of parkland open space and additional sport and recreation facilities:

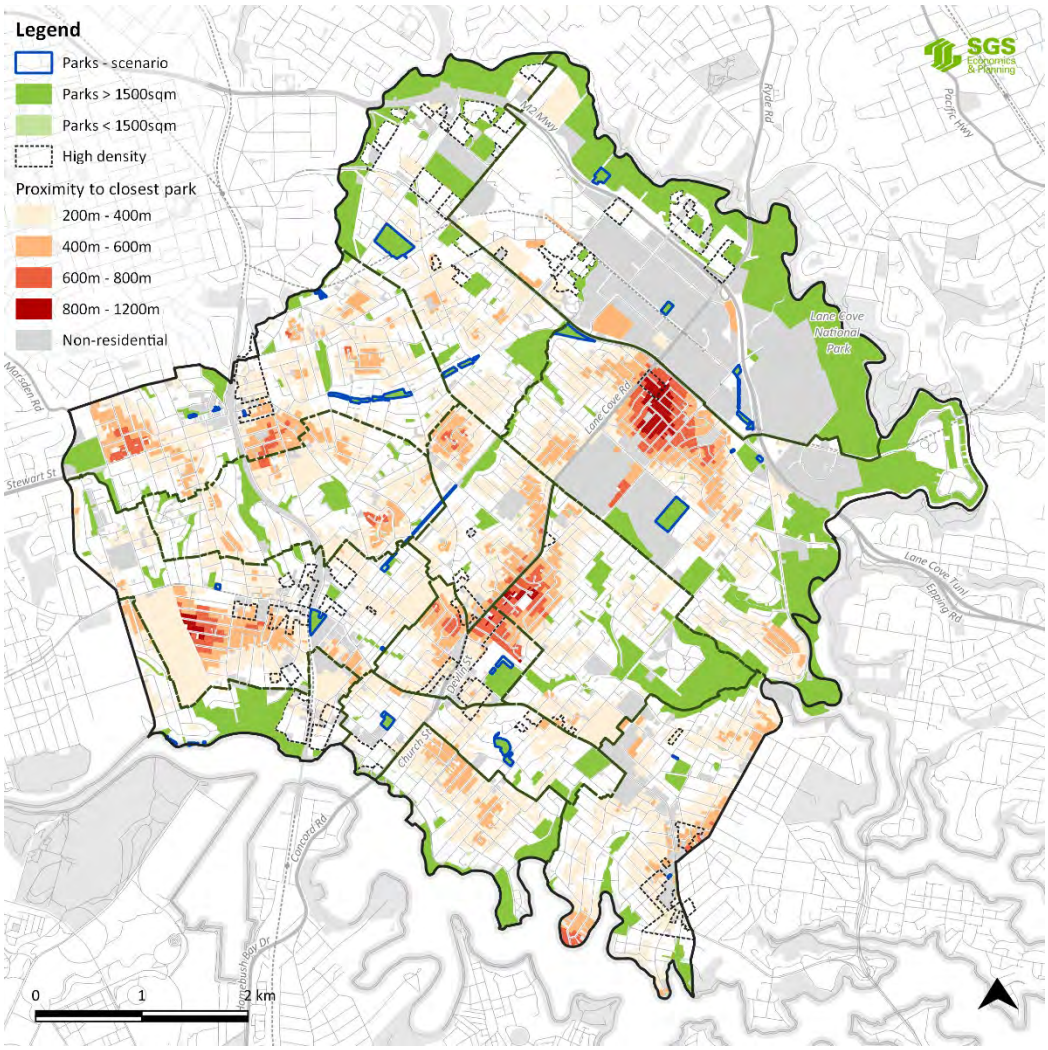
Impact of planned projects – open space

As indicated, the open space projects planned in the LEP and the LSPS will provide an additional 28.06 hectares of open space across the City.

Modelling indicates that the planned projects will help to improve access in most suburbs, and the proportion of future households with 400m access to open space will increase.

Figure 3 illustrates that the acquisition projects will substantially improve access in Eastwood and Denistone East – Denistone West- Denistone, but that some parts of Ryde (Santa Rosa), West Ryde, North Ryde-East Ryde -Chatswood West will continue to have large areas with poor access to open space.

FIGURE 3: OPEN SPACE ACCESSIBILITY WITH PLANNED PROJECTS



Source: SGS Economics and Planning, 2020

Impact on high density areas

As there are few new open space acquisitions planned by Council in high density areas, access to open space in these areas does not change significantly.

Impact of planned projects – recreation facilities

The planned projects will improve the capacity of the City's outdoor fields and ovals, outdoor courts and indoor courts. The capacity of bowls and croquet facilities and golf courses will remain unchanged as there are no enhancement projects planned for these facilities.

The outcome in terms of overall gaps in supply is summarised in Table 3.

TABLE 3: SUMMARY PLANNED RECREATION FACILITIES SPORTS

Facility type	Planned facilities	Total facilities including planned projects	Gap/ surplus at 2036 (# facilities)
Full size outdoor field and oval – summer*	6	44	+ 18
Full size outdoor field and oval – winter*			- 7
Junior outdoor field and oval – summer	7	26	+ 19
Junior outdoor field and oval – winter			+ 13
Outdoor court	5	113	+ 16
Indoor court	9	15	- 5
Bowls & Croquet	0	13	+ 5
Golf	0	2	- 1
Swimming	0	3,835m²	- 697m²

Source: SGS Economics and Planning 2020 * Improvements are also planned for some existing facilities which will increase the capacity of the network, but are not reflected in an increase in the number of facilities.

The planned sport and recreation facility enhancement projects will also improve **access** to sport and recreation facilities.

Planned Project Priorities

To help prioritise the various actions included in Council's existing adopted masterplans and strategies, a Multi Criteria Assessment (MCA) framework was developed. Each potential project was assessed against the extent to which it delivers on Council's objectives.

The resulting priority projects (i.e. those projects with the highest MCA scores) included:

Open space

- West Ryde new open space
- County Road Corridor
- North Ryde Hospital
- Macquarie Park – Catherine Hamlin Park (complete)
- Lachlan's Line

Recreation

- Marsden High School – 4 indoor courts
- RALC- 2 indoor court
- ELS Hall Park – 2 indoor courts
- Install lighting at all facilities
- Christie Park – 4 outdoor futsal courts and 1 full size field or oval

Potential Future Projects

Even with full delivery of the planned projects, there will be remaining gaps in the City's provision of open space and recreation facilities. Potential future projects have been identified to help address these gaps. These are categorised as:

- Open space: Acquisitions and upgrades

- Green corridor and links
- Options to improve access to open space
- Acquisitions
- Enhancements to parks and open spaces
- Collaboration and partnerships opportunities
- New and upgraded sports facilities
    - Full size outdoor field/oval
    - Indoor court
    - Swimming/aquatic

Open space

A range of potential future projects have been identified in the course of the study to address the remaining gaps. The identified projects are high level options and provide a range of alternative solutions for addressing the gaps. Particular combinations of projects may be required in different areas, and not all projects on the proposed list will be required to deliver an appropriate open space network for the City.

Further planning and design is required to identify the most appropriate location, design, and combination of projects to meet the City's needs.

Recreation

A range of potential sport and recreation facility projects have also been identified to address the identified gaps in supply. These projects include new sports fields and ovals (3 senior) and a combination of synthetic conversions or field developments on government owned land (equivalent to 4 senior fields), indoor sports courts (3 courts), and some additional swimming space.

The projects will significantly reduce both the capacity and accessibility service gaps. There will, however, be some remaining gaps in sport and recreation facilities:

- an undersupply of 1 golf course facility by 2036
- an undersupply of 457m² of pool space

Potential Project Priorities

The MCA framework was also applied to the potential future projects with the assessment identifying the following project priorities:

- Indoor courts (ELS Hall Park (1) and Marsden HS site (2) (if Macquarie University 3 court expansion does not occur))
- Government land opportunities (Epping Boys HS - 2 full size field/oval)
- Government land opportunities (CSIRO Marsfield - 2 full size field/oval)
- Darvall Park (1 additional full size (and loss of 1 Junior/mod field/oval)
- Private land opportunities (TG Milner Fields 2 full size fields)

Conclusions and next steps

This study has identified capacity and accessibility gaps in the City's open space network, including sport and recreation facilities, and has identified how planned and potential projects can effectively address these gaps, both now and over the next 16 years to 2036.

The key conclusions are summarised below:

- Both the **planned** and **potential future** projects for open space and recreation identified in this study respond to major current and future gaps in open space and recreation facilities. Priority projects have been identified, and address Council's objectives for open space and recreation.
- With rapid population growth and limited land availability, it is not realistic to maintain existing benchmark rates of open space provision. Instead, **upgrading existing facilities**

to cater to more uses, combined with **high quality spaces** in high density locations will help to address the increasing demand for open space in densifying areas.
- Macquarie Park provides a major opportunity to see new large public open spaces and sports facilities delivered.

The key next steps include the following:

- Implement **planned** projects in accordance with the priorities identified in the MCA assessment
- Undertake MCA for **potential** future open space projects, once they are sufficiently scoped, as one of the assessment tools during the business case development of specific projects
- Negotiate with developers on a site-by-site basis for access to open space in private developments
- Engage with private open space stakeholders, including Macquarie University, to understand the likelihood of the proposed 3 new indoor courts being delivered.
- Prepare a dedicated Aquatic Strategy in around 2025 to identify the scale and nature of the additional facilities which are required to meet the community's aquatic recreation needs.
- Undertake a study to review opportunities for excising some publicly accessible land (for new parks) from the City's two golf courses, while retaining the 18-hole layouts.

1. INTRODUCTION

The City of Ryde Open Space Future Provision Strategy is an important document that sets the overarching framework for the prioritisation and delivery of open space and recreation facilities in the City of Ryde.

1.1 Purpose, scope and approach

The City of Ryde currently has a range of open spaces, and recreation facilities including Lane Cove National Park, Meadowbank Park and Field of Mars, as well as a significant number of other smaller spaces and facilities.

The City continues to accommodate population growth and change. Planning for open space and recreation is particularly important, given:

- as dwellings become smaller and access to private open space reduces, public open space will become more important, as it will be a key place where the local community can commune with nature, keep active and where diverse cultures and generations can come together, and
- changing preferences including female participation, cultural diversity, population ageing, trends towards more unstructured recreation.

These and other relevant trends need to be considered as part of decision making about the location, role, form and scale of recreation facilities.

Recreation and open space planning in the City of Ryde is guided by a series of cascading plans and strategies:

The Integrated Open Space Plan *'analyses the City's existing pubic open space and makes clear recommendations on how that open space can be conserved, enhanced and extended to meet the community's recreation and leisure needs, both now and into the future'*.

The Sport and Recreation Strategy 2016 – 2026 '*provide a framework for the ongoing effective provision, management and coordinated development of recreation facilities and services across the City of Ryde*'.

These two documents provide the overarching policy settings about how recreation and open space should be managed in the City of Ryde.

This report provides more specific direction in terms of the scale and location of future open space and recreation facilities, providing the context for both the design of facilities (including masterplans), as well as facility specific management strategies.

To this end, the study has developed an evidence based strategy that identifies and prioritises future investment in public and open space. The process has involved the following:

- Recognise the **policy and strategic objectives** of Council in relation to open space and recreation,
- Review and build on Council's existing work and analysis relating to open space provision rates and standards,
- Understand the current levels of access to and provision of open space and recreation facilities,
- Forecast how **demand** for a range of open space and recreation facilities is likely to evolve over the medium to long term,
- Identify a range of potential mechanisms to address gaps in both the **supply** of and **access to** open space and recreation,

- Prioritise investments to improve the capacity of and access to open space and recreation, and
- Provide a compelling case for the priority investments, particularly in comparison to not investing, or investing in line with the current works program.

This has informed the development of a Strategy for recreation and open space.

Structure of report

This technical report covers the following:

- Outlines the factors which drive demand for open space and recreation
- Provides an overview of the strategic policy context
- Profiles the City of Ryde community, including population and housing trends and the outcomes of previous consultations
- Articulates the approach used to analyse open space and recreation needs in the City of Ryde
- Identifies the existing open space and recreation network
- Analyses current and future demand for open space and recreation
- Identifies gaps in the current network
- A strategy to guide the future open space and recreation network
- Outlines the future supply options, including priority projects, and the impact these projects will have on access and provision.
- Potential future projects that could help address the remaining gaps in recreation and open space access.

The Strategy comprises

- Vision
- Objectives
- Strategies
- Actions
- Implementation and funding priorities

The Strategy is organised around five key themes, taken from the Integrated Open Space Plan (IOSP).

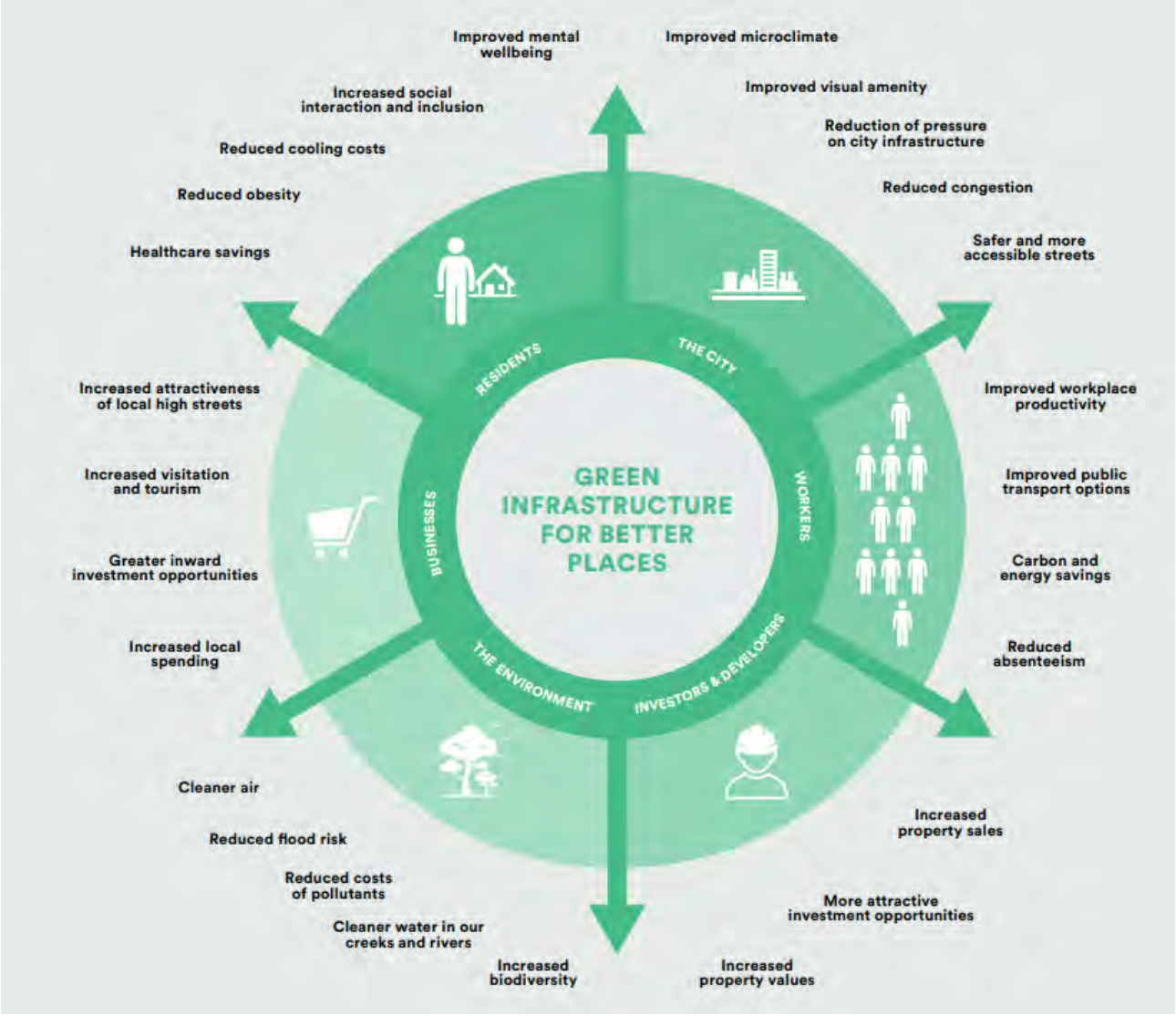
2. FACTORS INFLUENCING OPEN SPACE AND RECREATION

Planning for recreation and open space needs has evolved to consider the wide range of benefits these facilities provide; they play a role in many areas of our lives: from mitigating the impacts of climate change and protecting threatened species to inspiring us to move more and giving us access to beauty, wellbeing and social connection.

2.1 Benefits

There are a range of benefits and opportunities that open space and recreation facilities provide. These are summarised below.

FIGURE 4: WHO BENEFITS FROM GREEN INFRASTRUCTURE



Source: Greener Places Discussion Draft 2017, GANSW

2.2 Demand factors for open space, sport and recreation

A range of factors influence demand for open space and recreation. Some of the demographic trends, in particular, are changing and this will affect future demand.

Ensuring the City of Ryde's growing population can access open space

Access to open space is central to community health and wellbeing. The increasing number of people moving into the culturally diverse City of Ryde, combined with the fact that growth will largely be in the form of higher density development (with reduced private open space), will increase the need for different types of open space.

Sports participation trends

Sports participation trends are changing, as outlined in the Roy Morgan poll from 2016[1]:

'Over the past 15 years, more Australians are walking for exercise, jogging, cycling, gymming and yoga-ing—but fewer are playing most of the sports that can actually be won or lost'

While it's true that Australia has an ageing population, the decline in competitive sports participation is apparent across all age groups—and both sexes. Participation rates among men and women in most different age groups have shrunk by well over 20 percent.

In 2001, 34 percent of men and 20 percent of women (aged 14+) played one or more competitive sports regularly; by 2016 it was just 26 percent and 14 percent respectively.

*Among young women, the lower popularity of cricket, tennis, field hockey and gymnastics has been offset, in part, **by increased participation in soccer, volleyball and, yes, Australian Rules football.***

Other research also indicates that there has been a surge in women regularly participating in Australian Football since the introduction of the AFLW. This report[2], published by Sport Australia as part of its regular AusPlay survey, also found that:

- Walking is the most common activity, followed by Gym/Fitness and swimming,
- National, State and local trends indicate a higher demand for open space that supports informal, unstructured recreational activities above competitive organised sport.

Implications

The context for planning for sport and recreation is changing.

While participation rates are falling for organised sport, there is still strong demand for competitive sports (including as a result of population growth) and many of these have very specific attributes regarding, for example size, slope and shape of playing areas.

While there is reduced participation in formal sport, overall population growth means there is often still increasing demand for sport and recreation facilities.

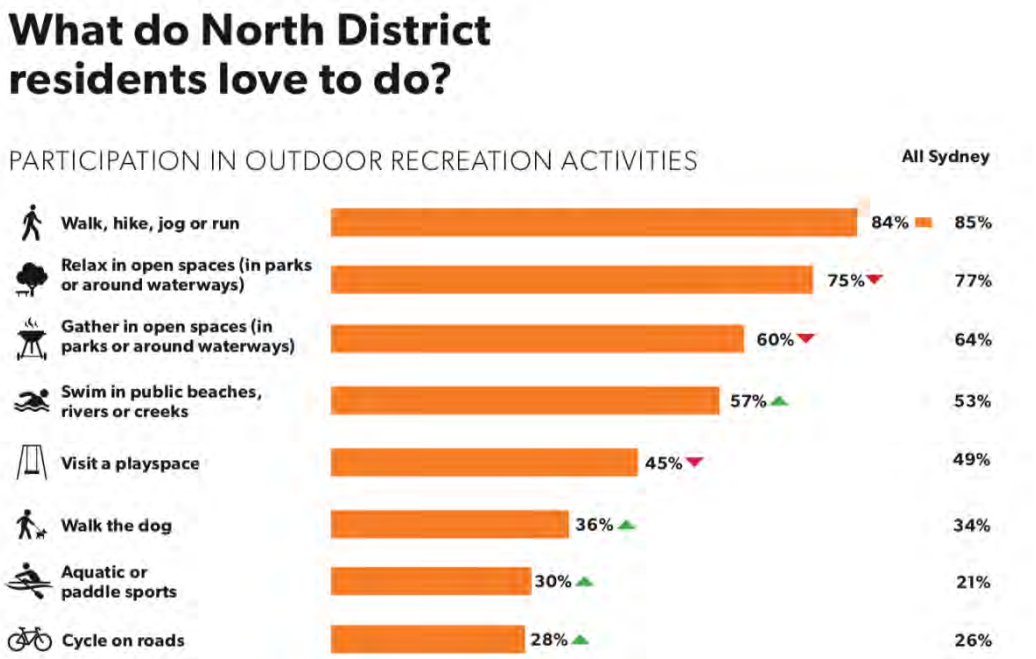
These are important considerations in planning for the future open space and recreation network.

[1] http://www.roymorgan.com/findings/7182-decline-in-competitive-sports-participation-australia-december-2016-201703200905
[2] https://www.sportaus.gov.au/media_centre/news/australias_top_20_sports_and_physical_activities_revealed

Recreation Participation

The NSW Government's Greater Sydney Outdoors Study (2018) tells us that walking, hiking and jogging are the most popular recreation activities.

FIGURE 5: NORTH DISTRICT OUTDOOR RECREATION PARTICIPATION



Source: Greater Sydney Outdoors Study, DPE 2019 https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/report-findings-greater-sydney-outdoors-study-2019-06-06.pdf

Cultural background and sporting preferences

47% of the City of Ryde residents were born overseas in non-English speaking countries[3]. Office of Sport research tells us recreation participation demands vary for different cultures. The main non-English countries of birth in the City of Ryde are:

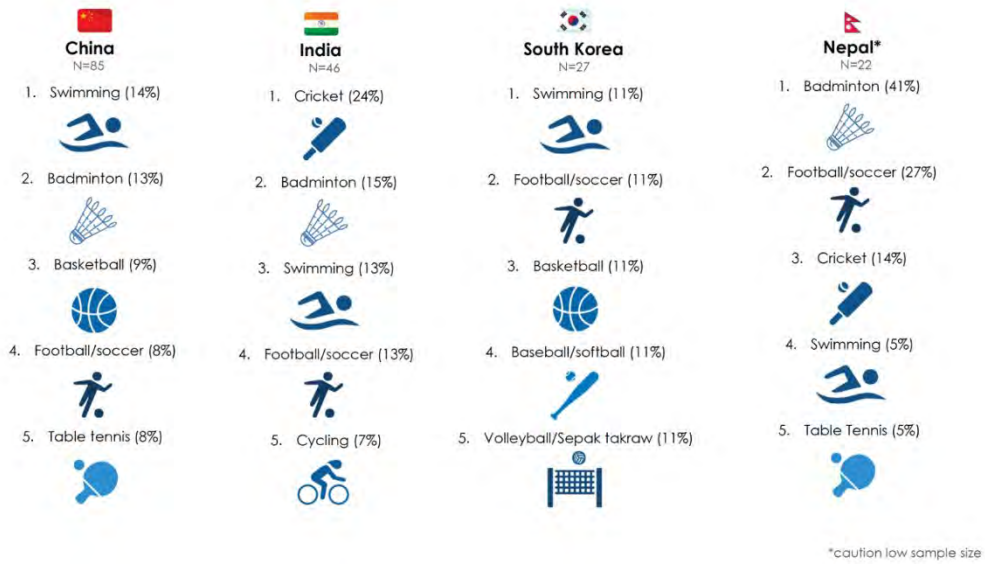
- China (12.5%)
- South Korea (3.9%)
- India (3.5%)
- Hong Kong (2.5%)

Nepal is emerging as a significant country of birth in the City of Ryde.

Culturally diverse communities also tend to have higher demand for spaces for informal sports and indoor sports.

[3] ABS Census of Population and Housing 2016

FIGURE 6: CULTURAL BACKGROUND AND SPORTING PREFERENCES



Source: *Research conducted by Cred Consulting for Office of Sport, 2018*

2.3 Barriers to participation

Participating in sport and recreation, and visiting open space, can provide a range of benefits. There is, however, a range of reasons or challenges people face in accessing these opportunities. These include that people:

- are increasingly time poor, have limited budgets and are being inundated by new forms of entertainment.
- have new preferences for greater flexibility, more tailored products and sport that works around peoples' busy lifestyles.
- are increasingly favouring more flexible, non-organised forms of physical activity, such as running with headphones on and pursuing new adventure sports.
- are developing new tastes as our population becomes more culturally diverse.
- some adolescents are self-conscious and embarrassed by their lack of sporting ability[4].

This report was prepared during the COVID-19 pandemic. At this point (June 2020) the impact of COVID19 is still unfolding and detailed data on the long term impacts, or the likely form of recovery, are not yet available. There is potential for COVID 19 to have medium and long term impacts on the use of recreation and open spaces. While this needs to be explored further, it could include:

- changes to the number of people able to be accommodated in facilities at one time,
- need for design adjustments to indoor facilities for example door handles, lift buttons and other touch points including food and beverage serving, water fountains, etc.
- increased demand for open space for informal outdoor recreation as formal recreation activities are less available, and
- increased demand for active travel corridors.

It is also possible that new or renovated venues may need to be designed in a more deliberate way to deploy as improvised hospitals and treatment centres in times of catastrophe[5].

[4] Market Segmentation for Sport Participation CSIRO, 2013
[5] HoK: https://www.hok.com/news/2020-04/whats-next-for-sports-and-entertainment-venues-after-the-covid-19-shutdown/

2.4 Quality of open space

Open space assessments are largely quantitative in nature, with a focus on the overall rate of provision, supported by proximity measures (for example, access within walking distance of households). It is increasingly acknowledged that the quality of open space also plays an important role in realising the benefits of open space.

This is particularly important in the context of projected population growth, changing household structures and demographics and evolving preferences and demands for different types of open space.

Delivering high quality open space is also important in higher density locations where it can be difficult to deliver large open spaces. Urban plazas and other compact open spaces can provide relief from the built environment in these higher density contexts.

Investment to increase the quality of open space, including elements such as lighting, water features, increased planting, seating, shade trees and accessible pathways allow for the open space to be used by a wider range of people, for a broader range of activities. It also means the open space is more desirable for use throughout the day and into the evening.

2.5 Summary and implications

The way open space and recreation facilities are designed and delivered needs to respond to changing societal expectations and preferences. In particular:

- acknowledging, and incorporating in design, the diverse range of benefits that open space and recreation can provide,
- Changing participation in sport – increasing informal activities, decreasing rates of participation in some formal and competitive sports, with overall growth in the rate of female participation in sport,
- Cultural diversity driving demand for particular sports facilities including indoor court sports (volleyball, badminton, futsal etc.), and
- Making recreation opportunities more flexible and accessible.

3. STRATEGIC POLICY CONTEXT

There are a range of State, Regional and Local strategic plans and policies that drive and inform the future provision of open space and recreation in the City of Ryde.

3.1 State Policy Context

NSW Premier Priorities

The relevant priorities for this study are:

- Greener public spaces: Increase the proportion of homes in urban areas within 10 minutes' walk of quality green, open and public space by 10 per cent by 2023
- Greening our city: Increase the tree canopy and green cover across Greater Sydney by planting one million trees by 2022.

Greener Places: Draft Greener Places Design Guide, Government Architect NSW

Greener Places is a draft policy to guide the design, planning, design and delivery of green infrastructure in urban areas across NSW. The aim of the policy is to create a healthier, more liveable, more resilient and sustainable urban environment by improving community access to recreation and exercise, walking and cycling connections. This includes the Draft Urban Tree Canopy Guide, which sets a target of increasing Greater Sydney's tree canopy to 40% (>25% in medium density and >40% in suburban areas).

The Guide includes a number of relevant performance indicators. In relation to access, the Guide sets out the following for high density, and medium to low density areas.

TABLE 4: GREENER PLACES PERFORMANCE INDICATOR – LOCAL ACCESS

Local access	
High density areas > 60 dwellings/ha	2-3 minutes walk / 200m walking distance (barrier free)
Medium-to-low-density areas <60 dwellings / ha	5 minutes walk / 400m walking distance to a local park (barrier free)

Source: Draft Greener Places Design Guidelines (2020)

The Guide also notes performance indicators for minimum park size, as follows.

TABLE 5: GREENER PLACES PERFORMANCE INDICATOR – OPEN SPACE SIZE

Open Space Size
Desirable minimum size of a local park is 3,000m²
In high-density areas, parks may be as small as 1,500m² where more efficient provision does not exist or opportunities for re-use of small spaces arise

Source: Draft Greener Places Design Guide (2020)

The Draft Greener Places Design Guide recognises the importance of open space for recreation and outlines approaches to planning for open space, including benchmarking, hierarchy and functional classifications and criteria for open space and recreation facilities.

Joint Use of School Facilities and Land Policy, NSW Department of Education

This policy encourages shared use of school facilities (such as open space and sporting facilities), with significant investment in new, upgraded or maintained facilities.

Everyone Can Play in NSW, NSW Department of Planning and Environment

Everyone Can Play is a best practice resource for councils, community leaders, landscape architects and passionate local residents. It is a reference guide for creating world-class playspaces, designed to include everyone in the community. At the heart of Everyone Can Play is the declaration that play is for everyone – regardless of age, ability or cultural background.

The resource encourages responsible agencies to follow the three principles of Everyone Can Play: Can I Get There, Can I Play and Can I Stay to create more inclusive playspaces in their areas.

Five Million Trees, NSW Government

Five Million Trees is an initiative aimed at increasing Greater Sydney's tree canopy by planting more trees in streets, parks, bushland areas and yards by 2030. The project is a long-term commitment to create a greener city and improve Sydney's health, climate, economy and environment.

3.2 Regional Context

Greater Sydney Regional Plan – A Metropolis of Three Cities

Objective 31 of the Greater Sydney Regional Plan is that "*Public open space is accessible, protected and enhanced*". The Plan also highlights that the key considerations for planning open spaces are quantity, quality and distribution, and provides the following insights:

- Access to high quality open space is becoming increasingly important as higher housing densities, more compact housing, and changing work environments develop,
- Where land for additional open space is difficult to provide, innovative solutions will be needed, as well as a strong focus on achieving the right quality and diversity of open space,
- Enhancing open space so it can meet a wider range of community needs in areas where it is difficult to provide additional open space. This can include better landscaping, more durable and high quality facilities, better lighting and multi-use playing fields and courts,
- Open spaces within school grounds are a potential asset that could be shared by the wider community outside of school hours,
- The use of golf courses may also be examined to provide a wider range of sport and recreation facilities for local communities,
- There may be opportunities to use surplus government-owned land as open space including for sport and recreation facilities,
- Urban renewal needs to begin with a plan to deliver new, improved and accessible open spaces that will meet the needs of the growing community, particularly where density increases, and
- High density development (over 60 dwellings per hectare) should be located within 200 metres of quality open space, and all dwellings should be within 400 metres of open space.

North City District Plan, Greater Sydney Commission

The North City District includes the LGAs of City of Ryde, Hornsby, Hunters Hill, Ku-ring-gai, Lane Cove, Mosman, North Sydney, Northern Beaches, and Willoughby. The North City District Plan provides a more detailed context to the directions and objectives of the Greater Sydney Regional Plan specific to the area. The North District forms a large part of the Eastern Harbour City, and its economy leans to the Harbour CBD, which is the North District's metropolitan centre. The District's strategic centres of Macquarie Park, Chatswood and St Leonards are part of the State's greatest economic asset. Planning priorities include:

- Planning for a city supported by infrastructure,

- Working through collaboration to enable increased use of public resources such as open space and community facilities,
- Celebrating diversity and putting people at the heart of planning including increased walkable access to local centres, and fostering healthy, creative, culturally rich and socially connected communities,
- Designing places for people including increased access to open space and creating and renewing great places and local centres, respecting the District's heritage,
- A city in its landscape including increased urban tree canopy; expanding Sydney Green Grid; protecting and enhancing bushland and biodiversity; protecting and enhancing scenic and cultural landscapes; increasing urban tree canopy cover and delivering Green Grid connections; delivering high quality open space, and
- Adapting to a changing world: including adapting to the impacts of urban and natural hazards and climate change.

Government Architect's Office, Sydney Green Grid, Spatial Framework and Project Opportunities

This study notes that open space is one of Sydney's greatest assets with its national parks, harbour, beaches, coastal walks, waterfront promenades, rivers, playgrounds and reserves being integral to the character and life of the city. In this report the hydrological, recreational and ecological fragments of the city are mapped and integrated into a proposition for a cohesive green infrastructure network for greater Sydney.

The report indicates that Macquarie Park faces significant change, being identified as an area for mixed use and higher density housing, and has the potential to be better connected with the Lane Cove River as a key open space corridor.

Office of Sport Recreation Participation Strategy

The Office of Sport is working in collaboration with key partners, including councils, to develop a Sport and Recreation Participation Strategy and a Sport and Recreation Facility Plan for each district. These plans are to include local and regional sport facilities and provide a strong foundation for participation in sport and active recreation. The plans were scheduled for release in late 2019 but at the time of writing (in July 2020) this had not yet happened.

3.3 City of Ryde context

Community Strategic Plan, City of Ryde

The City of Ryde's Community Strategic Plan 2028 (CSP) is a ten-year plan that sets out the community's vision for the future and strategies to achieve it. The Plan breaks down the community's desired future for the City of Ryde into seven key categories: vibrant and liveable; active and healthy; natural and sustainable; smart and innovative; connected and accessible; diverse and inclusive; and open and progressive. The document details actions and practices the community would like to see Council adopt to realise each of these categories.

Source: City of Ryde Community Strategic Plan categories (source: City of Ryde LSPS, 2019)

Ryde Local Strategic Planning Statement, 2019

The City of Ryde Local Strategic Planning Statement (LSPS) outlines the vision for land use planning in the Ryde LGA over the next 20 years and will guide all planning decisions. Council's 20-year vision for land use planning in the City of Ryde:

A liveable, prosperous and connected city, that provides for our future needs while protecting nature and our history. A city with diverse and vibrant centres, our neighbourhoods reflect and service our residents and businesses. Our well planned places enhance the health, wellbeing and resilience of our future community. They also foster innovation, equity, inclusion and resilience.

Key challenges and opportunities identified in the LSPS include the following.

TABLE 6: LSPS CHALLENGES AND OPPORTUNITIES

Challenge	Opportunity
An additional 17,000 new dwellings by 2031	Use this growth to enhance the City's prosperity, uniqueness and liveability.
Over coming decades the overall composition of our community will shift in some important areas.	Protect and revitalise the places, facilities and services that people use and better target these to meeting the changing needs of our community.
Adapting to climate change. Over the coming decade, natural hazards such as heatwaves, increased hot days as well as frequency of extreme rainfall events are expected to accelerate as the climate changes.	Ensure our neighbourhoods are prepared for changing weather patterns and our infrastructure and urban areas are able to cope with more frequent extreme weather, bushfires, erosion and flooding.
Valuing our cultural heritage. Around 50% of the population were born overseas from 50 different countries.	Protect and revitalise the places, facilities and services that people use and better target these to meet the changing needs of our community.
Managing traffic and congestion. City of Ryde residents use their own car for approximately 70% of trips	Work with stakeholders and the NSW government to advocate for improved transport links and making sure that appropriate infrastructure is planned.

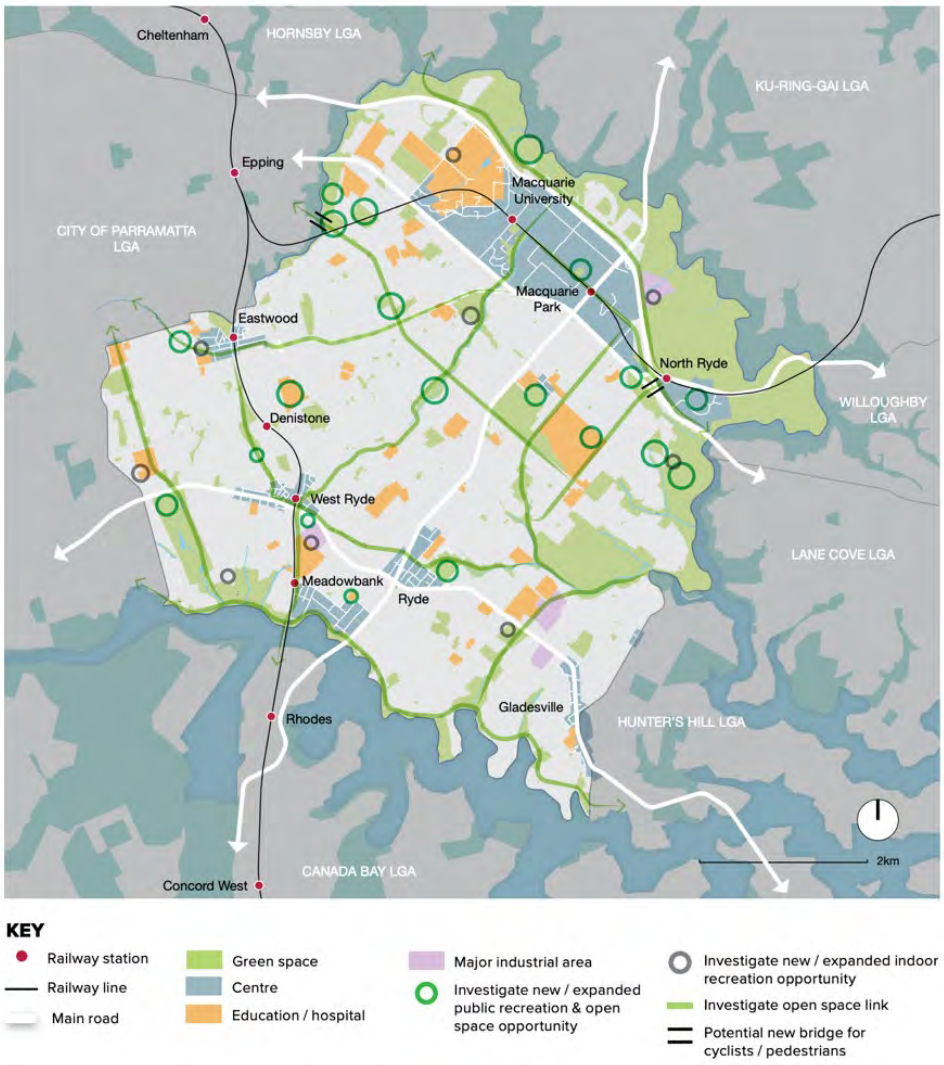
The open space structure plan (including future proposed open space) prioritises providing sufficient open space to support a growing, active and healthy community to ensure long term quality of life. The Plan's aim is to diversify and increase active recreation opportunities (for example, through the provision of walking and cycling paths and indoor recreation facilities). While some potential opportunities are shown below, additional spaces will also be required, to support individual sites and localities.

The target as set out in the LSPS is as follows:

It also notes that a key challenge for the City of Ryde is: '*Providing open space within a safe and direct walking distance from every residence – 200 metres for high-density areas and 400 metres for low/medium-density areas'*[6].

[6] City of Ryde LSPS, p129

FIGURE 7: OPEN SPACE STRUCTURE PLAN



Source: City of Ryde LSPS

Draft Ryde Social Plan, 2019 – 2024

The City of Ryde Social Plan 2019 - 2024 outlines a strategic roadmap to sustain and improve social wellbeing in the City of Ryde for our communities and places as they grow and change. Social Plan priorities requiring initiatives in open space and recreation planning include:

- To build connections to make the City of Ryde a stronger community and place
- To respond to local cultural diversity to create a more welcoming place and enable cross cultural connections
- Providing opportunities for all cultures, ages and abilities including in our civic, foreshore and park spaces
- To maintain a sense of community and place locally as the population grows and we live in higher densities, and
- To enhance community safety, recognising that the City of Ryde is currently relatively safe.

The City of Ryde Integrated Open Space Plan, 2012

The Integrated Open Space Plan (IOSP) provides the key context for this project. The Vision for the IOSP is that:

'We have ample, accessible open space to meet our needs, shared and enjoyed by us all, founded on a healthy natural environment, conserving our rich history, culture and local character and managed sustainably now and for future generations.'

This Plan is driven by 5 priorities:

- Optimisation: making more of what we have,
- Consolidation and acquisition: achieving more equitable access to our open spaces,
- Integration and adaptation: ensuring the whole is greater than the sum of the parts,
- Connection: linking our parks with our natural environment and history, and
- Organisation: planning from top down and bottom up.

The gap analysis at the time of preparation (2012) identified the following needs to be addressed:

- Make more of the City's existing open space to meet current needs (embellishment, additional capacity, multi-using) while exploring opportunities to deliver new open space to meet future needs (acquisition, consolidation, rationalisation),
- Extend the planning for "open space" to include streets and urban spaces,
- Integrate the natural environment and cultural heritage values more substantially into open space planning,
- Extend unstructured and informal leisure and recreation opportunities,
- Improve access to and between public open spaces,
- Offer a greater diversity of experience and landscape character to parks,
- Strategically plan and manage sports from both a local and sub-regional perspective recognising competing needs and interests for facilities,
- Respond to the cultural diversity throughout the City through open space planning and design,
- Address specific needs of youth activities and for seniors, and
- More closely aligned planning, design and maintenance of open space with respect to objectives, quality and service level.

The IOSP objectives are as follows:

- Ample, Accessible Open Space
    - Providing open space within at least 400 metres safe and direct walking distance from every residence,
    - maintaining existing provision at minimum (ie. no net loss of open space),
    - ensuring safe and convenient access to open space for all abilities,
    - optimising access by walking and cycling – maintaining a network of recreational corridors, linkages and connections.
- Shared and Enjoyed By All
    - providing opportunities for all ages and backgrounds,
    - balancing structured and unstructured recreation,
    - incorporating flexibility for multiple uses,
    - fostering healthy physical activity and mental wellbeing,
    - offering safe environments that encourage social interaction, health and wellbeing,
    - enabling simple wayfinding and providing accessible information and interpretation.
- Founded on a Healthy Natural Environment
    - responding to the LGA's natural topography and geology,
    - maximising creek, river and bushland connections and corridors,
    - conserving and enhancing native flora and fauna communities and habitats,
    - providing natural connections across the City linking with adjoining LGAs,

- promoting awareness of the City of Ryde's natural values,
- maximising permeable area by minimising built structures and hard surfaces,
- adapting to the impacts of climate change by park planning and design.

- Conserving Our Rich History, Culture and Local Character
  - integrating natural, Aboriginal and non-Aboriginal heritage into the City's open spaces,
  - interpreting and promoting the unique history of the City of Ryde for residents and visitors,
  - drawing on local landscape character in park design and planting strategies,
  - maximising views and vista opportunities across the City,
  - implementing public art to express the identity and culture of the City.
- Managed Sustainably Now and For Future Generations
  - conserving energy and resources and optimising life cycles,
  - managing assets to a financially and operationally sustainable model**,**
  - designing to high standards and quality with innovative practices,
  - actively involving the community in planning and design,
  - fostering partnerships with other parties to extend recreation opportunity,
  - operating under a structured management and maintenance plan and program.

Sport and Recreation Strategy 2016-26

The Strategy guides the provision, allocation, management and planning for sport and recreation within the City. This includes sport and recreation opportunities in all open spaces with the focus of the Strategy on structured and unstructured recreation. The vision for sport and recreation is as follows:

'Sport and recreation are key elements of the lifestyle of the City of Ryde residents. The following vision is proposed in the Strategy: "Through its role in sport and recreation planning and management, the City of Ryde will contribute to the lifestyle, health and wellbeing and social cohesion of the community.'

The Goals of the strategy are as follows:

Goal 1 - To Make the Most of What We Have

Goal 2 – Equitable access for all

Goal 3 - We Understand and Respond to the Needs of Our Diverse Community

Goal 4 - Our Facilities are Fit for Purpose

Goal 5 - We Provide Inclusive and Accessible Sport and Recreation

Goal 6 - Our Community Will be Aware of Our Facilities and Programs

Goal 7 - Sustainable management of facilities and Sport'

3.4 Summary and implications

Existing policies and strategies provide important context relating to the priorities for open space and recreation in the City of Ryde. These can be summarised as follows:

- Prioritise the provision of sufficient open space to support a growing, active and healthy community to ensure long term quality of life and diversify and increase active and informal recreation opportunities (for example, through the provision of walking and cycling paths and indoor recreation facilities).
- Deliver the Green Grid & improved connectivity between existing and future open space areas, including for Macquarie Park to be better connected with the Lane Cove River as a key open space corridor.
- Respond to cultural diversity of the Ryde area including through locally provided, culturally appropriate sport and recreational infrastructure and providing open space for communities to connect
- Increase tree canopy to cool our streets and neighbourhoods, and support increased informal recreation in our parks and streets. This includes the LSPS target of increasing tree canopy to 40%.
- Ensure inclusivity for all ages, abilities, genders and cultures including consideration of the three principles of Everyone Can Play: Can I Get There; Can I Play; and Can I Stay.
- Sharing and increasing the capacity of what we have, including sharing school open space and sporting facilities, multi-use of our sportsfields, golf courses, and facilities.
- Deliver new and improved open space in high density areas with the Greater Sydney Regional Plan setting a target in high density developments (over 60 dwellings per hectare) being located within 200m of quality open space, and all dwellings within 400m of open space.
- Deliver open space planning and design that is environmentally sustainable and responds to climate change impacts.

4. THE CITY OF RYDE COMMUNITY PROFILE

The profile of the community is an important input in to understanding and responding to the demand for open space and recreation.

4.1 Community overview

FIGURE 8: COMMUNITY PROFILE

Source: Cred Consulting 2020

4.2 Population and housing profile

Current and projected population

The population is anticipated to grow by over 50,000 people between 2016 and 2036. This represents an increase of over 40%.

Macquarie Park is the location for major growth in the City of Ryde; and is projected to accommodate over 45% of the LGA's growth (refer Section 14 for further information). Other areas of significant growth include:

- Ryde South (13.9% of the City of Ryde's growth)
- North Ryde – East Ryde – Chatswood West (8.7%)
- Eastwood (7.5%)

Macquarie Park is anticipated to be a young adult community, with 51% of the population at 2036 forecast to be aged 20-44.

TABLE 7: CURRENT AND PROJECTED POPULATION

Suburb	2016	2036
Denistone - Denistone East - Denistone West	7,255	8,191
Eastwood	14,133	17,932
Gladesville - Tennyson Point	11,200	13,993
Macquarie Park	8,496	31,282
Marsfield	13,915	14,838
Meadowbank - Melrose Park	6,244	8,715
North Ryde - East Ryde - Chatswood West	14,139	18,521
Putney	4,152	4,413
Ryde (Field of Mars)	6,778	7,421
Ryde (Santa Rosa)	6,353	6,800
Ryde (South)	7,491	14,472
Ryde (Top Ryde)	7,101	8,446
West Ryde	14,014	16,626
City of Ryde total	**121,271**	**171,650**

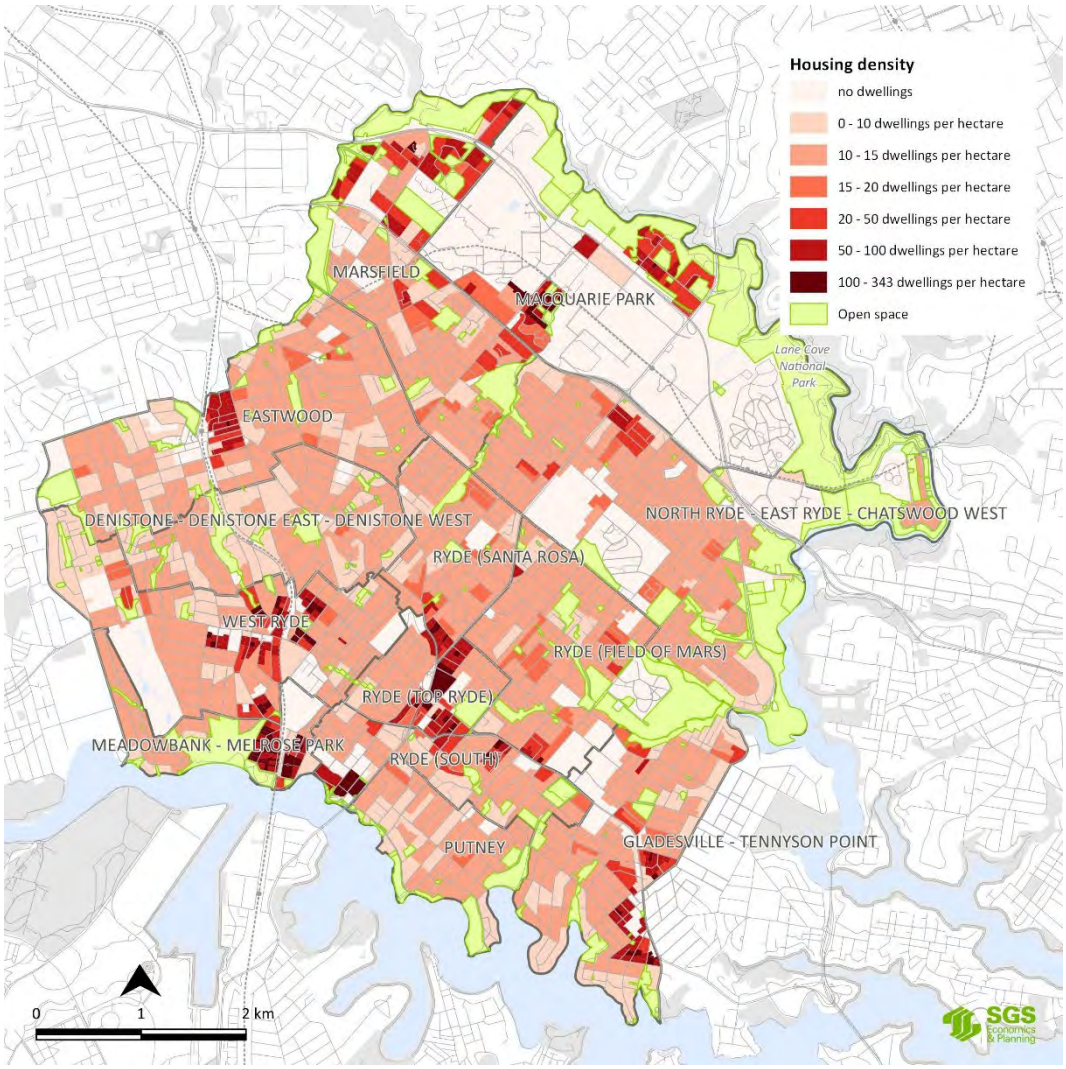
Source: Id Forecasts, 2019, DPE forecasts 2019. NB. Id suburb forecasts have been scaled to align with DPE LGA forecasts at 2036.

Housing density

The current profile of housing density is illustrated in Figure 9. This indicates areas of higher density in Meadowbank, Top Ryde and Eastwood. There are also areas of higher density near Macquarie Park, as well as Marsfield.

Increased housing density generally results in less private open space. For areas of higher density, and areas anticipated to accommodate future higher density, access to open space is particularly important.

FIGURE 9: HOUSING DENSITY



Source: SGS Economics and Planning 2020

4.3 Cohort profiles

The following characteristics of the City of Ryde population are drawn from 2016 ABS Census of Population and Housing.

Aboriginal and Torres Strait Islanders

- Aboriginal and Torres Strait Islanders (ATSI) make up 0.4% of the City of Ryde population. They are typically younger and more likely to be living in one-parent families within rented dwellings.
- Compared to ATSI populations in other LGAs, the City of Ryde's ATSI residents trend toward higher incomes and higher educational outcomes. They are more likely than the City of Ryde's total population to be attending an educational institution with an increase in participation over the past years. They are significantly more likely than the NSW ATSI population to be attending University.

Culturally and linguistically diverse population

- Almost 50% of the City of Ryde's population were born overseas and speak a language other than English at home.

- There has been a large increase in non-English speaking languages over the past 4 years, and this trend is expected to continue for the next 4 years. Chinese languages make up around 20% of this cohort with other major languages Korean, Italian, Arabic, Armenian and Hindi.
- English proficiency is generally good among non-English speakers, but the growing Korean speaking group has a low rate of English proficiency (with 1 in 3 indicating they speak English poorly or not at all).
- CALD residents are more likely to:
    - live in family households with children, but also group households (most likely due to the large number of university students living in the area),
    - occupy high density housing at a rate nearly 20% higher than English speaking residents,
    - have smaller dwellings,
    - Have incomes slightly lower than the total population, but are increasing,
    - own less cars, and
    - have higher rates of internet access.
- 27% of overseas born residents had arrived in Australia in the past 5 years, up from 25% in 2011. The presence of Macquarie University attracting large numbers of overseas students being a large driver.
- Recent arrivals are mostly younger, with 60% aged between 20 and 34 years. They also mostly live in high density, 1 or 2 bedroom units which they are renting.
- China, India, and South Korea combined make up more than half the arrivals in the 5 years to 2016. This is likely to continue with 3,000 arrivals in 2018. Recent arrivals are highly educated (50% have a degree and 28% are attending university). Despite this, incomes are generally lower and unemployment rates are high at 16%.

Children (0 to 11) and families

- There were 15,800 children aged 0 to 11 years in 2016, or 13.5% of the population.
- The City of Ryde's children were more likely to live in couple households and within dwellings with a mortgage, but the large increase was in private rental category, indicating that families might be priced out of the housing market.
- Families with children are occupying high density housing in the City of Ryde at a rapidly increasing rate with around 1/3 of new high density built between 2011 and 2016 housing families with children under 12. Most of this growth was in 2 bedroom dwellings.

Young people

- 16% of the City of Ryde's population are young people aged 12 to 24 years – with 2/3 of this age group 18 to 24 years (university age).
- The greatest increase in young people households between 2011 and 2016 was 18 to 24 year olds living with their parents, perhaps indicating a housing affordability issue.
- University attendance is very high with over 50% of 18 to 24 year olds attending university and 22% already having a degree qualification – likely because of Macquarie University's location.
- There has been a large increase in 18 to 24 year olds living in rental accommodation, particularly in high density housing.
- In contrast, 12 to 17 year olds mostly live in separate housing.
- The unemployment rate of 15 to 24 year olds is higher than Sydney average but this is driven by the high proportion of university students.

Seniors

- Around 14% of the City of Ryde's population are aged 65 years or over, a proportion similar to that in Greater Sydney.
- More than half of City of Ryde's older population 65 and over were born overseas, predominantly from China, Italy and the UK.

- Compared to the City of Ryde's total population, seniors are more likely to speak English at home and are likely to hold no post-school qualifications.
- As part of a general trend, an increasing number of seniors are remaining in the workforce beyond 65 years of age.
- Seniors in the City of Ryde are more likely than the total population to be providing unpaid assistance for the aged or people with disability. They are slightly more likely than across Greater Sydney to be renting either privately or living in social housing (given there are a number of social housing estates in the LGA, eg Gladesville and Ivanhoe Estate).

People living in high density

With a third of the City of Ryde's population living in high density, there is a need to:

- Provide open space and play spaces within 200m walking distance to these areas
- Provide outdoor and indoor hire-able space to hold celebrations and events, especially for families in high density.

4.4 Community expectations for open space

The City of Ryde has previously undertaken community engagement as part of the LSPS and Ryde Social Plan and Creative Strategy. These have yielded a range of insights regarding preferences for future open space and recreation.

The following key points are taken from these previous consultation exercises.

Informal green space and natural areas

Many members of the community highly value the existing spaces within the Ryde LGA. However, some have indicated a need to create and maintain informal green spaces, such as walking tracks, to provide a combination of leisure opportunities, access routes, and particularly to ensure there is a balance between the increasing development, and maintaining the City's natural heritage and character. Overall, the community is in favour of retaining the natural, 'unmanaged' spaces in the LGA.

Inclusive and accessible design

Some members of the Ryde community would like their LGA to be a great place to live for people regardless of their cultural background, socioeconomic status, age or ability. This means ensuring that there are available and accessible spaces and places that respond to the diverse needs of the community. Having an inclusive and accessible environment is a priority for residents in the Ryde community. The design and features of key areas should speak to the multiple demographics of each area within the LGA. Ensuring that all members of the community, in particular people with a disability, young children and older residents, are considered and accommodated for when planning for new or upgraded open space and recreation facilities, resonates with a lot of community members.

Indoor sport and recreation

Indoor sport and recreation facilities offer efficient playing solutions, including being in a safe, climate-controlled environment. These facilities were expressed as a major priority for the Ryde community, and in particular, there is an attraction to Indoor sports courts, Indoor climbing or bouldering, and Indoor pools.

Some members of the Ryde community also specifically mentioned indoor recreation opportunities with an expansion of the Ryde Aquatic Leisure Centre and an indoor recreation centre at Macquarie Park. Community suggestions for indoor recreation facilities focused on the design of recreation facilities to better consider the area's urban appeal, and to not disregard nightlife. Many also highlighted the needs for the design of recreation facilities to be accessible and multipurpose, and located close to key centres such as Top Ryde Shopping Centre.

A top priority for open space and active recreation for the community include space for different groups to run organised activities such as yoga classes, indoor sports, and space for community groups to hire.

Recreation for seniors

Greater consideration of the community's senior residents has been identified in community engagements. Passive recreation aimed at seniors, such as Tai Chi, was also highlighted by some community members. Benefits of recreational activities for seniors were also recognised as important to helping improve physical health and mobility, improve cognitive abilities and increase emotional wellbeing, as well as improve social wellbeing by building connections and maintaining social skills.

Parks as social connectors and community wellbeing

Building social connections and sustaining community wellbeing is a priority for open space and recreation activities. The most popular focus areas for open space and recreation activities are parks and gardens, sports facilities, playgrounds that are inclusive of all ages, walking and cycling areas, as well as BBQ facilities.

It was widely recognised by the community that open spaces facilitate community connections and provide opportunities for the community to be empowered in their social and physical environments. Some members of the community emphasised the importance of promoting a sense of community ownership to ensure success of future open spaces.

Public open space generates a wide range of social and economic values for individuals, groups and the wider community. The community has indicated a need for additional open space in the Ryde LGA, with a high response for more parks and open space areas, sporting facilities such as golf and basketball courts, and connected running, walking and cycling paths. The top four suburbs nominated for additional open space include North Ryde, Macquarie Park, West Ryde and Meadowbank.

Some community members have also indicated a need for more open space for a range of activities, such as organised sport, play areas for younger children, passive recreation activities, active/informal recreation and formal gathering areas, such as community gardens, sheltered seating and BBQ facilities.

Additional open space in high density areas:

Providing spaces, whether built or natural, outside of the home to participate in unstructured social, cultural and recreational activities is important for communities living in high density areas. The City of Ryde has a significant proportion of high-density dwellings. The community has expressed concerns about future development in the LGA continuing at the cost of open space and the natural environment. A key priority expressed by the community is for Council to provide indoor and outdoor recreation facilities located in parks, and in and around high-density housing areas. Open spaces and recreation facilities, especially in high density areas, underpin a healthy, connected and resilient community.

Sustainability

Some members of the Ryde community have raised concerns specific to protecting native wildlife, improving sustainability efforts and enhancing and expanding existing and future green space. Greater consideration and incorporation of environmental protection in future planning is a key need and interest within the LGA, as there are concerns that future development will be built on existing green space and therefore pose a significant threat to native species. The creation of a sustainability hub was suggested as way for the community to be actively involved in sustainability processes, and to access information of best practices.

Better access to the foreshore and waterways

Creating new connections and spaces along the foreshore provides increased and equitable access for everyone, encourages healthy, active lifestyles and increases the enjoyment for both residents and visitors. Some members of the Ryde community have indicated a need to further connect the foreshore and river walk to enable healthy and active uses, such as running, cycling, kayaking and swimming. Improving the quality and safety of existing paths promotes active recreation and access to foreshores.

Night time use of parks

Improved sense of safety in parks is a priority for some members of the Ryde community, particularly at night. Being able to use parks into the evening is important for many communities within the Ryde LGA, including being able to access and use fitness equipment after work hours, or socialising with friends at a basketball court after dinner.

Adequate lighting and amenity are important in activating parks for nighttime use. Many of those consulted, and who had prioritised lighting for use at night, expressed that this would help address safety concerns. The use of CCTV, in areas such as Eastwood, was seen as another potential solution. Furthermore, ensuring there is good provision of walking paths and cycling paths, reassures a sense of safety and security in travelling at nighttime.

More swimming pools

A recurring theme in recreation related community engagement in the City of Ryde is the need for increased access to pools, either through increased capacity at existing pools or provision of new facilities.

4.5 Summary and implications

The City of Ryde is projected to grow by over 40% by 2036, and this 50,000 additional population will generate demand for additional open space and recreation facilities. The City of Ryde community also has the following characteristics which will inform demand for particular facilities.

Population change and diversity:

- Culturally and linguistically diverse community, including significant arrivals from China, India, and South Korea (combined, make up more than half the arrivals in the 5 years to 2016)
- Significant group households, often living in smaller and higher density dwellings, with lower incomes – influenced by access to Macquarie University
- Over a quarter of Ryde LGA's population arrived recently in Australia and almost half speak another language at home.
- Around 1/3 of new high density built between 2011 and 2016 houses families with children under 12

Highest levels of population growth up to 2036 will be in:

- Macquarie Park
- Eastwood
- North Ryde – East Ryde – Chatswood West
- Ryde South

Areas of the City with current higher density:

- Eastwood
- West Ryde
- Meadowbank
- Top Ryde
- Gladesville

The community's expectations for open space will also inform future demand:

- Informal green space and natural areas
- Indoor sport and recreation
- Recreation for seniors
- Parks as social connectors and contributors to community wellbeing
- Additional open space to cater for different activities

- Sustainability
- Better access to the foreshore and waterways
- More swimming pools
- More or higher capacity sports facilities

These factors will drive demand for:

- Quality and event-ready public domain that allows people to 'live on the street', meet each other, celebrate and shop,
- Open space that includes spaces for large social gatherings and unstructured and social sport and recreation,
- Parks and public domain that can be used for a range of activities,
- Indoor recreation facilities that respond to particular culturally popular sports, and
- Playgrounds and spaces for young families.

5. METHOD

The study first reviewed the *Future Open Space Provision Plan - Phase 1* report prepared by Council. Analysis was then undertaken based on best practice and methods tailored to the City of Ryde context.

5.1 Phase 1 report

Ryde Council prepared the '*Future Open Space Provision Plan – Phase 1 Report*' during 2019. The purpose of this report was to describe and report on open space and recreation facility provision ratios and standards for the City of Ryde. The report includes 5 key components:

- Research of 'best practice' open space planning guidelines,
- Review of recently completed council open space plans and strategies (in Australia and NZ) for the purpose of benchmarking against the 'model' provision ratios proposed in those plans,
- Benchmarking against the existing provision ratios in 17 other councils (9 in Sydney North District and 8 in the former Sydney Central Subregion),
- Current bookings/use of facilities (for sports fields managed and booked by Council), and
- 'Model' provisions for sports facilities identified via a sports facility demand modelling exercise.

These findings were used to establish provision ratios for the quantity of public open space and sports facilities in the City and performance criteria for their accessibility and quality. It provides a context for open space and sport facility provision in Sydney and indicates how the City of Ryde performs against other LGAs.

SGS undertook a peer review of the report and the spreadsheets that were used for analysis. This included reproducing the results in key tables in the Phase 1 report and evaluating the methodology. Overall, SGS found that the modelling methods were robust. The results calculated in spreadsheets corresponded with the summarised tables in the Phase 1 report. Specific information for each facility (including bookings and playable hours) were used to drive supply and demand calculations. Playable hours were discounted to reflect school and informal use.

The Phase 1 report provides an important baseline for the analysis that is undertaken in this report. In order to ensure consistency, the participation rates that are used to model demand in the Phase 1 report are also used in this report.

This Phase 2 report provides a spatial lens to the distribution of supply and demand for open space and recreation facilities, and evaluates the community's level of access to individual facilities.

5.2 Analytical method

The approach used in this Study comprised the following key steps. Existing population projections were used in both sport/recreation, and open space.

The following process was used to identify the initial supply and demand for sport and recreation:

- Identifying existing sport and recreation facilities including capacity (in terms of playable hours),
- Identifying individual sport participation rates,
- Calculating demand for recreation and open space, based on population and participation rates, in playable hours,
- Assessing demand against supply, and identifying overall LGA level gaps,

- Modelling, at a small area, access to sport and recreation facilities, and identifying areas with poor access, based on agreed travel time thresholds.

For open space, a similar process was used:

- Identifying the location of existing open space,
- Identifying the provision rates and accessibility to open space, and
- Identifying gaps in current and future provision rates, and access to open space.

Following this initial identification of gaps, a pipeline of projects, comprising planned projects in the LEP and LSPS were tested.

This testing involved assessment against the Strategy objectives, and included modelling to test changes to accessibility and overall provision rates.

Following this testing, the remaining gaps were identified and actions to respond to these were proposed.

The final recommendations include:

- Priority projects,
- Strategies to guide planning and delivery of open space and recreation, and
- Case studies to help inform more detailed planning.

6. OPEN SPACE SUPPLY AND DEMAND

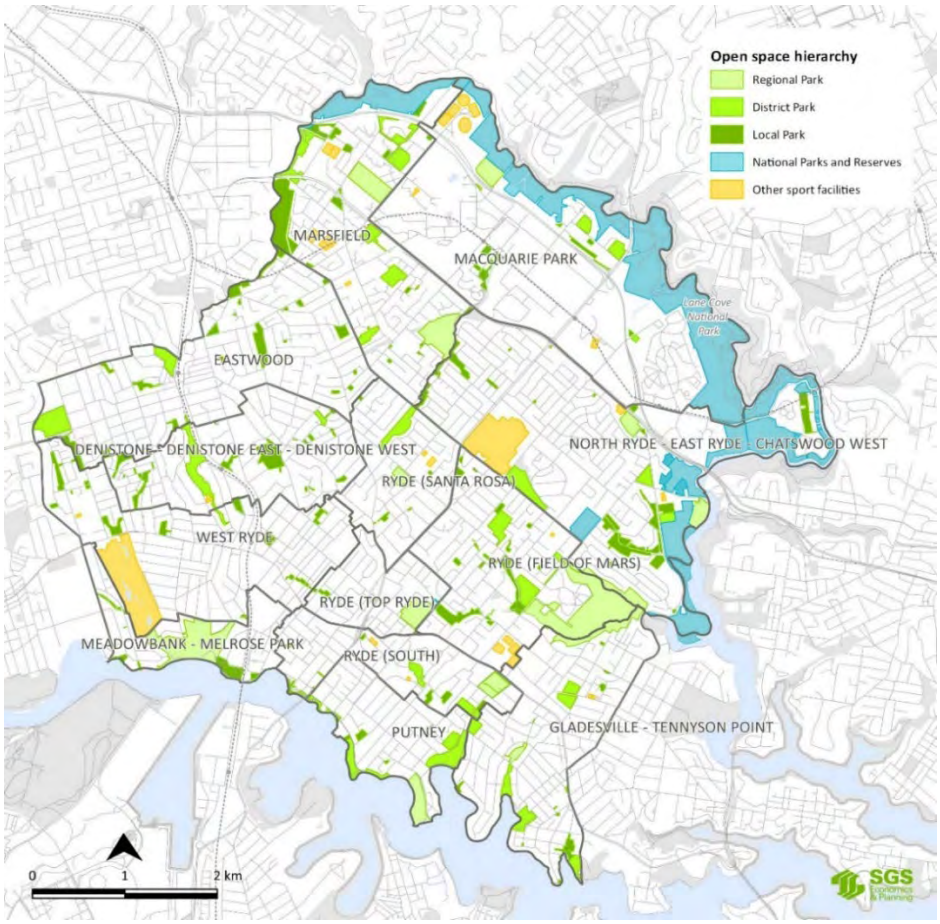
The City of Ryde has an extensive network of open space including parkland, sports grounds, creek and utility corridors, natural areas and civic spaces. As the population continues to grow and change, there will be increasing demand for open space. This Section reviews the current overall supply and demand for open space in the City.

6.1 Current open space context

The City of Ryde has 141 hectares of Council owned parkland and civic space, and many boundaries are natural areas. The LGA is bounded by the Lane Cove National Park along the north eastern boundary, Lane Cover River to the east and Parramatta River to the south. Terry's Creek, a tributary of Lane Cover River runs along part of the north-west boundary.

Of the Council owned parkland and civic space, 49 hectares are located in local parks, 54 hectares in district parks and 38 hectares in regional parks. This existing network is illustrated in Figure 10 and a list of regional parks is provided in Table 8.

FIGURE 10: EXISTING OPEN SPACE



Source: City of Ryde & SGS Economics and Planning

The Regional Parks in the City of Ryde include the following:

TABLE 8: REGIONAL PARKS

Regional Park	Suburb
Field of Mars Park	Ryde - Field of Mars
Meadowbank Park	Meadowbank
Els Hall Park	Marsfield
Marsfield Park	Marsfield
Putney Park	Putney
Ryde Park	Top Ryde
Christie Park	Macquarie Park
Magdala Park	North Ryde
Blenheim Park	North Ryde
Yamble Reserve	Ryde - Santa Rosa
Olympic Park	Ryde South
Peel Park	Gladesville - Tennyson Point

Source: Integrated Open Space Strategy inventory

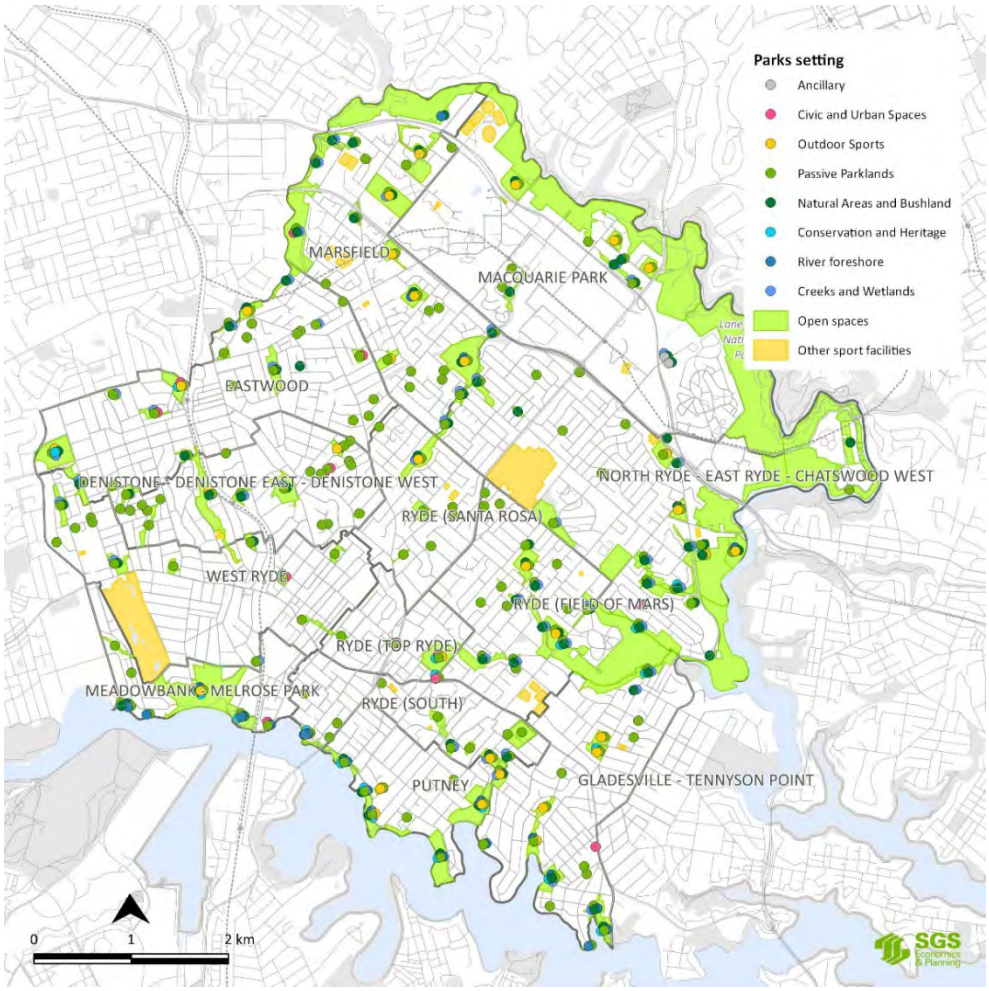
Open space settings

As well as scale, there is variation in terms of the setting of open space; these settings – illustrated in Figure 11 - provide a diversity of experiences.

The primary setting for most open spaces is passive parklands, followed by outdoor sports. Many open spaces have only one setting, which is passive parklands, however there are some parks, typically district and regional ones, that accommodate a range of settings.

Areas along Terry's Creek and Lane Cove National Park are more likely to have the primary settings as Natural Areas and Bushland.

Figure 11: open space settings



Source: City of Ryde & SGS Economics and Planning

Distribution of open space

The distribution of open space by scale and type varies across the LGA, reflecting the location of some district scale open spaces, as well as the provision of local parks.

Ryde (Field of Mars) and Marsfield have substantial bushland /natural areas, and these are primarily located adjacent to Terry's Creek and Lane Cove River. Significant natural areas in North Ryde-East Ryde-Chatswood West are also adjacent to Lane Cove National Park.

The majority of open space area that is used for active sport is found in either Marsfield or Meadowbank, due to the presence of Meadowbank Park, ELS Hall Park and Marsfield Park. All parts of Denistone and Ryde have far lower provision of active sports.

TABLE 9: TYPES OF OPEN SPACE

Suburb	Parkland Civic (ha)	Active sports (ha)	Bushland/Natural Area (ha)
Denistone - Denistone East - Denistone West	11.23	0.99	10.87
Eastwood	12.05	3.38	11.60
Gladesville - Tennyson Point	9.36	4.65	5.55
Macquarie Park	8.73	4.89	1.73
Marsfield	18.02	13.79	30.47
Meadowbank - Melrose Park	11.71	17.42	2.23

North Ryde - East Ryde - Chatswood West	17.98	3.94	18.85
Putney	14.75	7.21	3.26
Ryde (Field of Mars)	8.88	3.63	57.93
Ryde (Santa Rosa)	6.69	1.19	0.11
Ryde (South)	9.90	0.56	0.49
Ryde (Top Ryde)	3.00	3.71	0.00
West Ryde	8.70	0.00	1.17
All Ryde	**141.00**	**65.38**	**144.26**

Links with National Parks and reserves

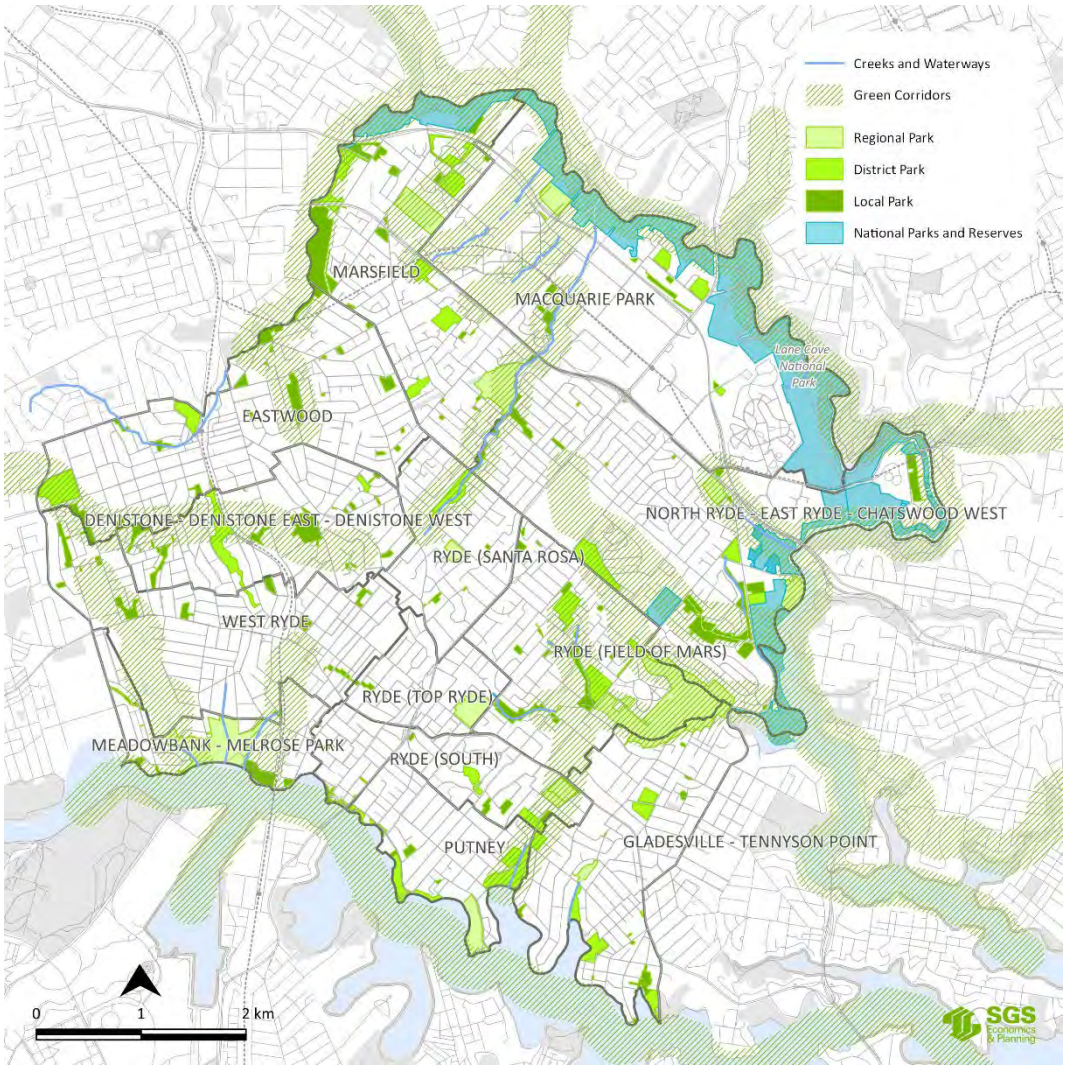
Much of the open space in the City of Ryde is located on the boundaries, flanking the natural ecological corridors that exist there. There are substantial ecological corridors associated with Lane Cove National Park which provides a continuous corridor along the northern boundary.

Open space is fragmented along the north western boundary, with little open space along Terry's Creek west of Eastwood Shopping Centre. The creek in this section is largely bounded by housing, with the exception of Braemar Park.

Many of the reserves in Denistone have a large amount of natural bushland, however despite being in close proximity these are not continuous.

Figure 12 illustrates the many green corridors in the City, however outside of the corridors associated with Lane Cove National Park and Parramatta River, these are poorly connected.

FIGURE 12: OPEN SPACE CORRIDORS

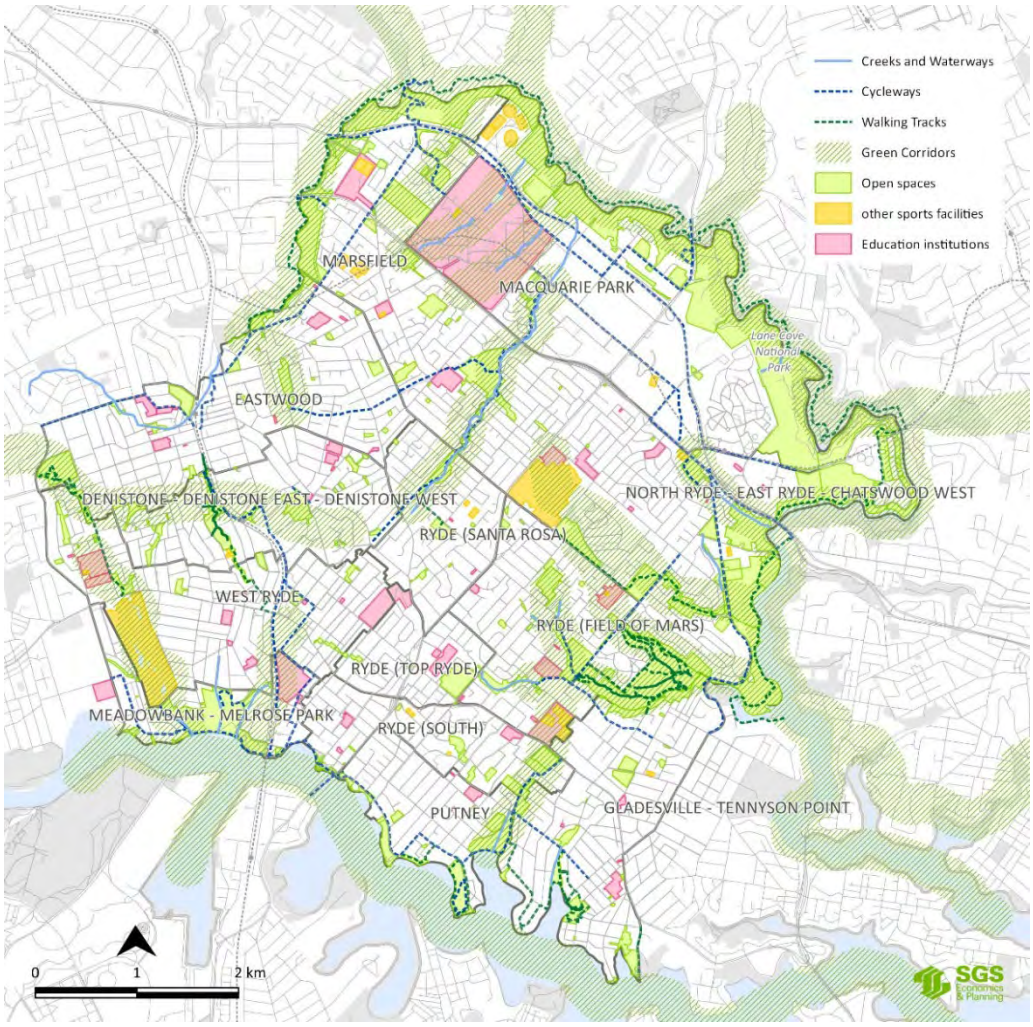


Source: City of Ryde & SGS Economics and Planning

Ecological corridors

Ecological corridors are important in providing opportunities for active travel and connecting the open space network. From a biodiversity perspective, they also allow animals to move and migrate, as well as the interbreeding of plants and animals which can increase levels of genetic variability within populations and avoid the chance of problematic genetic traits.

FIGURE 13: ECOLOGICAL CORRIDORS



Source: City of Ryde & SGS Economics and Planning

6.2 Open space provision

The key relevant guideline for open space planning in NSW is the Government Architect's *Draft Greener Places Design Guide* (2020), initially released in 2018 as the *Draft Open Space for Recreation Guide*. The Guide has been released to support the implementation of Greener Places, the urban green infrastructure policy for NSW. It sets out a new performance-based approach to the planning for outdoor recreation across different urban settings.

The Guideline does not include **quantity** standards due to its preferred focus on open space **accessibility** and **quality** criteria.

However many contemporary guidelines, as summarised below, still use **quantity** indicators because of their utility in comparing open space provision over time and in different neighbourhoods and for identifying areas of open space surplus and/or deficits.

Overview of standard levels of provision

- In Australia, the National Capital Commission (Canberra, 1981) proposes 4ha per 1000 people, Queensland proposes 4 to 5ha per 1,000 people[7] and New South Wales proposes 2.83ha per 1,000 people, which is based on the aforementioned UK guidelines.
- In the US, researchers have found that 4ha of open space per 1,000 people is considered the norm, while in the UK 2.83ha open space per 1,000 people is used.
- Local governments included in Table 10 illustrate a range between 2.4 and 3.03 ha per 1000 people. In infill areas, the community has less access to private open space. This means that more public open space is required.

[7] Local Government Research and Development Fund (2011) Best Practice Open Space in Higher Density Developments Project: Research Findings. Local Government Research Project into Best Practice Open Space Provision for Higher Density Infill Development Project.

TABLE 10: OPEN SPACE PROVISION STANDARDS

Source	Total open space provision rate (m^2 per capita)	Total open space provision rate (Ha/1000 people)
British National Playing Fields Association (1938)	28.3	2.83
National Capital Commission (Canberra 1981)	40	4
US National Recreation and Parks Association	40	4
NSW Department of Planning (1992)	28.3	2.8
Vic Gov - Planning for Community Infrastructure for Growth Areas (2008)	26.4**	2.6
Vic –default contribution in Subdivision Act (5%) in low density areas	13.3*	1.3
City of Kingston Open Space Strategy 2012	24	2.4
City of Wyndham Open Space Strategy 2045	30	3
Frankston City Council Open Space Strategy2016-2036	30.3	3.03
South Australian legislation	12.5% net developable area	4.0 in low density areas 1.0 in higher density areas
South Australian higher density guidelines	Up to 30 ***	3.0
Precinct Structure Plan Guidelines Vic	10% net developable area	n/a

* Excludes higher order passive open space and based on suburban developments of 15 dwellings per hectare
** Comprising $10m^2$ for neighbourhood passive open space, $8.88m^2$ for neighbourhood active open space and $7.5m^2$ for higher order active open space
*** Comprising a mix of local and district open spaces and state/district sports fields.

- South Australian legislation recommends up to 12.5 per cent of net developable area, which is equivalent to approximately 40m² per person in low density areas, where housing density is 15 dwellings per hectare, but only 10m² in higher density urban developments (more than 70 dwellings per hectare).
- A set of guidelines for open space in higher density developments was developed in by the City of Charles Sturt, in partnership with the South Australian State Government and other LGAs and recommend 10m² per capita of primary open space located on site, an additional 10m² nearby and a further 10m² for state and local sports provision- a total of 30m² per capita.

30 square metres is considered a reasonable benchmark to apply as an open space standard based on national and international norms, and the higher density development that is projected to occur in an established area such as the City of Ryde.

Table 11, Figure 14 and Figure 15 show the current and projected rates of provision of open space, *assuming no additional open space is provided*. It indicates that the following areas currently have low rates of provision:

- Ryde (Santa Rosa)
- Ryde (Top Ryde)
- West Ryde

By 2036, areas of the City with the lowest per capita of open space are projected to be:

- Macquarie Park
- Ryde (South)
- Ryde (Top Ryde)
- West Ryde

Open space will be provided at Macquarie Park as it develops, but the quantum is currently unknown.

TABLE 11: OPEN SPACE PROVISION (CURRENT AND 2036)

Suburb	Total Council owned public open space (ha)	2019 open space per 1,000 people (ha)	2036 open space per 1,000 people (ha)
Denistone - Denistone East - Denistone West	23.10	3.18	2.82
Eastwood	27.02	1.91	1.51
Gladesville - Tennyson Point	19.56	1.75	1.40
Macquarie Park	15.36	1.81	0.49
Marsfield	62.28	4.48	4.20
Meadowbank - Melrose Park	31.37	5.02	3.60
North Ryde - East Ryde - Chatswood West	40.77	2.88	2.20
Putney	25.22	6.07	5.72
Ryde (Field of Mars)	70.44	10.39	9.49
Ryde (Santa Rosa)	7.98	1.26	1.17
Ryde (South)	10.95	1.46	0.76
Ryde (Top Ryde)	6.71	0.95	0.79
West Ryde	9.87	0.70	0.59
All Ryde	**350.65**	**2.89**	**2.04**

Source: City of Ryde

This analysis also indicates that many parts of the City of Ryde have less than 2.83ha per 1,000 people (NSW Department of Planning guidelines) and that by 2036 with no additional open space, the LGA overall will fall below this provision rate.

FIGURE 14: OPEN SPACE PER CAPITA 2019

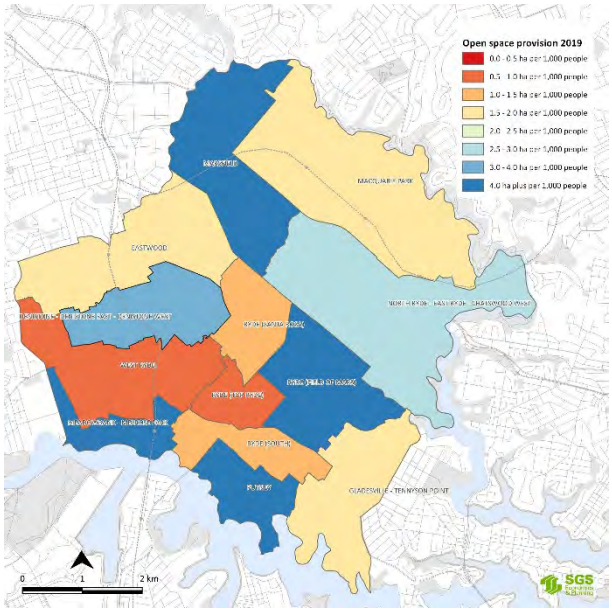
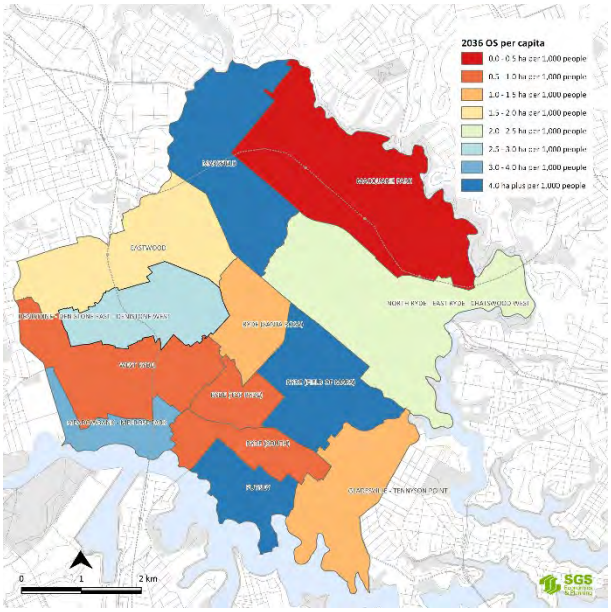


FIGURE 15: OPEN SPACE PER CAPITA 2036



Source: City of Ryde & SGS Economics and Planning

6.3 Accessibility of open space

The **accessibility** and **quality** of open space are just as important, if not more important, than open space quantity.

This is reflected in the GAO's draft *Greener Places Design Guide* which identifies a range of performance-based accessibility and quality criteria.

Accessibility criteria and standards are concerned with proximity – in terms of travel time and distance – to useable open space.

Specifically, the GAO's draft Guide prescribes that the majority of residents should be within 400 metres of usable open space (i.e. open space of a minimum size of 1,500m^2) in low and medium density areas and 200 metres within high density areas.

This accessibility, or 'walkability', benchmark has been adopted in Council's LSPS and also provides the accessibility benchmark in this study.

The 200 and 400m walkability thresholds have been applied in the mapping analysis of existing open space, and planned projects, as detailed respectively in Sections 8 and 10, below.

Road frontage and visibility are also key considerations. With respect to these, the GAO provides a series of draft recommendations in the draft *Greener Places Design Guide* (2020)[8]. These generally suggest minimum 50% road frontage, although there is some variation depending on the type of space.

[8] https://www.governmentarchitect.nsw.gov.au/resources/ga/media/files/ga/discussion-papers/discussion-guide-greener-places-2020-06-03.pdf

7. SPORT AND RECREATION: SUPPLY AND DEMAND

The City of Ryde has an extensive network of sport and recreation facilities. As the population continues to grow, there will be increasing demand for these facilities. This Section reviews the supply of, and demand for, recreation facilities.

7.1 Supply of recreation facilities

The City accommodates a range of publicly accessible recreation facilities. There are also a number of non-publicly accessible (i.e. private, school and Macquarie University) sports fields located within the City, as detailed in Section 7.2, below.

Current publicly accessible facilities

Full size outdoor fields and ovals

The City of Ryde has 38 publicly accessible full size outdoor fields and ovals, as summarised in Table 12. Many of these sports facilities are co-located with other types of open space such as passive parkland, playgrounds and conservation/bushland.

TABLE 12: EXISTING FACILITIES - FULL SIZE OUTDOOR FIELD AND OVAL

Facility Name	Number of Facilities	Facility Name	Number of Facilities
Bill Mitchell Park	1	North Ryde Park	1
Bremner Park	1	Peel Park	1
Christie Park	2	Pidding Park	1
Dunbar Park	1	Pioneer Park	1
Eastwood Park	2	Ryde Park	1
ELS Hall Park	3	Santa Rosa Park	1
Keith Thompson Hockey Centre	1	Smalls Road School	1
Magdala Park	1	Tuckwell Park	1
Marsfield Park	2	Waterloo Park	1
Meadowbank Park	9	Westminister Park	1
Monash Park	1		
Morrison Bay Park	4	**Total**	**38**

TABLE 13: EXISTING FACILITIES - SENIOR BASEBALL DIAMONDS

Facility Name	Number of Facilities
ELS Hall Park	1
Magdala Park	1
Waterloo Park	1
Total	**3**

Junior outdoor fields and ovals

The City of Ryde has 19 publicly accessible junior outdoor fields and ovals and 10 junior baseball diamonds.

TABLE 14: EXISTING FACILITIES – JUNIOR OUTDOOR FIELD AND OVAL

Facility Name	Number of Facilities
Bill Mitchell Park	1
Cleves Park	1
Darvall Park	1
Fontenoy Park	4
Magdala Park	1
Meadowbank Park	3
Morrison Bay Park	2
Pidding Park	1
Ryde Park	2
Santa Rosa Park	1
Smalls Road School	1
Tyagarah Park	1
Total	**19**

TABLE 15: EXISTING FACILITIES - JUNIOR BASEBALL DIAMONDS

Facility Name	Number of Facilities
ELS Hall Park	3
Gannan Park	1
Magdala Park	2
Pioneer Park	4
Total	**10**

Outdoor court

The City of Ryde has 108 outdoor courts, comprising 62 tennis courts, 44 netball courts and 2 basketball courts.

TABLE 16: EXISITING FACILITIES – OUTDOOR COURT

Facility Name	Number of Facilities
Brush Farm Park – netball courts	16
Kings Park – tennis courts	2
Kotara Park – tennis courts	8
Macquarie University Tennis	12
Meadowbank Park – tennis courts (8), netball courts (28)	36
Next Gen Tennis	4
North Ryde RSL Tennis	2
Olympic Park – tennis courts	8
Royal Rehabilitation Centre – tennis courts	2
Ryde East Primary School – tennis courts	2
Ryde Park – basketball court	1
St Anthonys Catholic Primary School – tennis courts	4
Tennis World – tennis courts	10
Waterloo Park – basketball court	1
Total	**108**

Indoor court

The City of Ryde has 4 publicly accessible indoor sport facilities with a total of 6 courts.

TABLE 17: EXISITING FACILITIES - INDOOR SPORT

Facility Name	Number of Facilities
Ryde Ex Services Memorial and Community Club	1
ELS Hall Park	2
Macquarie University Sports and Aquatic Centre	1
Ryde Aquatic and Leisure Centre	2
Total	**6**

Bowls and croquet

The City of Ryde has 11 publicly accessible lawn bowls greens and 2 croquet greens.

TABLE 18: EXISTING FACILITIES – BOWLS AND CROQUET

Facility Name	Number of Facilities
Club Ryde Lawn Bowls	2
Darvall Park	3
Eastwood Park Croquet	2
Gladesville Sporties Lawn Bowls	2
Morrison Bay Park	2
North Ryde RSL Lawn Bowls	2
Total	**13**

Golf

The City of Ryde has 2 publicly accessible 18-hole golf courses.

TABLE 19: EXISTING FACILITIES - GOLF COURSE

Facility Name	Number of Facilities
North Ryde Golf Course	1
Ryde-Parramatta Golf Course	1
Total	**2**

Swimming

The City of Ryde has 2 publicly accessible aquatic centres (comprising several types and sizes of pools) with total water area of 3,835m^2.

TABLE 20: EXISITING FACILITIES – SWIMMING

Facility Name	Number of Facilities	Swimming area (m^2)
Ryde Aquatic and Leisure Centre	1	2,335
Macquarie University Sports and Aquatic Centre	1	1,500
Total	**2**	**3,835**

7.2 Non-publicly accessible facilities

Facilities that are not managed by Council, including recreation facilities provided by educational institutions and private organisations, have an important role to play in the provision of sport and recreation opportunities within the City of Ryde.

Key education institutions which accommodate recreation facilities include schools, and Macquarie University which has 3 ovals, 2 rectangular fields and 12 tennis courts.

Privately run facilities include North Ryde RSL, Eastwood Rugby Club and several lawn bowls, croquet and tennis clubs.

Lawn bowls are predominantly played through clubs in facilities that are not managed or owned by Council. There are 8 private/commercial lawn bowl or croquet facilities in the City.

Golf is played through clubs in facilities that are not owned or managed by Council. There are 2 privately run golf facilities in the City.

12 of the 62 tennis courts within the City are provided by the private sector, although these are accessible by the community.

Facility Ownership

The following table provides a summary of the ownership of the various facility types.

TABLE 21: OWNERSHIP OF SPORT AND RECREATION FACILITIES IN THE CITY OF RYDE[9]

Sport	Council facilities	Other public sector facilities	Private/ commercial facilities	Total facilities	Total publicly accessible*
Full Size Rectangle Fields	29	9	2	40	29
Full Ovals	8	3	0	11	8
Softball	0	0	0	0	0
Hockey	0	1	0	1	1
Total full size outdoor fields and ovals	***37***	***13***	***2***	***52***	***38***
Mod/Jnr Rectangle Fields	17	3	3	23	17
Junior Ovals	2	0	0	2	2
Total – Mod/junior outdoor fields and ovals	***19***	***3***	***3***	***25***	***19***
Tennis	30	20	12	62	44
Netball Courts	44	0	2	46	62
Basketball - outside	2	0	0	2	2
Total – outdoor courts	***76***	***20***	***14***	***110***	***108***
Indoor Basketball/Multi-purpose	4	1	1	6	6
Total – indoor courts	***4***	***1***	***1***	***6***	***6***
Lawn bowls	3	0	8	11	11
Croquet	2	0	0	2	2
Total – lawn bowls & croquet	***5***	***0***	***8***	***13***	13

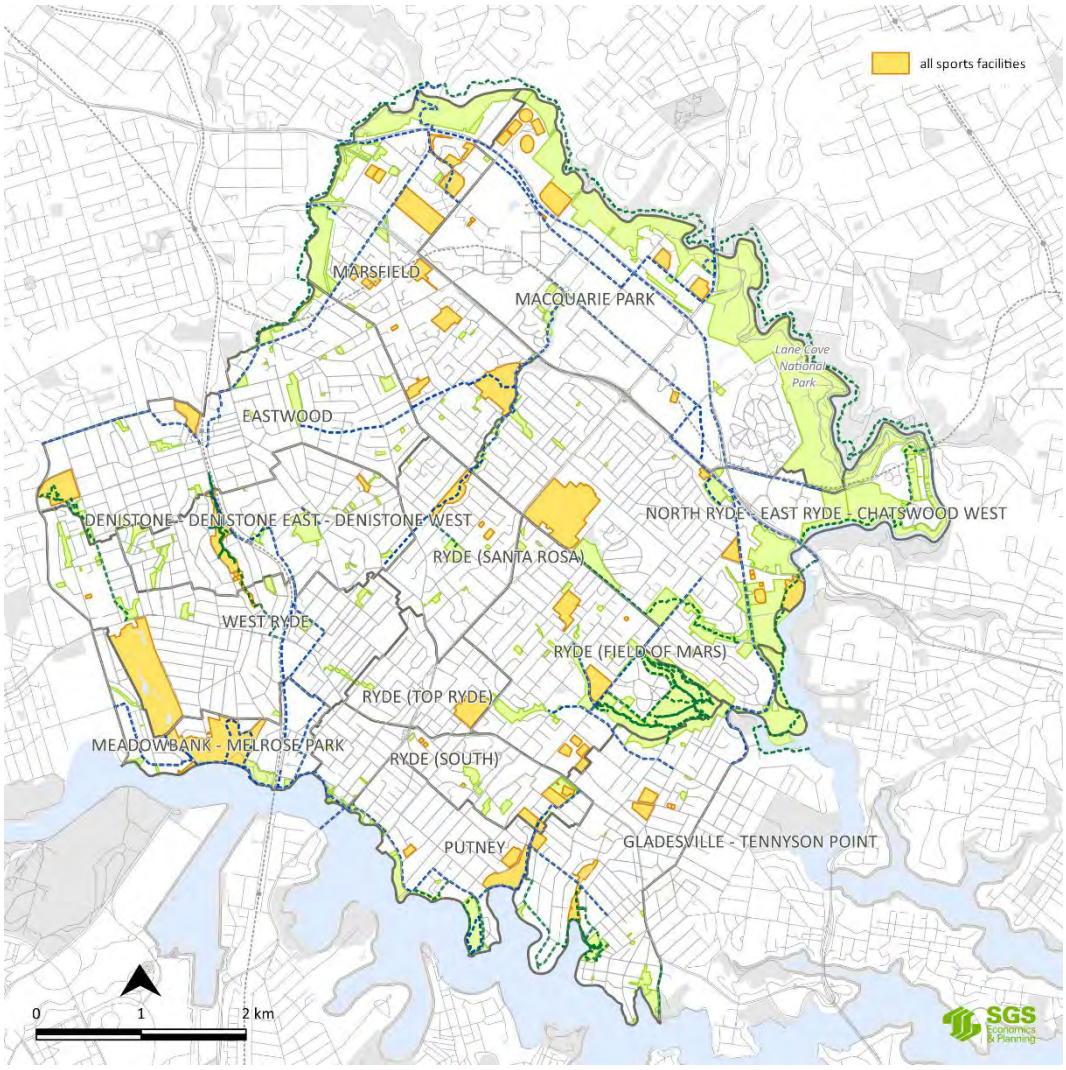
[9] All Council owned and some public sector and some private/ commercial are considered publicly accessible and used in subsequent analysis of the available supply of facilities.
Netball courts include both hard and grass courts. There are 4 grass tennis courts at Brush Farm Park.
The analysis also does not include modified outdoor courts.

Golf course	0	0	2	2	2
Total - golf	*0*	*0*	*2*	*2*	*2*
Swimming centre	1	1	0	2	2
Total – swimming	**1**	**1**	**0**	**2**	**2**

Source: SGS Economics and Planning, Ryde Council 2020

The location of these sports facilities is shown below, noting sport specific maps are provided in Section 8.

FIGURE 16: SPORTS FACILITIES



Source: SGS Economics and Planning 2020

7.3 Capacity of publicly accessible facilities

The overall capacity for sport and recreation activities is determined by a range of factors, including:

- The types of facilities which are available, and the sports played at various facilities
- Seasonality of sports
- The capacity of individual facilities
- Utilisation rates of facilities

Facility types

Different sports can be undertaken at the same facility. Table 22 shows which sports can be played at each facility type.

TABLE 22: SPORTS AND FACILITIES

Facility	Sports played
Full size outdoor field and oval	Cricket Touch football AFL Soccer Hockey Rugby league Rugby union Oztag Frisbee Softball Baseball Athletics
Junior outdoor field and oval	Junior cricket AFL Soccer Rugby league Rugby union Baseball and t-ball
Outdoor court	Netball Tennis Outdoor basketball
Indoor court[10]	Basketball Volleyball Futsal Badminton Martial arts Gymnastics[11]
Bowls & Croquet	Lawn bowls Croquet
Golf course	Golf
Swimming	Swimming

Source: SGS Economics and Planning

[10] Occasionally, netball and hockey will be played on indoor courts; elite netball and suburban senior teams use indoor courts for training or wet weather fixtures. This study assumes these sports are played exclusively outside, as there is not sufficient information relating to the use of indoor vs outdoor spaces to include in the analysis.

[11] Martial arts and gymnastics are assumed to occur on indoor courts. In some cases, these sports may also occur on informal indoor spaces. Demand for informal spaces is not included as there is not sufficient information relating to this to include in analysis. The Otium study provides additional detail regarding this.

Seasonality

Different sports use facilities at different times of the year – for example cricket is a summer sport played on ovals, while netball is a winter sport played on outdoor courts, while indoor basketball is played all year round.

Outdoor facilities typically have a lower capacity during winter due to lower light levels. For all outdoor facilities, analysis shows summer and winter provision.

Capacity estimates

The capacity of each facility considers a range of factors, and depends on the individual characteristics of each facility. It includes:

- The number of playing hours available per week per facility which is influenced by lighting and playing surface
- The number of participants that can be accommodated at any one time, which varies between sports according to sport-specific rules, and between training and competition sessions

Golf and swimming are exceptions as they are mainly unstructured activities without strict competition and training time slots, typical of other sports. Facility capacity for these sports is measured in terms, respectively, of rounds of golf and m^2 of pool water space.

The measures of capacity are summarised in Table 23. The demand for facilities is also calculated in these units to enable comparison between supply and demand.

TABLE 23: FACILITY CAPACITY & DEMAND UNITS

Facility type	Capacity & demand unit
Oval and Outdoor field	Playable hours per week
Outdoor court	Playable hours per week
Indoor court	Playable hours per week
Bowls and croquet	Playable hours per week
Golf course	Rounds of golf per week
Swimming	Square metres of pool

Source: SGS Economics and Planning

Capacity calculations

Table 24 summarises the number of facilities, and the current total capacity of the City's facilities.

TABLE 24: CURRENT CAPACITY SUMMARY BY FACILITY TYPE[12]

Facility type	Number of facilities	Total Current capacity (hours per week)
Full size outdoor field and oval – summer	38	1,270
Full size outdoor field and oval – winter	38	1,055
Junior outdoor field and oval – summer	19	570
Junior outdoor field and oval – winter	19	402
Outdoor court	108	5,120
Indoor court	6	300
Bowls & croquet	13	650
Golf course	2	2,940 (rounds)
Swimming	2	3,835 (m^2)

Utilisation

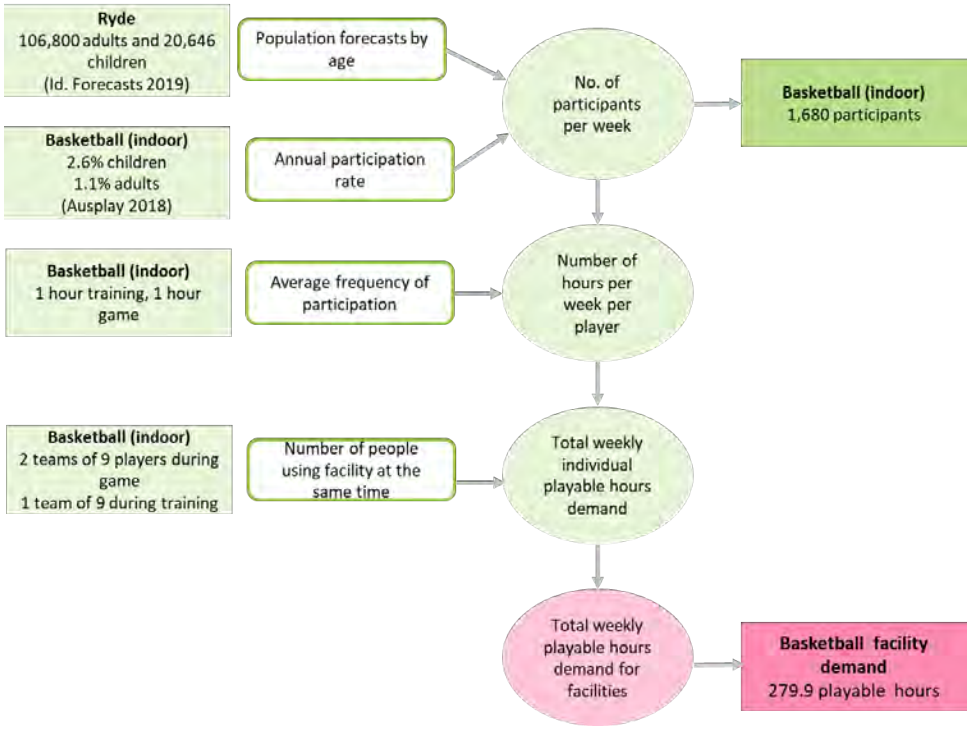
The analysis has assumed that facilities are utilised at 100% of capacity. Programmed repairs, maintenance and upgrades mean that in some cases, facilities are available at less than 100% of total capacity, and outdoor facilities are also susceptible to damage from storm and flooding. The implication of this is that the real capacity of some outdoor facilities may be lower than estimated.

[12] Capacity for individual outdoor facilities varies depending on the presence of lighting and surface material. Lighting and synthetic surfaces increase capacity.

7.4 Approach to estimating demand

Estimating demand for various sport facilities considers population (current and projected) combined with participation rates, estimates of frequency of participation as well as the number of people who use a facility at once. The method is shown in Figure 17.

FIGURE 17: EXAMPLE METHOD FOR ESTIMATING DEMAND FOR PLAYABLE HOURS



Source: SGS Economics and Planning, 2019

Participation rates, drawn from 2018 AusPlay data for Metropolitan Sydney, are illustrated below. These have been used to project current and future demand for recreation, but emerging trends may not be reflected in current data, including:

- Increasing female participation in AFL and cricket,
- Declining overall participation in golf, lawn bowls and croquet.

The implications of these trends are considered further in Section 10.

TABLE 25: PARTICIPATION RATES

Sport	Juniors Participation (5-14 years)	Seniors Participation (15+ years)
	AusPlay - Metro Sydney 2018 (%)	AusPlay - Metro Sydney 2018 (%)
Summer sport		
Athletics	3.60%	0.60%
Cricket	4.10%	1.70%
Frisbee	n/a	0.10%
Oztag	2.60%	0.80%
Summer baseball	1.40%	0.20%
Touch football	1.70%	1.10%
Winter sport		
AFL	3.50%	0.90%
Frisbee	n/a	0.10%
Hockey	0.90%	0.40%
Netball	8.60%	1.50%
Rugby league	3.40%	0.70%
Rugby union	2.40%	0.70%
Soccer (U10/U11)	37.80%	n/a
Soccer (U12 to Senior)	17.20%	4.70%
Soccer (U6/U7)	29.80%	n/a
Soccer (U8/U9)	33.80%	n/a
Softball	1.60%	0.10%
Winter baseball	n/a	0.10%
Winter oztag	0.80%	0.30%
All year sport		
Basketball (outdoor)	0.00%	0.50%
Croquet	n/a	0.10%
Golf	0.30%	3.90%
Lawn bowls	n/a	1.30%
Tennis	7.90%	2.80%
Indoor court sports[13]		
Basketball (indoor)	2.60%	1.10%
Badminton	0.70%	0.40%
Futsal	0.70%	0.30%
Other indoor sport/recreation		
Gymnastics	7.80%	0.40%
Martial arts	1.30%	0.50%
Swimming	38.0%	18.0%

[13] It is recognised that there is demand for indoor netball and hockey. Participation rates for indoor netball and hockey were not available at the time of analysis and were therefore not included in the modelling

Source: AusPlay

A NOTE ABOUT INDOOR COURTS

Concurrently with this study, the City of Ryde undertook an *Indoor Sports Facilities Review*, with Otium Planning Group. The Otium study reviewed the demands for and supply of indoor court facilities for basketball, netball, futsal, badminton, volleyball, indoor hockey, and other relevant sports. It also considered a range of activities available at community sports centres, private facilities and education facilities.

The current study uses a slightly different methodology- identifying demand, supply and access to courts for specific sports (i.e. basketball, volleyball, futsal, badminton, martial arts and gymnastics) but does not include indoor netball and hockey, or broader recreational uses such as yoga, dance, karate, corporate sport or school PE in its analysis.

The outcomes of the two studies, in terms of unmet need, are slightly different, as noted in relevant sections, below.

7.5 Current and future demand

The outcome of the demand analysis for the City of Ryde (for 2019 and for 2036) is shown in Table 26.

This is presented in total hours of demand per week for each sport in 2019 and 2036. This is then translated in to number of facilities (based on average capacity per week) required currently, and in 2036.

TABLE 26: SUMMARY DEMAND FOR SPORT AND RECREATION FACILITIES 2019 AND 2036

Sport	Season	Total hours of demand 2019	Total Hours of demand 2036	Facilities required 2019	Facilities required 2036
Athletics	Summer	28	39	0.9	1.3
Cricket oval (U13-Sen)	Summer	398	531	13.3	17.7
Frisbee	Summer	7	9	0.2	0.3
Oztag	Summer	48	66	1.6	2.2
Baseball – full size	Summer	56	75	1.9	2.5
Touch football	Summer	42	57	1.4	1.9
Total: Full size outdoor field and oval (Summer)		**579**	**777**	**19**	**26**
AFL – senior	Winter	80	107	2.7	3.6
AFL - junior	Winter	38	55	1.3	1.8
Frisbee	Winter	7	9	0.2	0.3
Hockey	Winter	67	92	2.2	3.1
Rugby league - senior	Winter	104	140	3.5	4.7
Rugby union - senior	Winter	94	127	3.1	4.2
Soccer full size (U12 to Sen)	Winter	696	932	23.2	31.1
Softball	Winter	30	42	1	1.4
Winter baseball	Winter	14	19	0.5	0.6
Winter oztag	Winter	15	21	0.5	0.7
Total: Full size outdoor field and oval (winter)		**1145**	**1544**	**38**	**51**

Sport	Season	Total hours of demand 2019	Total Hours of demand 2036	Facilities required 2019	Facilities required 2036
Cricket oval (U5-U12)	Summer	105	120	3.5	4
Baseball - modified	Summer	54	78	1.8	2.6
Total: Junior outdoor field and oval (summer)		**159**	**198**	**5**	**7**
Rugby league - junior	Winter	39	57	1.3	1.9
Rugby union - junior	Winter	17	24	0.6	0.8
Soccer (U10/U11)	Winter	83	120	2.8	4
Soccer (U6/U7)	Winter	45	65	1.5	2.2
Soccer (U8/U9)	Winter	82	119	2.7	4
Total: Junior outdoor field and oval (winter)		**266**	**385**	**9**	**13**
Netball	Winter	890	1,231	29.7	41
Basketball (outdoor)	All year	89	118	1.8	2.4
Tennis	All year	1,958	2,681	39.2	53.6
Total: Outdoor Court		**2937**	**4030**	**71**	**97**
Basketball (indoor)	All year	280	382	5.6	7.6
Badminton	All year	96	130	1.9	2.6
Volleyball	All year	44	59	0.9	1.2
Futsal	All year	74	101	1.5	2
Gymnastics	All year	168	239	3.4	4.8
Martial arts	All year	69	94	1.4	1.9
Total: Indoor Court		**731**	**1005**	**15**	**20**
Croquet	All year	32	43	0.6	0.9
Lawn bowls	All year	280	372	5.6	7.4
Total: Bowls and Croquet	All year	**312**	**415**	**6**	**8**
Total: Golf (rounds)	All year	**3,382 rounds**	**4,497 rounds**	**2**	**3**
Total: Swimming (m2)	All year	**3,365m2**	**4,532m2**	**2**	**3**

Source: SGS Economics and Planning 2020

8. SERVICE GAPS AND ISSUES

This Section discusses open space and recreation facility service gaps in terms of their capacity to accommodate current and emerging demands **and** their accessibility. It identifies capacity shortfalls and areas of the City which suffer poor access (based on travel distance thresholds).

8.1 Capacity

Open space

There is currently a sufficient quantity of open space in the LGA - 350 hectares, equivalent to 28.9 square metres per person. There is, however, projected to be an undersupply of open space by 2036. If no new open space is acquired, the provision rate for open space drops to 20.4 square metres per person. When the benchmark rate of 28.3 square metres per person is applied (equivalent to 2.83 hectares per 1,000 people), there is a projected need for 485 hectares of open space by 2036. This represents a shortfall of 135 hectares.

It is not realistic to expect this quantum of new open space to be delivered in an established area like the City of Ryde. Alternative solutions are required, including making the most of existing assets and space through increasing their capacity and ability to accommodate higher levels of use or more diverse activities. Quantity is an important metric for open space, but so are quality and design/management that allow for high levels and adaptability of use.

The spatial distribution and accessibility of the City's open space network are addressed in Section 8.2, below.

Sport & recreation facilities

TABLE 27: SUMMARY RECREATION SERVICE GAPS[14]

Sports facility	Current facilities (No.)	2019		2036	
		Required	Gap or surplus	Required	Gap or surplus
Full size outdoor field and oval – summer	38	19	+ 19	26	+ 12
Full size outdoor field and oval – winter	38	38	0	51	- 13
Junior outdoor field and oval – summer	19	5	+ 14	7	+ 12
Junior outdoor field and oval – winter	19	9	+ 10	13	+6
Outdoor court	108	71	+ 37	97	+ 11
Indoor court[15]	6	15	- 9	20	- 14
Bowls & Croquet	13	6	+ 7	8	+ 5
Golf course	2	2	0	3	- 1
Swimming	3,835 m²	3,365	+ 470m²	4,532 m²	- 697m²

- **Full size outdoor field and ovals** are sufficient to meet the demand of summer sports but there is forecast to be an undersupply by 2036 for winter sports. In winter there is projected

[14] The City of Ryde's sports facilities are often used for regional competitions, and they attract users from outside the LGA. Modelling for demand is based purely on the residents of the City of Ryde, and do not account for external users. Nor does it account for residents of the City using facilities in other LGA's.

[15] Service gap of 12 courts by 2036 in the Indoor Sports Facilities Review (Otium Planning Group, 2020)

to be an overall undersupply of 13 full sized outdoor fields. Sharing opportunities with schools and other institutions should be investigated to address this. In summer there is overall sufficient supply, but some people in the south west of the City will have to travel further to access facilities.

- It is anticipated that any surplus supply in the summer will be taken up by informal uses, and expanded use by formal sports for pre-season and short summer seasons e.g. soccer.
    - Increased use by informal users due to the better weather conditions in summer is also likely to mean that the surplus of facilities in summer is smaller.
    - There is also significant use of facilities by people who do not reside in the LGA.
- Junior outdoor fields and ovals are, at an LGA level, adequately supplied however some residents in the north of the City will have to travel further to reach facilities (which are concentrated in the south). Given many of the junior fields and ovals are located within a regional facility, the propensity of people to travel to these higher order regional facilities and competitions means this is not of significant concern. There is also the potential to access full size fields.
- The City of Ryde is home to district and sub- regional facilities for outdoor courts (tennis and netball) and these outdoor courts are used by local residents as well as people from outside of the LGA. Balancing local, informal demand for outdoor tennis and netball courts with district and higher level competitions is essential. Investment in new outdoor courts for local use in undersupplied areas is an opportunity including shared use of facilities.
- The proposed investment in indoor courts will address the immediate demand for this facility type and a dedicated strategy has been prepared to facilitate this. By 2036, additional facilities will be required[16]. The local community has expressed a strong preference for indoor courts, and the diverse cultural profile indicates that sports played in these facilities (badminton and table tennis particularly) are likely to generate demand beyond the Sydney average forecasts. Continued investment will be required, including through developer contributions response, and opportunities for shared facilities and multi-function spaces will also need to be investigated.
- There is sufficient provision of bowls and croquet facilities.
- The analysis indicates that there is currently sufficient supply to meet demand for golf courses within the City. By 2036, there is forecast to be demand for additional golf facilities. This is largely driven by population growth, as participation rates in golf are declining. While it is not realistic for Council to invest in new golf facilities to meet the increasing demand, it does indicate that the two golf courses in the City of Ryde are not suited to repurposing for other uses. The additional demand could be absorbed by facilities across the region and there are a number of facilities located in close proximity to the City of Ryde.
- Planning and analysis of swimming facilities is particularly complex; while the analysis indicates that facilities are currently adequate this does not necessarily cover the diversity of activities, and visitation from outside the City of Ryde is also not considered in this analysis. The future undersupply of swimming facilities will require substantial investment and planning, and a designated swimming facility strategy will assist in providing a clear response to this. Swimming facilities have also been analysed using square metres of swimming space. There is currently 3,835m^2 of swimming space, which represents a gap of 697m^2 by 2036.

The spatial distribution and accessibility of sport and recreation facilities are addressed in the next section.

[16] A requirement for 3 additional courts by 2036 according to the Otium Planning Group study and 5 according to the current study.

8.2 Access

The previous section discussed the *capacity* of the City's open space network and its sport and recreation facilities. This section addresses *accessibility* of the network and facilities.

Accessibility, in terms of walking distance, cycling or driving, is an important part of liveability. The accessibility analysis provided here is based on road network access (rather than 'as the crow flies' distance) thereby providing a more realistic indication of household access.

As indicated in Section 6.3 above, the NSW Government Architect's *Draft Greener Places Design Guide* defines the walkability or accessibility of open space differently according to residential density. In low and medium density areas, reasonable access is defined by a 400-metre catchment whereas in high density residential areas (i.e. areas with greater than 60 dwellings per hectare gross), the prescribed catchment is 200 metres.

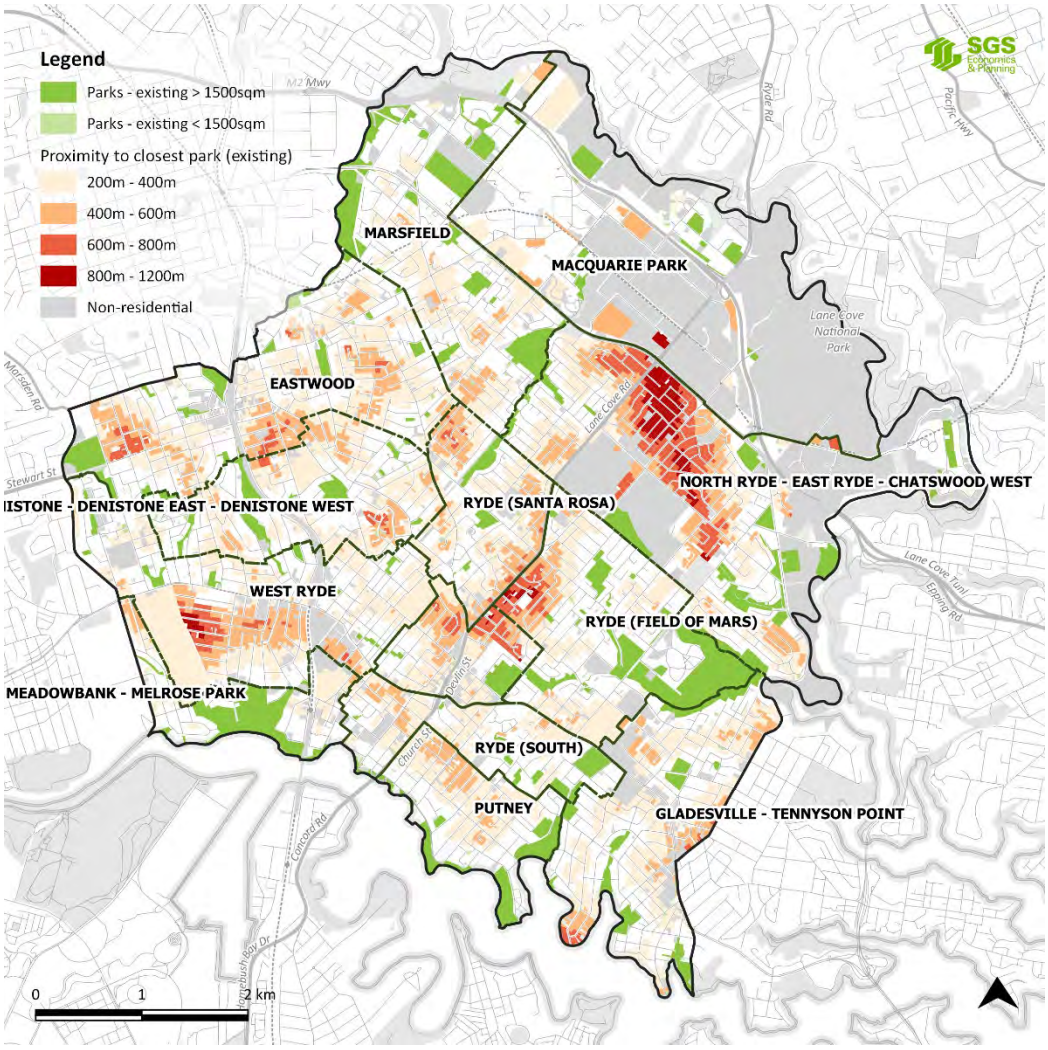
The Guide also recommends that the access thresholds relate to open spaces of at least 1,500 m^2 (while acknowledging, for optimum usability, that 3,000m^2 is the ideal minimum open space size).

The analysis, below, reviews both low/medium density (400m) and high density (200m) access to open spaces of at least 1,500 m^2.

Open Space – low/medium density areas

Some areas of the City do not have adequate access to local open space. This is illustrated in Figure 18, which shows residential properties that have access to open spaces of the required minimum size within 400 metres (i.e. the unshaded areas) and those that do not (i.e. those within the orange-red shaded areas, some of which are more than 800m distance from local open space).

FIGURE 18: OPEN SPACE ACCESSIBILITY: EXISTING NETWORK



Source: SGS Economics and Planning

Currently, as illustrated in Figure 18 and quantified in Table 28, areas with poorer access to open spaces greater than 1,500m² within 400m include Gladesville – Tennyson point, North Ryde – East Ryde – Chatswood West, Top Ryde and Ryde (Santa Rosa). More than 30% of residences in these areas do not have adequate access to local open space.

TABLE 28: EXISTING ACCESS TO OPEN SPACE

Suburb	Percentage of households within 400m of open space
Denistone - Denistone East - Denistone West	77%
Eastwood	73%
Gladesville - Tennyson Point	65%
Macquarie Park	37%
Marsfield	70%
Meadowbank - Melrose Park	84%
North Ryde - East Ryde - Chatswood West	60%
Putney	70%
Ryde (Field Of Mars)	74%
Ryde (Santa Rosa)	68%
Ryde (South)	80%
Ryde (Top Ryde)	61%
West Ryde	71%
City of Ryde total	**68%**

Source: SGS Economics and Planning.

It should be noted that while Macquarie Park has been included in the modelling, the area will undergo site specific planning, including the creation of a new street network and new open spaces. This will have a significant impact on the percentage of households within 200m of open space in the future.

Open Space – high density areas

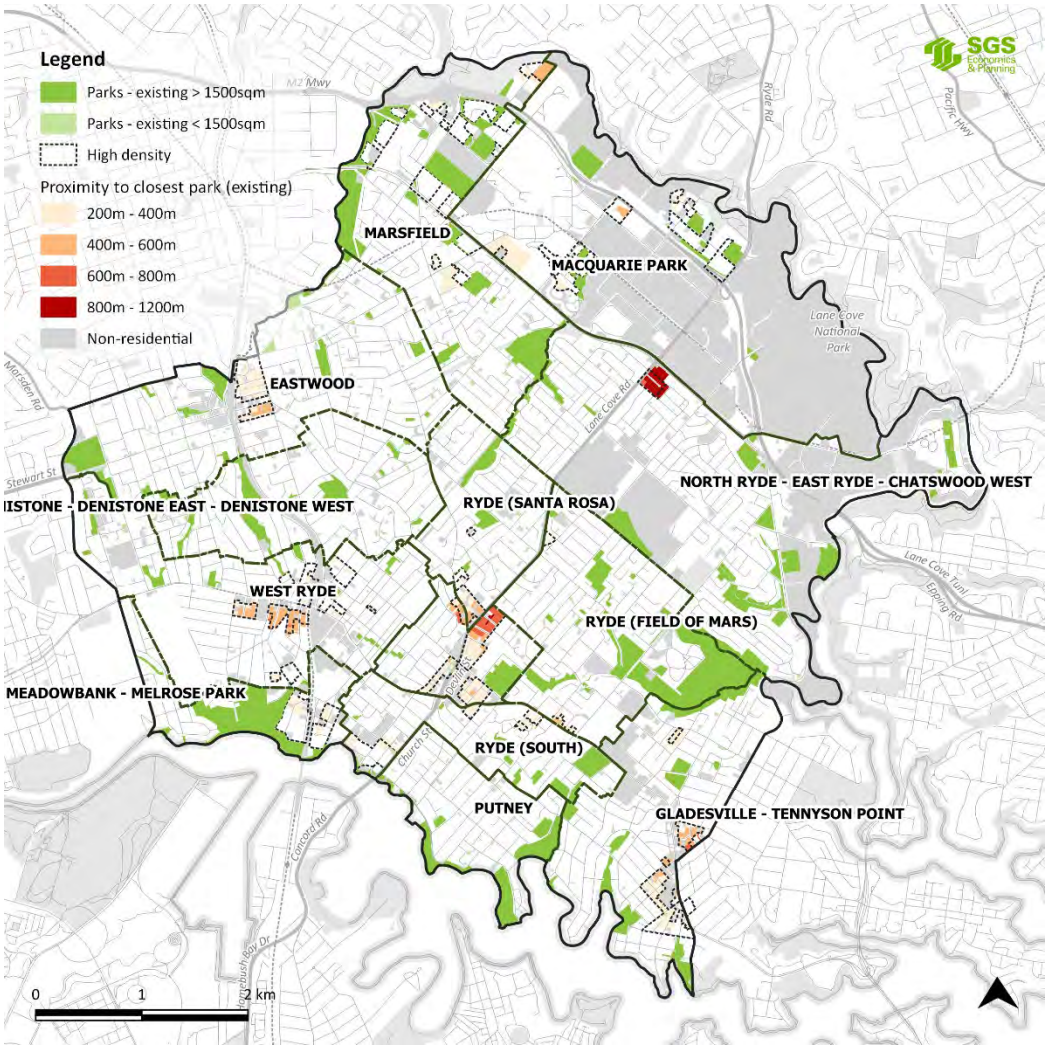
Areas in the City with a density greater than 60 dwellings per hectare are depicted in Figure 19 (as a black hatch).

The higher density areas are defined using mesh blocks (where the gross residential density is higher than 60 dwellings per hectare), the smallest geography of data that is available from ABS Census data from 2016.

Many of these areas do not have access to open space within 200 metres and some do not have access within 800 metres.

As illustrated in Figure 19, high density areas with poorer access to local open space include parts of Top Ryde, Gladesville- Tennyson Point, Eastwood, North Ryde and West Ryde.

FIGURE 19: OPEN SPACE ACCESSIBILITY: EXISTING NETWORK AND HIGH DENSITY AREAS



Source: SGS Economics and Planning

It is noted that additional high density has been delivered since 2016 (including through the Macquarie University Station, and North Ryde Station Urban Activation Precincts and Top Ryde). Accordingly, the accessibility gaps illustrated at Figure 19 do not include possible accessibility issues around these newer developments.

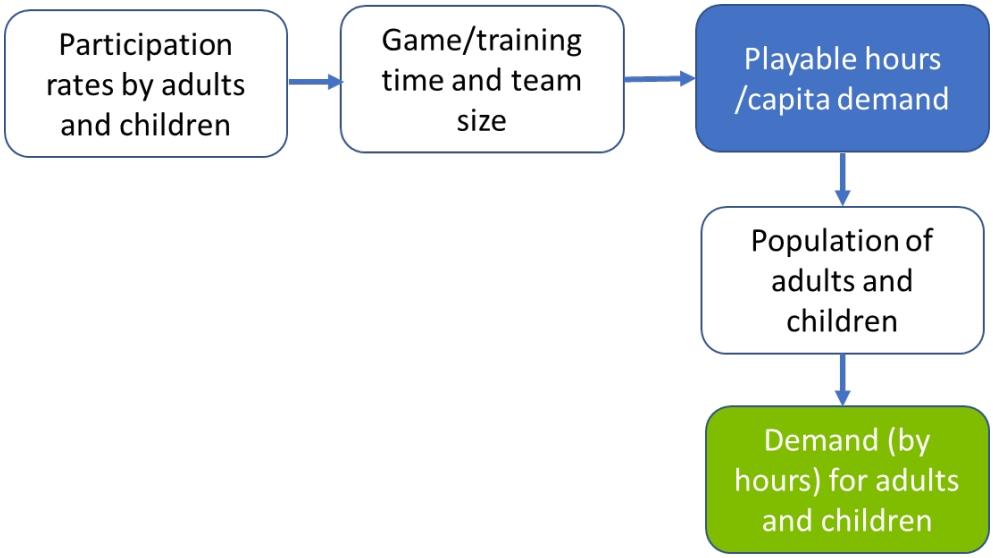
Sport and recreation

As with open space, real accessibility to sport and recreation, in terms of reasonable walking, cycling and driving distances, is important for liveability and equity reasons.

Small area network approach

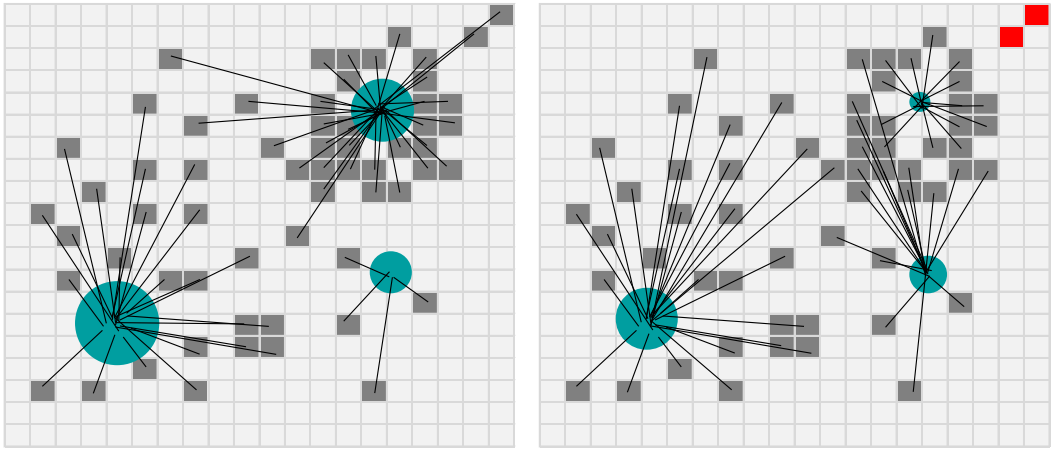
As well as access via the road network, the sport and recreation analysis considers the spatial distribution of capacity across the LGA and where the demand is generated from (i.e. where people live). This small area analysis follows the same logic and approach as the LGA level analysis (for the open space network as a whole) and is shown in Figure 20.

FIGURE 20: SMALL AREA DEMAND METHOD



The demand (number of hours) is then allocated to a facility using an optimised allocation algorithm which essentially associates demand at the small area level with individual facilities. It allows for identification of specific areas within the LGA that are undersupplied with certain types of facilities. The method is illustrated below in Figure 21.

FIGURE 21: OPTIMISED ALLOCATION METHOD



Source:

1. Forecast demand for by small area (grey boxes) are aligned to the closest sports facility (blue dots). This considers actual network travel times and total capacity (size of dot) at each facility.

2. As forecast demand is allocated to facilities this reduces their available capacity in subsequent periods (i.e. smaller blue dot).

As a result, they can service a smaller area and new players will be allocated to the next closest facility. There may be some areas that do not have a secondary option and would be identified as 'unallocated' (red).

This approach also requires the application of a catchment; an estimate of how far people are willing to travel to access a particular facility type. Catchments for each facility type are shown in Table 29.

TABLE 29: FACILITY CATCHMENTS

Facility type	Catchment
Full size outdoor field and oval	1.5km
Junior outdoor field and oval	1.5km
Outdoor court	1.5km
Indoor court	10km
Bowls and croquet	10km
Golf course	10km
Swimming	10km

Source: SGS Economics and Planning

The application of a catchment means that an area that is experiencing poor access is caused by a lack of available capacity *within the catchment*.

The following section shows the results of the optimal allocation algorithm for each facility type.

Each map shows whether there is poor access in 2019, and in 2036. Poor access can be due to lack of capacity within the catchment, or capacity existing beyond the travel distance thresholds for the specific catchment.

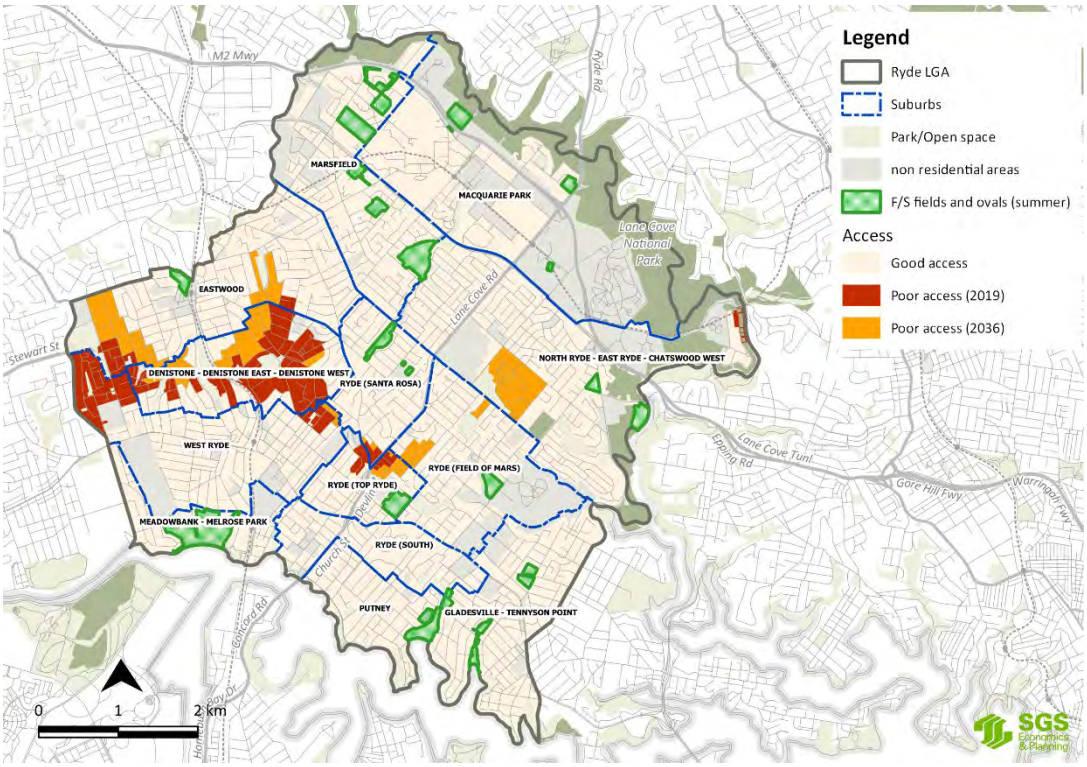
Full size outdoor field and oval

Full size outdoor fields and ovals are widely distributed across the City of Ryde, except for the western part of the LGA (Denistone East and West). Many of the full-size outdoor fields and ovals are recognised for their role in regional competitions, and in attracting residents from outside the LGA. Meadowbank Park, for example, is one of the largest facilities for soccer and netball in the region and is used for regional competitions.

Summer

During summer, access gaps for full size outdoor fields and ovals exist mostly in the western part of the City, primarily Denistone-Denistone East-Denistone West. This is due to the insufficient supply of full-size outdoor fields and ovals within this part of the LGA.

FIGURE 22: FULL-SIZE OUTDOOR FIELD AND OVAL: SUMMER ACCESS GAPS (2019 AND 2036)

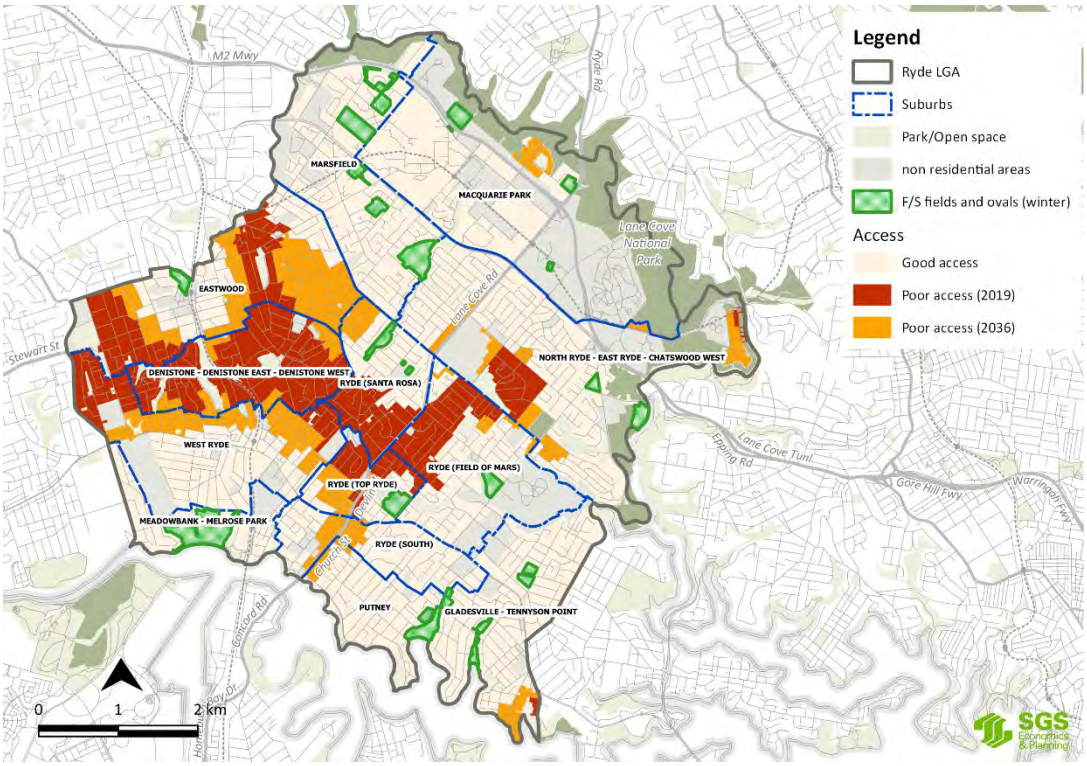


Source: SGS Economics and Planning

Winter

During winter, the supply gap extends across multiple suburbs based on existing facilities, indicating that many residents have restricted access to facilities. By 2036, the supply gap is forecast to extend into West Ryde and Putney.

FIGURE 23: FULL-SIZE OUTDOOR FIELD AND OVAL: WINTER ACCESS GAPS (2019 AND 2036)



Source: SGS Economics and Planning

Junior outdoor field and oval

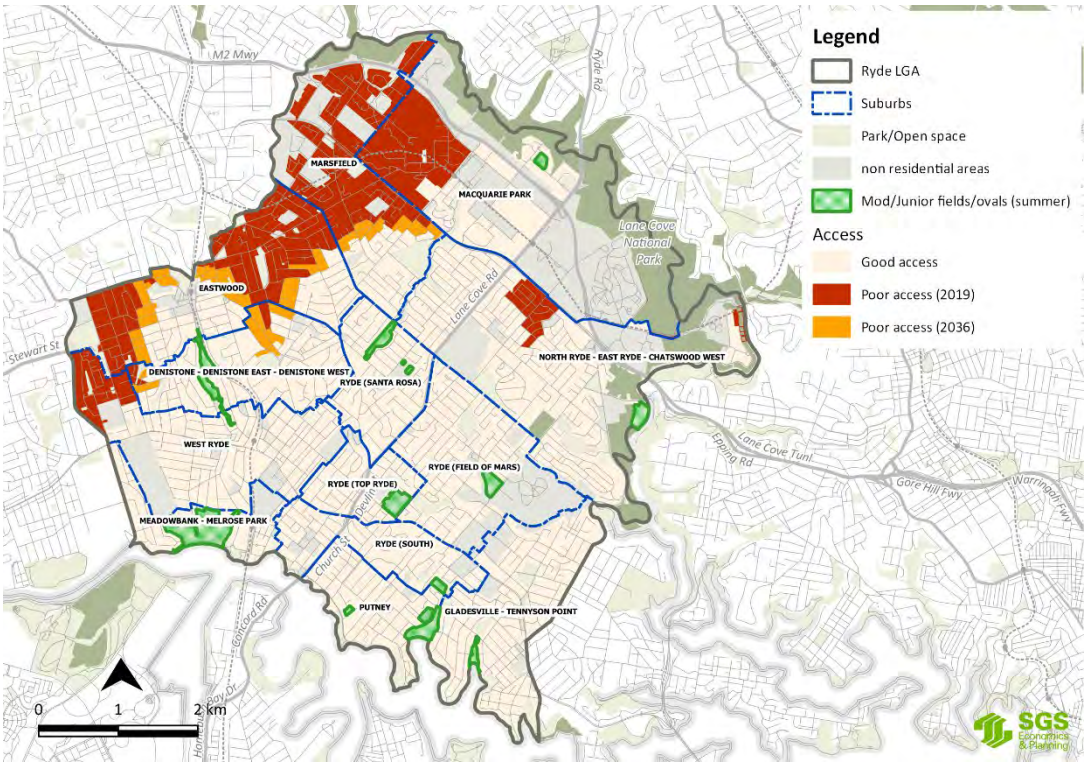
The City of Ryde is a regional centre for baseball, and has 10 junior/modified baseball diamonds. These facilities service a larger catchment than the Ryde LGA, and therefore much of the surplus is likely to be taken up by regional baseball competitions, especially during summer.

- It is also likely that some of the surplus in supply is being utilised by teams which would typically play on full sized fields and ovals, which are recognised to be undersupplied in winter.
- As with full-sized fields, some winter sports, in particular soccer where there is high participation, are also likely to have 'season creep' into summer with extended pre-seasons, and short summer competitions.
- Overall, there is ample supply of junior/modified outdoor fields and ovals. People are likely to be willing to travel to the facilities located in the south, however this is further than the threshold for access to outdoor fields and ovals.

Summer

- In summer, access is constrained in the north across Marsfield and Macquarie Park, where no junior outdoor fields or ovals exist. Access constraints also extend into Eastwood.

FIGURE 24: JUNIOR OUTDOOR FIELD AND OVAL SUMMER ACCESS GAPS (2019 AND 2036)

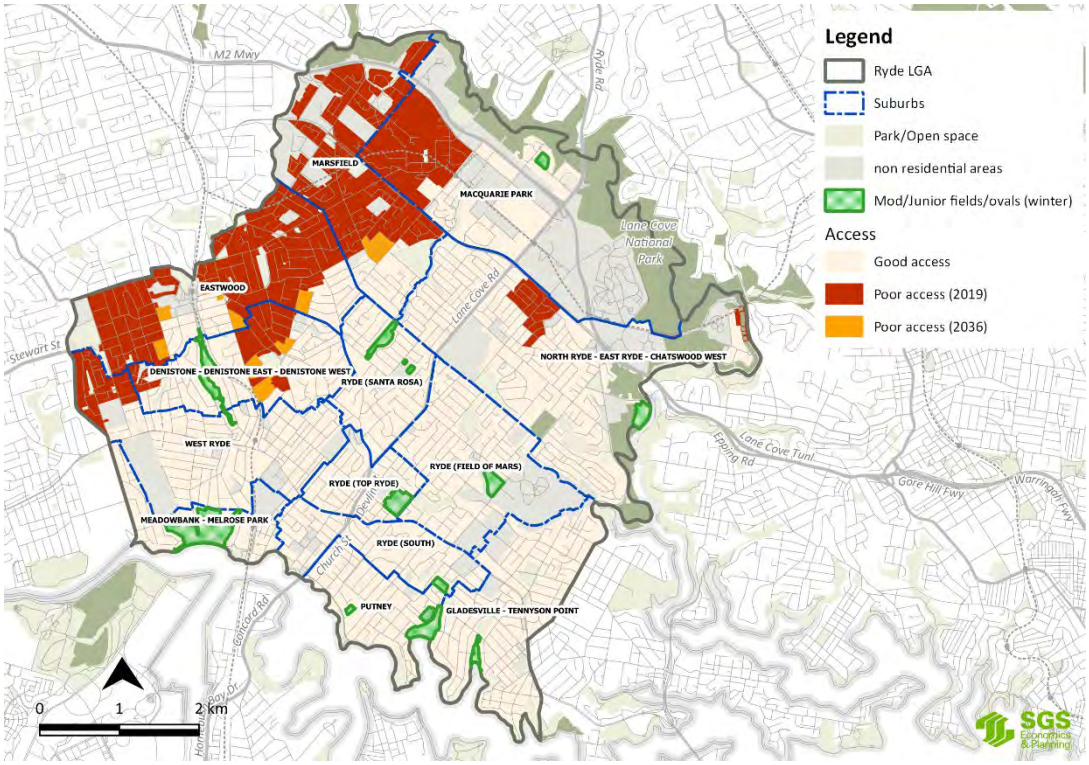


Source: SGS Economics and Planning

Winter

- In winter, access is constrained in the north in Marsfield and Macquarie Park, where no junior outdoor fields or ovals exist. Access constraints also extend into Eastwood.

FIGURE 25: JUNIOR OUTDOOR FIELD AND OVAL WINTER ACCESS GAPS (2019 AND 2036)



Source: SGS Economics and Planning

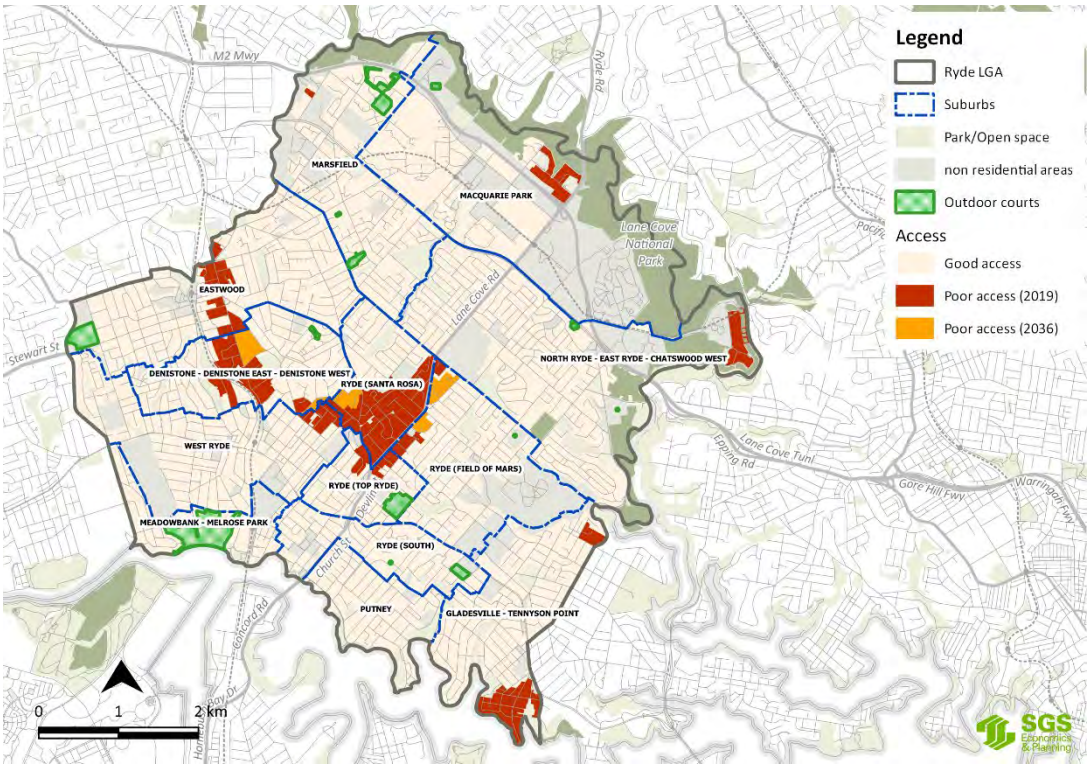
Outdoor court

The City of Ryde is recognised as a regional centre for netball, with the significant surplus mainly catering to users from outside the City as well as within.

Outdoor courts are concentrated in large facilities which accommodate multiple courts – for example the 28 netball courts at Meadowbank Park. Therefore, when looking at supply spatially, there are a number of areas that have limited access to outdoor courts. Ryde-Santa Rosa, Denistone-Denistone East, Eastwood, and Gladesville – Tennyson Point have poor access to outdoor courts.

It is important to note that the travel distance threshold for users to access outdoor courts is 1.5km. This is the cause of the supply gaps for outdoor courts. As with baseball, it may be reasonable to travel further than 1.5km to a regional level facility.

FIGURE 26: OUTDOOR COURT ALL YEAR ACCESS GAPS (2019 AND 2036)



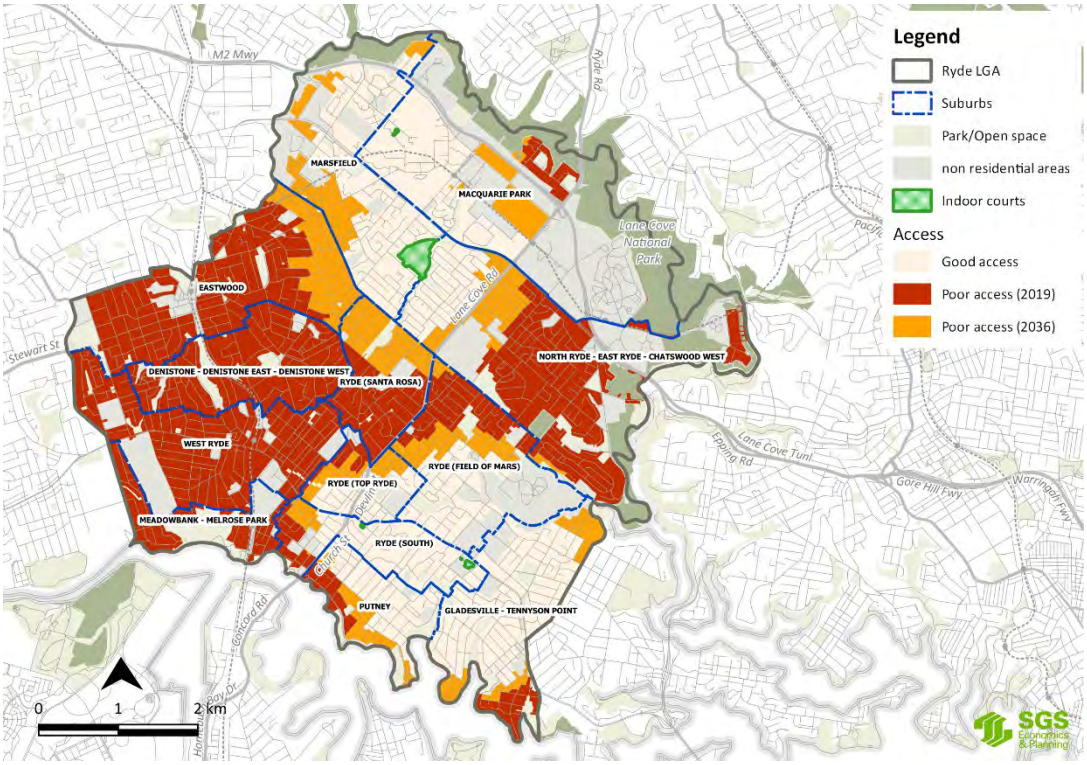
Source: SGS Economics and Planning

Indoor courts

The City of Ryde is a multicultural LGA, and studies indicate that futsal, volleyball, badminton and table tennis are popular amongst African, Asian and Middle Eastern communities in the LGA. This suggests that there could be greater than average Sydney demand for indoor facilities[17].

The existing scenario shows that the majority of existing and future undersupply occurs in the areas to the west of Santa Rosa.

FIGURE 27: INDOOR COURT ALL YEAR ACCESS GAPS (2019 AND 2036)



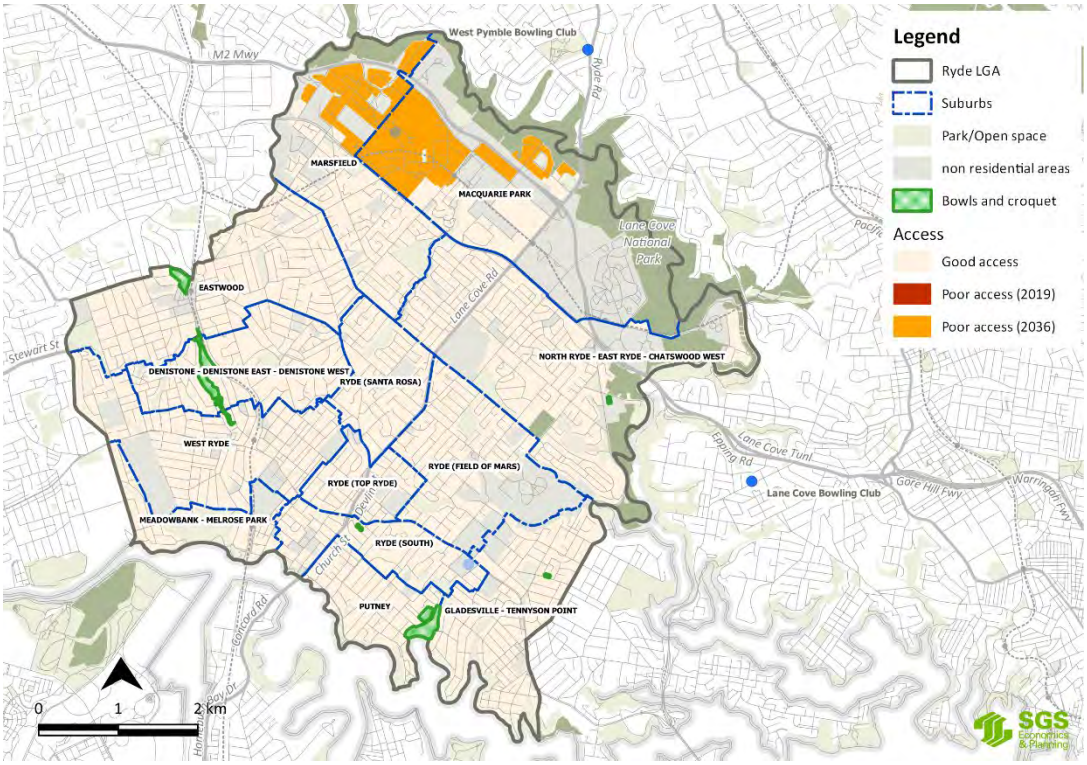
Source: SGS Economics and Planning

[17] Overall participation rates for Sydney were applied

Bowls and croquet

As illustrated in Figure 28, the northern end of the City of Ryde is expected to experience an undersupply in bowls and croquet in the long term *only if the bowling facilities in the City of Ryde are considered*. Neighbouring facilities located a short distance outside Ryde LGA (North Epping Bowling Club and West Pymble Bowling Club) may be able to meet this demand.

FIGURE 28: BOWLS AND CROQUET ALL YEAR ACCESS GAPS (2019 AND 2036)

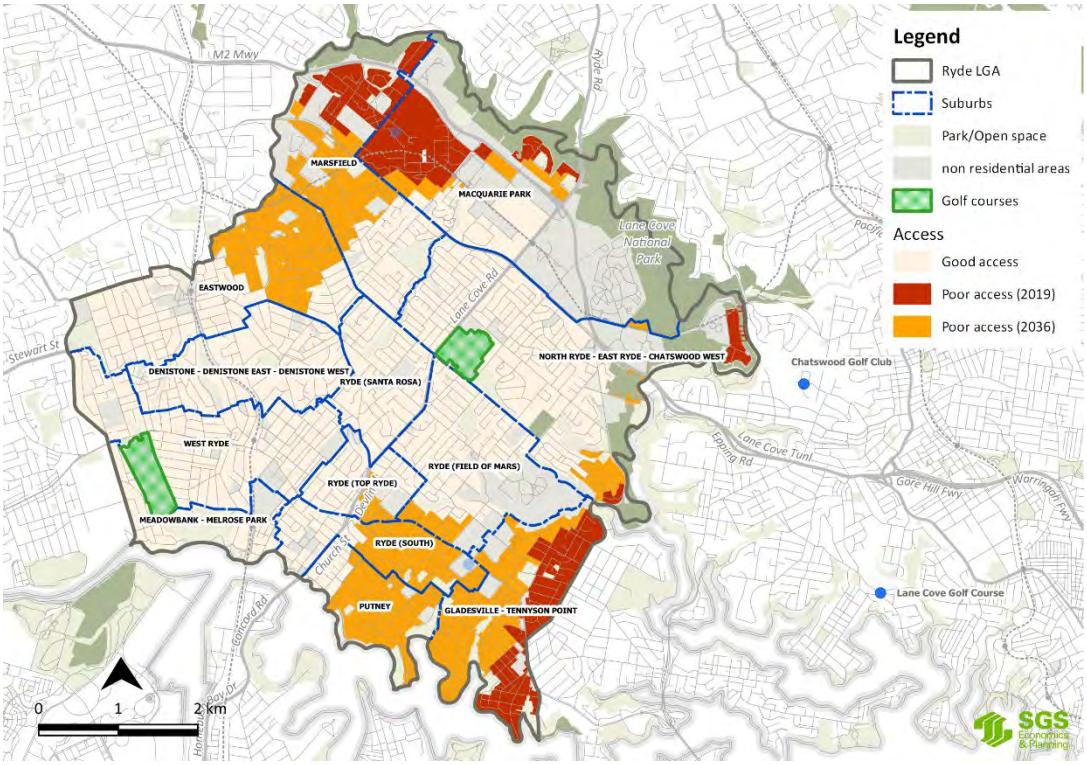


Source: SGS Economics and Planning

Golf courses

The areas where there is a spatial gap are in the north and the south of the LGA, including Marsfield, Macquarie Park, Eastwood, Ryde, Putney, and Gladesville, although some of the demand in these areas may be offset by golf courses in neighbouring LGA's such as the West Chatswood Golf Course.

FIGURE 29: GOLF COURSE ALL YEAR ACCESS GAPS (2019 AND 2036)



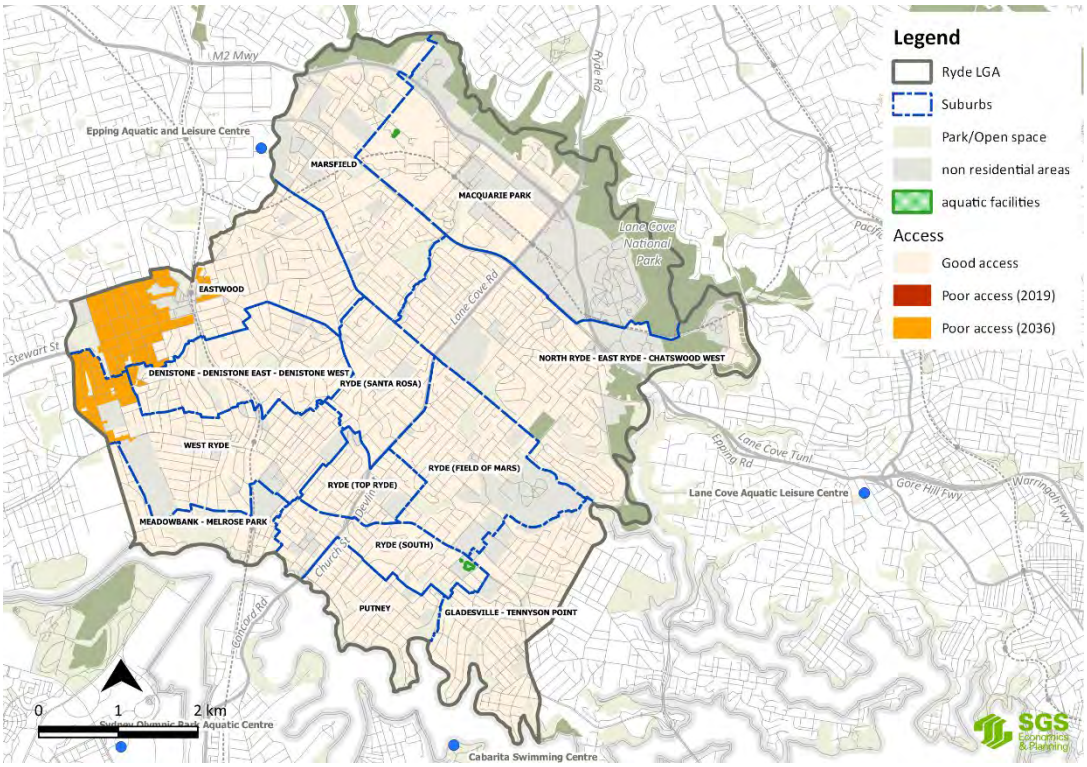
Source: SGS Economics and Planning

Swimming

Publicly accessible swimming and other aquatic recreation activities are provided at the Ryde Aquatic and Leisure Centre pools and the two pools (one outdoor and one indoor) at Macquarie University. The Next Generation Health and Lifestyle Club adjacent to the Ryde Aquatic and Leisure Centre is not included in this analysis as it is only available to members and is not publicly accessible.

Unmet demand is anticipated in Eastwood and West Ryde by 2036, which can potentially be fulfilled by surrounding aquatic facilities, such as Epping Aquatic and Leisure Centre located north-west of Ryde and the proposed Parramatta Aquatic Centre close to the Parramatta CBD.

FIGURE 30: SWIMMING ALL YEAR ACCESS GAPS (2019 AND 2036)



Source: SGS Economics and Planning

8.3 Summary of existing conditions

The key conclusions from this analysis are:

- There are a diversity of **open spaces** including national parks, foreshore and a reasonably well connected clear green grid. There are significant natural assets and proximity to major regional parks. There is significant provision of open space across the LGA, including several major open space reserves. There are however gaps in access to open space; some parts of the LGA do not have adequate provision but overall the Ryde LGA enjoys a relatively high level of access to open space.
- For **full size outdoor fields,** in summer, there is overall sufficient supply at an LGA level, however, access is poor in the western part of the City, primarily Denistone-Denistone East-Denistone West. In winter, there remains an overall spatial supply gap. This primarily affects Denistone-Denistone East-Denistone-West, Eastwood, Ryde (Santa Rosa), and Ryde (Top Ryde).
- **Junior outdoor fields and ovals** are, at an LGA level, adequately supplied however some residents in the north of the City will have to travel further to reach facilities (which are concentrated in the south). Given many of the junior fields and ovals are located within a regional facility, the propensity of people to travel to these higher order regional facilities and competitions means this is not of significant concern. There is also the potential to access full size fields. Over time, shifting sport onto facilities which allow greater throughput, like synthetic futsal courts and indoor courts could also provide additional capacity.
- The City of Ryde has significant provision of **outdoor courts** for tennis and netball, and these are used by local residents as well as people from outside of the LGA. This means that while there is, overall, an ample supply of outdoor courts, residents in Ryde-Santa Rosa, Denistone-Denistone East, Eastwood, and Gladesville – Tennyson Point have to travel further under both the current and 2036 scenarios. Balancing local, informal demand for outdoor tennis and netball courts with regional competitions is essential.
- As indicated in previous sections, there is a variation in the supply gap forecast by SGS and the *Indoor Sports Facilities Review* prepared by Otium Planning Group. Importantly, both the Otium report and this report both indicate a supply gap for indoor courts at 2036, despite the number of new indoor sports facilities in planning. Macquarie Park will create substantial demand for sports facilities by 2036, and **indoor courts** could be incorporated into those development precincts.
- There are opportunities to consider repurposing some Council owned **lawn bowls** facilities for use by other sports which are experiencing a gap in provision. This could include repurposing, adaptive re-use opportunities in the long term for other sport and recreation.
- While there is likely to be demand for an additional **golf course**, this demand is anticipated to be met by facilities outside of the City of Ryde. Golf courses occupy large land areas, some of which may be underutilised. There are opportunities to consider increasing capacity at golf courses via changes to available game formats, however this will be a decision for the private operators who manage the courses. Areas in the north of the City have access to the North Shore golf courses. Any redevelopment of golf courses to improve commercial viability must ensure 18 holes are preserved due to the growing undersupply.
- Modelling for **aquatic centres** is particularly complex as they are used for a range of purposes, and by a range of users. As this makes it difficult to estimate overall capacity, further work is required to identify the scale and nature of the additional facilities which are required to meet the community's needs. This preliminary analysis indicates that this planning exercise should commence around 2025, as there are currently poorly served areas, and these are projected to increase.

Table 30 provides a summary of the gaps in supply and access of existing open space and recreation facilities.

TABLE 30: GAPS IN SUPPLY AND ACCESS BASED ON EXISTING OPEN SPACE AND RECREATION FACILITY PROVISION

Current gaps in supply and access	
Poor open space access	Areas with gaps in access to open space within 400m - all suburbs in Ryde have areas where there is no access within 400m. Suburbs with areas without access within 500m of open space should be prioritised for open space acquisitions and/or enhancements, and include: ▪ Gladesville – Tennyson Point ▪ Marsfield ▪ North Ryde – East Ryde - Chatswood West ▪ Putney ▪ Ryde (Top Ryde) ▪ Ryde (Santa Rosa) ▪ West Ryde
Regional corridors	Many local and potential corridors in the *Ryde Biodiversity Plan* (2016) have not been realised
Sport capacity	Indoor courts have an existing undersupply of 9 facilities which will increase to 14 facilities (or 12 according to the Otium Planning Group study) by 2036, if no new facilities are provided
Sport capacity	Full size fields and ovals will have an undersupply of 13 facilities by 2036
Sport capacity	Golf will have an undersupply of 1 facility by 2036
Sport capacity	Swimming will have an undersupply of 697$m^2$of pool space by 2036
Sport capacity	Junior/modified outdoor fields/ovals and outdoor courts have an existing and future surplus based on the assumptions used in this report. However, a number of these are located within larger regional facilities, so some of this excess supply may be used by visitors from outside the LGA. The spatial distribution of these facilities also means there are some gaps in local access.

Source: SGS Economics and Planning

9. STRATEGY

The vision and objectives for the City's open space and sport and recreation facilities provide the framework for the proposed Strategy to guide the planning of open space and recreation in the City of Ryde for the next 20 years.

- The **vision** provides an overarching statement regarding the desired future open space in the City of Ryde.
- The **objectives** outline what is to be achieved.
- The **strategies** identify how to meet the objectives.
- The **actions** are the specific steps that need to be taken.

The strategies also form the basis for the evaluation framework, which helps identify the priority projects. KPI's have been identified as part of a monitoring framework.

The Strategy is organised around the five outcomes used in the *2012 Integrated Open Space Plan*:

- Ample and Accessible Open Space and recreation.
- Shared and enjoyed by all.
- Founded on a healthy natural environment.
- Conserving our rich history, culture and local character.
- Managed sustainably now and for future generations.

9.1 Vision

The City of Ryde's network of recreation facilities and open space will contribute to the community's quality of life, health and wellbeing and will support the LGA's cultural heritage and enable a resilient future City.

9.2 Objectives and strategies

The objectives of this Strategy relate specifically to the *location, scale and role* of recreation and open space needs.

Ample and Accessible Open Space and Recreation

Council has an important role in providing a network of open space and recreation that responds to the current and future community's needs for recreation and open space opportunities.

The objectives relating to this are:

- Ensure an appropriate quantum of open space and recreation facilities.
- Ensure appropriate levels of access to open space and recreation facilities.
- Consider the regional role the City of Ryde plays in providing access to recreation facilities.

The strategies to deliver this are:

- Prioritise increasing the provision of open space in areas where households do not currently have access to open space of greater than 1,500m², within 200/400m,
- In higher density areas such as town centres, prioritise providing high quality public and civic spaces,
- Improve connections to and between open spaces, including through providing new through-block links in areas with poor access to open space, and
- Plan for recreation facilities in locations which provide equitable access.

Shared and enjoyed by all

Providing safe opportunities for everyone to engage in a range of recreation activities is important for physical and mental wellbeing. Council's role in this includes providing diverse spaces, as well as considering the needs of specific groups in the design of facilities.

The objectives relating to this are:

- Ensure design and location of open space and recreation facilities encourages participation for diverse users, including CALD groups, older people, youth and females.
- Provide spaces which allow for a range of uses, including formal and informal recreation.

The strategies to deliver this are:

- Consider the needs and preferences of specific groups in the design and location of recreation facilities.
- Actively plan for formal and informal recreation and use of open space.

Founded on a healthy natural environment

The City of Ryde's topography, geology, native flora and fauna, creek, river and bushland are important elements of its natural values. Preserving these, and mitigating and adapting to climate change are important considerations in the planning and management of the recreation and open space network.

The objectives relating to this are:

- Promote the City of Ryde's distinctive natural assets through open space and recreation facilities including reinforcing the green grid,
- Contribute to mitigation and adaptation of climate change through planning, design and operation of open space and recreation facilities, and
- Encourage active transport use, including to access open space.

The strategies to achieve the objectives are:

- Improve connections and links with the Parramatta River foreshore,
- Develop corridors and spaces which link existing open spaces, and link to regional open spaces/ access paths, and increase tree canopy to provide shade and relief from heat through creation of cooler microclimate,
- Encourage active transport by providing attractive and comfortable paths to walk and cycle,
- Provide opportunities for indoor recreation, and
- Consider the micro climate, permeability and water required to maintain recreation playing surfaces.

Conserving our rich history, culture and local character

The City of Ryde's open spaces and recreation facilities play a role in conserving the area's character.

The objectives related to this are:

- Consider history, culture and local character in the location of open space and recreation facilities, and
- Reflect cultural values in the design and development of open space and recreation facilities.

The strategies to achieve the objectives are:

- Ensure local history, culture and character is a key element in the design and decision making regarding the location of new and expanded open space and recreation facilities.

Managed sustainably now and for future generations

It is important that the planning, design and delivery of open space and recreation facilities make the most of Council's resources, considers the life cycle of assets, leverages assets within the City of Ryde, and involves the community in planning and design.

The objectives related to this are:

- Conserving energy and resources and optimising life cycles managing assets to a financially and operationally sustainable model,
- Designing to high standards and quality with innovative practices,
- Actively involving the community in planning and design,
- Fostering partnerships with other parties to extend recreation opportunities,
- Operating under a structured management and maintenance plan and program,
- Consider various options to address undersupply or access gaps, to optimise the use of council resources, and
- Engage with the community regarding planning and design of open space and recreation.

The strategies to achieve the objectives are:

- Prioritise investment in existing facilities to increase their capacity, rather than new facilities,
- Where new facilities are required, design them to maximise future adaptability for use with other sports,
- Leverage non-Council owned and private spaces for community use including schools, Macquarie University and privately owned facilities through joint use agreements to increase capacity and choices,
- Investigate options to enable use over broader number of hours, or to provide a wider range of activities in existing facilities to increase capacity and choices, and
- Engage with users, residents and community groups to help inform the design, planning and management of open space with particular emphasis on diverse communities.

10. PLANNED PROJECTS ANALYSIS

A range of projects have been planned by Council and identified in the LEP, LSPS and various masterplans. This Section details these planned projects and their broad impacts on open space capacity and accessibility.

10.1 Planned projects

Planned projects have been identified based on Council plans and strategies, effectively forming the initial pipeline of future facility supply. Table 31 and Table 32 identify the projects and the key access or supply issue that they are addressing.

Open Space Network

TABLE 31: PLANNED PROJECTS – OPEN SPACE

Project	LEP/ LSPS	Description	Issue addressed
Open Space projects			
Macquarie Park – Catherine Hamlin Park - *completed*	LEP	7,000m²	Poor supply of and access to open space in Macquarie Park
Blenheim Park - *completed*	LEP	1,984m²	Poor access to open space in North Ryde – East Ryde – Chatswood West
Lachlan's Line - *completed*	LEP	16,267m² including 1,930m² for passive recreation	Poor supply of and access to open space in Macquarie Park
Ryde Park	LEP	524m²	Poor supply of and access to open space in Ryde (Top Ryde)
Parramatta River foreshore in Melrose Park	LEP	4,466m²	Poor access to open space in Meadowbank – Melrose Park
County Road Corridor	LEP	4,597m²	Poor supply of and access to open space in Eastwood
Terry's Creek	LEP	1,332m²	Poor supply of and access to open space in Eastwood Local Biodiversity Corridor (See City of Ryde Biodiversity Plan)
Ryde Park expansion	LSPS	8,030m²	Poor supply of and access to open space in Ryde (Top Ryde)
Expansion of Charity Creek Cascades	LSPS	990m² + 1,703m²	Poor supply of and access to open space in West Ryde
Eastwood Town Centre	LSPS	400m²	Poor supply of and access to open space in Eastwood
Glen Reserve expansion	LSPS	1,612m²	Poor supply of and access to open space in Eastwood
Rowe St East Eastwood	LEP	763m²	Poor supply of and access to open space in Eastwood

Project	LEP/ LSPS	Description	Issue addressed
Gladesville town centre	LSPS	1,170m²	Poor supply of and access to open space in Gladesville – Tennyson Point
Westminster Park	LSPS	616m²	Poor supply of and access to open space in Gladesville – Tennyson Point
Meadowbank Primary school site	LSPS	11, 970m²	Poor access to open space in Meadowbank – Melrose Park
West Ryde new open space	LSPS	7,227m²	Poor supply of and access to open space in West Ryde
Expansion of Lions Park	LSPS	1,929m²	Poor supply of and access to open space in West Ryde
Expansion of Carrara Reserve	LSPS	2,038m²	Poor supply of and access to open space in West Ryde
New connection into Blenheim Park	LSPS	613m²	Poor access to open space in North Ryde – East Ryde – Chatswood West
North Ryde Hospital	LSPS	10,000m²	Poor supply of and access to open space in North Ryde – East Ryde – Chatswood West

The open space network projects total approximately 28.06 hectares.

Sport and recreation facilities

A series of new sport and recreation facility projects are planned. As with open space, they are drawn from existing Council plans and strategies and are detailed in Table 32. Table 54 in the appendix provides additional detail regarding the additional capacity for the planned projects.

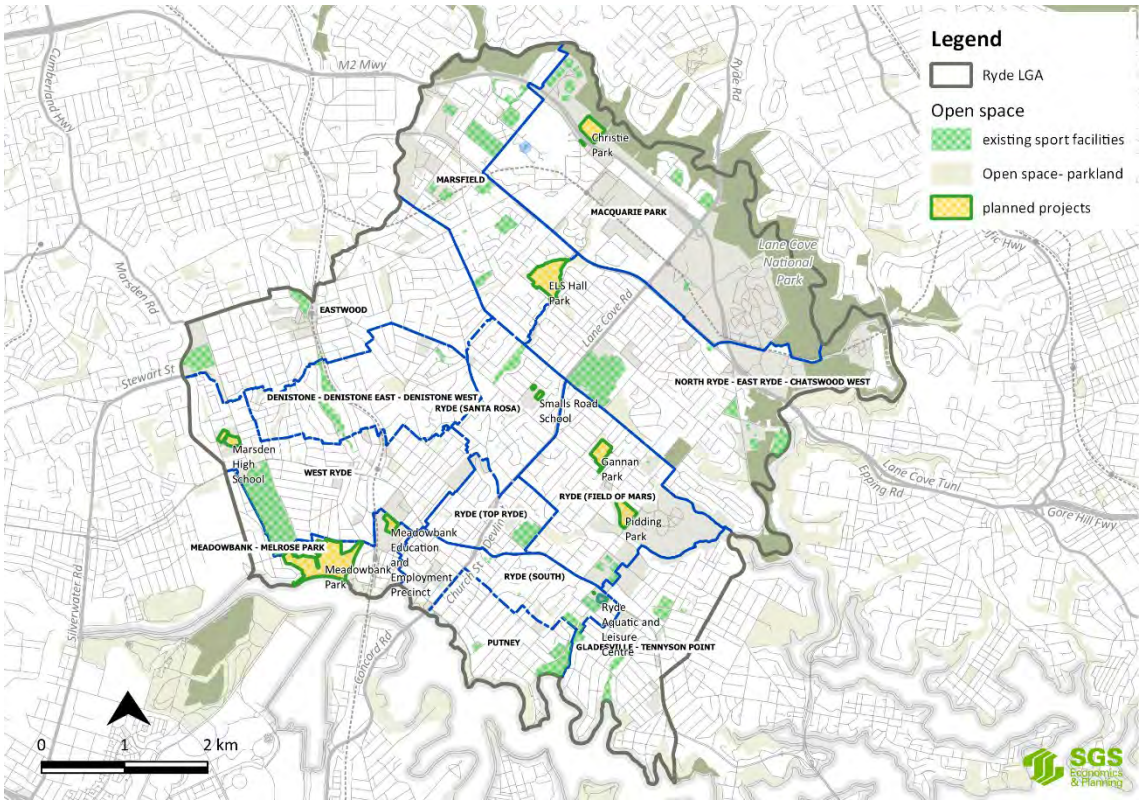
TABLE 32: PLANNED PROJECTS - RECREATION

Project	Description	Issue addressed
Gannan Park	1 x full size field/oval 1 x junior/mod field/oval	Responds to gap in full size field and oval
Meadowbank Park	3 x full size field or oval Upgrade of LH Waud Oval to Synthetic 3 x Junior/mod fields/ovals 1 x outdoor court 28 outdoor courts transferred to Marsden High School	Responds to gap in full size field and oval Responds to regional demand for Junior/mod fields/ovals
ELS Hall Park	2 x indoor courts	Responds to existing and forecast gap in indoor courts
Marsden High School	4 x indoor courts 28 outdoor courts transferred from Meadowbank Park	Responds to existing and forecast gap in indoor courts
Meadowbank Education and Employment Precinct	1 x indoor court	Responds to existing and forecast gap in indoor courts
RALC	2 x indoor court	Responds to existing and forecast gap in indoor courts

Project	Description	Issue addressed
Christie Park	4 x outdoor futsal courts 1 x full size field or oval (synthetic)	Responds to gap in full size field and oval
Pidding Park	1 x full size field/oval 3 x junior/mod field/oval	Responds to gap in full size field and oval Responds to demand for junior/mod fields/ovals
Smalls Road Upper (school)	Conversion to synthetic	Responds to gap in full size field and oval
Lighting upgrades	Upgrade all full size field/ovals to have sports field lighting Upgrade all junior field/ovals to have sports field lighting	Responds to gap in full size field and oval Responds to demand for junior/mod fields/ovals

The location of these planned projects is identified in Figure 31.

FIGURE 31: PLANNED PROJECTS: SPORT AND RECREATION PROJECTS



Source: SGS Economics and Planning, 2020. Nb. Facilities where only lighting upgrades are planned are not shown on this map.

Full implementation of the planned projects will result in a significant increase in the number of publicly accessible sport and recreation facilities within the City of Ryde, as summarised below.

TABLE 33: SUMMARY RECREATION FACILITIES INCLUDING PLANNED PROJECTS

Facility type	Total facilities (existing)	Total facilities including planned projects
Full size outdoor field and ovals	38	44
Junior/mod outdoor field and ovals	19	26
Outdoor courts	108	113
Indoor courts	6	15
Bowls and croquet	13	13
Golf courses	2	2
Swimming[18]	3,835m^2	3,835m^2

Potential impacts of the planned projects

The impact of the planned projects on the overall **capacity** and **accessibility** of the open space network and on specific sport and recreation facilities has been assessed, with the outcomes detailed below.

10.2 Impact of planned projects – open space network

Capacity

The open space projects planned in the LEP and the LSPS will provide an additional 28.06 hectares of open space. This means that the amount of open space per 1,000 people in 2036 will be 2.21 hectares, compared to the forecast ratio of 2.04 hectares which would occur without the planned projects, but well below the planning benchmark of 2.83 hectares.

TABLE 34: OPEN SPACE PROVISION WITH PLANNED PROJECTS – 2036

Suburb	Open space including planned projects			
	Planned 2019-2036 Ha	Total 2036 Ha	Ha per 1,000 people	
			Ha	Change 2019-2036 (%)
Denistone - Denistone East - Denistone West	0.65	23.75	2.90	-9%
Eastwood	4.17	31.19	1.74	-9%
Gladesville - Tennyson Point	0.12	19.69	1.41	-19%
Macquarie Park	4.36	19.72	0.63	-65%
Marsfield	7.43	69.72	4.70	5%
Meadowbank - Melrose Park	0.36	31.73	3.64	-27%
North Ryde - East Ryde - Chatswood West	3.79	44.56	2.41	-16%
Putney	-	25.22	5.72	-6%
Ryde (Field of Mars)	-	70.44	9.49	-9%
Ryde (Santa Rosa)	0.22	8.21	1.21	-4%
Ryde (South)	3.40	14.36	0.99	-32%

[18] Comprises 3,835m^2 of swimming space

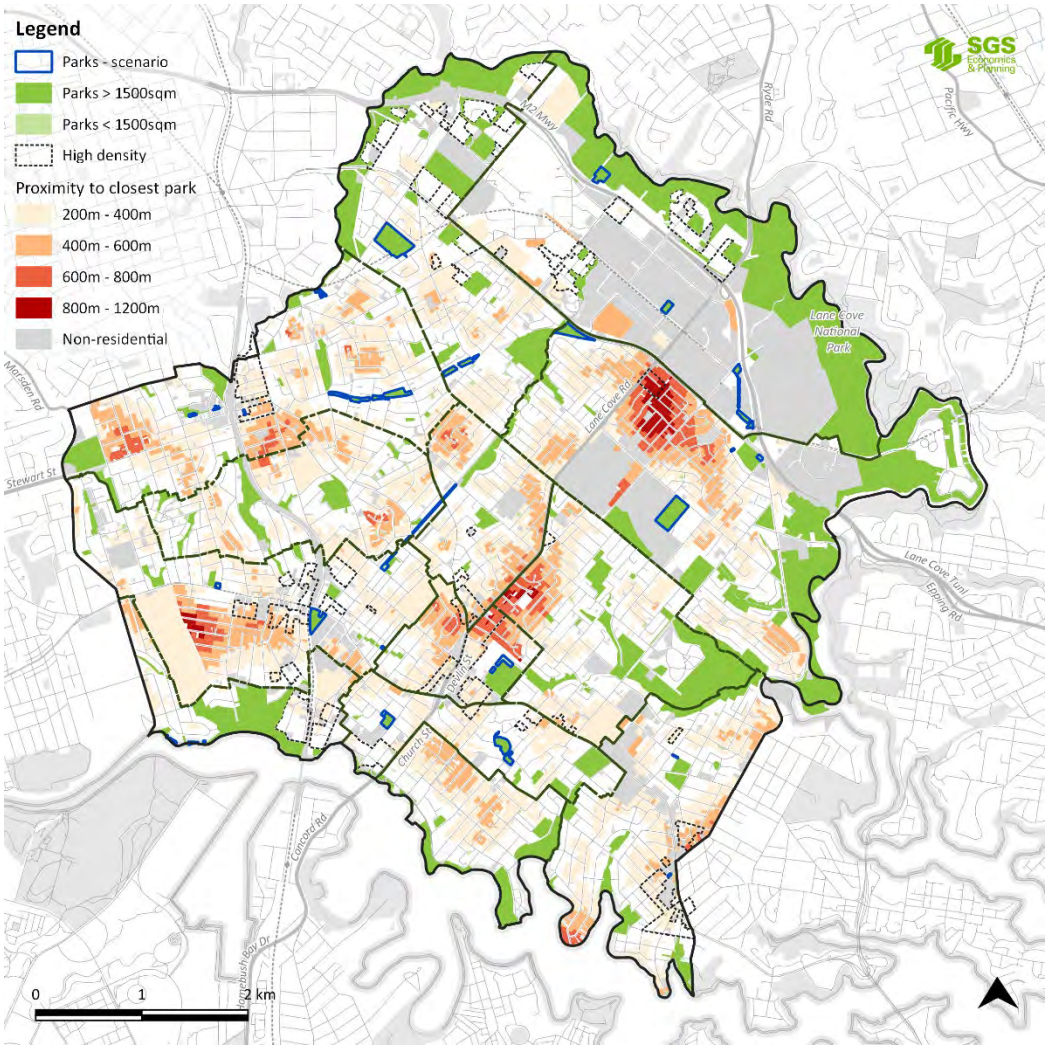
Suburb	Open space including planned projects			
	Planned 2019-2036 Ha	Total 2036 Ha	Ha per 1,000 people	
			Ha	Change 2019-2036 (%)
Ryde (Top Ryde)	0.86	7.57	0.90	-5%
West Ryde	2.70	12.57	0.76	9%
City of Ryde Total	**28.06**	**378.71**	**2.21**	**-24%**

Accessibility

Planned recreation projects will make a significant difference to open space accessibility. In particular, the acquisitions will substantially improve access in Eastwood and Denistone East – Denistone West- Denistone.

Areas within Ryde (Santa Rosa), West Ryde, North Ryde-East Ryde -Chatswood West will continue to have large areas with no open space within 400 metres, as illustrated in Figure 32.

FIGURE 32: PLANNED PROJECTS: OPEN SPACE ACCESSIBILITY



Source: SGS Economics and Planning, 2020

This is also indicated in Table 35, which shows the proportion of households within each suburb which will have access to an open space within 400m walking distance, noting Council aspiration is to have 95% of households within 400m, and 95% of high density households within 200m.

This indicates that the planned projects have a significant impact on accessibility in some areas (North Ryde – East Ryde – Chatswood West, Ryde South, West Ryde). Some areas experience a modest increase (Eastwood, Macquarie Park, Marsfield).

This analysis reinforces the importance of planning for open space in appropriate locations; there is not a direct correlation between the quantum of additional open space (refer Table 34) and the impact on accessibility.

TABLE 35: IMPACT OF PLANNED PROJECTS ON ACCESS TO OPEN SPACE

Suburb	Percentage of households within 400m of open space	
	Existing	**With planned projects**
Denistone – Denistone East – Denistone West	77%	79%
Eastwood	73%	76%
Gladesville – Tennyson Point	65%	66%
Macquarie Park	37%	N/A
Marsfield	70%	73%
Meadowbank – Melrose Park	84%	84%
North Ryde – East Ryde – Chatswood West	60%	66%
Putney	70%	71%
Ryde (Field of Mars)	74%	74%
Ryde (Santa Rosa)	68%	70%
Ryde (South)	80%	91%
Ryde (Top Ryde)	61%	61%
West Ryde	71%	77%
City of Ryde total	**68%**	**71%**

Source: SGS Economics and Planning.

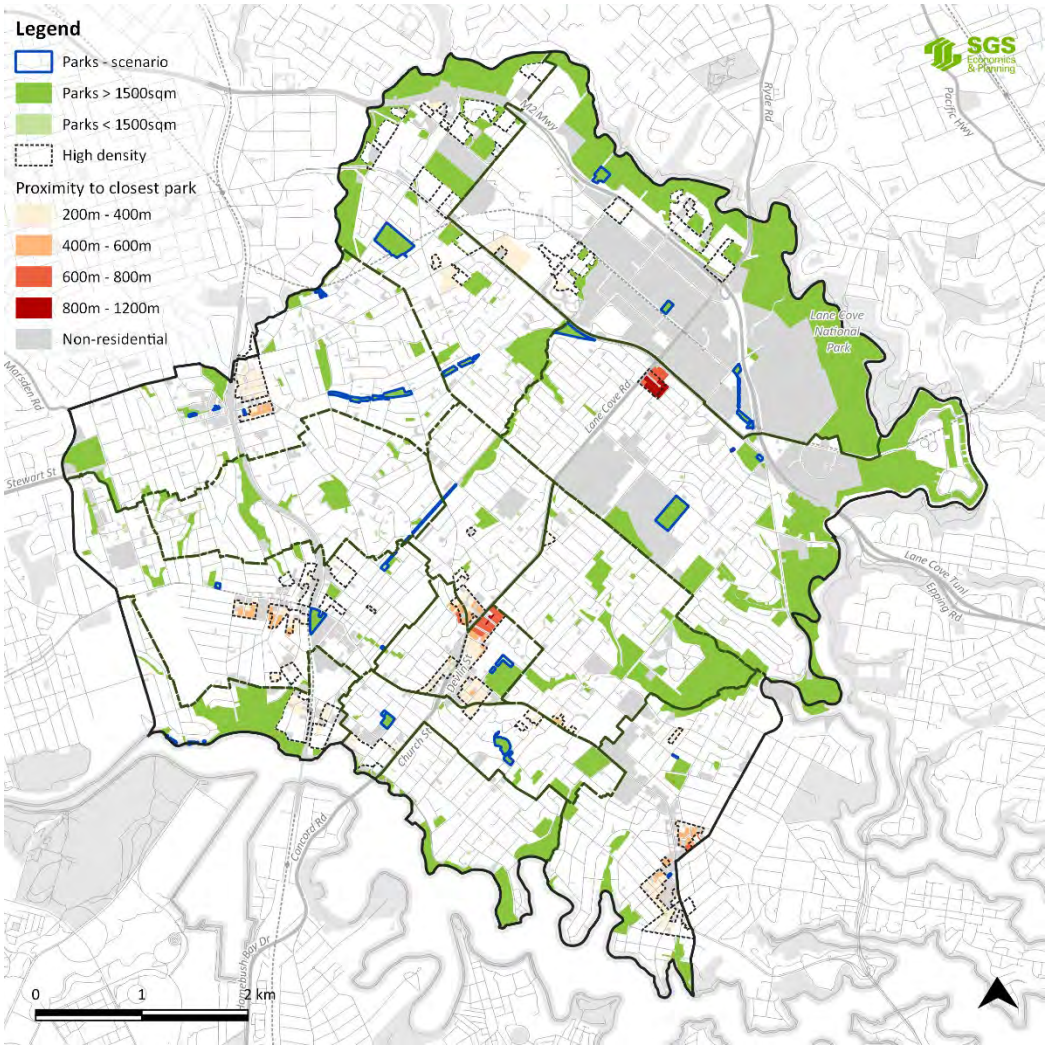
* This table reports on all households and does not distinguish houses in higher density areas when calculating the proportion within 200m.

Impact on high density areas

There are few new open space acquisitions planned by Council that will make a significant difference to open space accessibility for high density areas. Access is not improved for West Ryde, Eastwood or Top Ryde town centres.

This indicates that further open space acquisitions are ideally concentrated in town centres and planned precincts such as Macquarie Park, Meadowbank Education and Employment Precinct.

FIGURE 33: SCENARIO 2: OPEN SPACE ACCESSIBILITY HIGH DENSITY



Source: SGS Economics and Planning

10.3 Impact of planned projects – recreation facilities overview

Capacity

As summarised in Section 10.1 above, there are 27 planned sport and recreation facility enhancement projects, as summarised in Table 36.

These projects will improve capacity for outdoor fields and ovals, outdoor courts and indoor courts. The specific details of the capacity improvements are summarised in Sections 10.4 to 10.6, below.

The capacity of bowls and croquet facilities and golf courses will remain unchanged as there are no enhancement projects planned for these facilities.

TABLE 36: SUMMARY PLANNED RECREATION FACILITIES SPORTS

Facility type	Planned facilities	Total facilities including planned projects	Gap/ surplus at 2036 (# facilities)
Full size outdoor field and oval – summer*	6	44	+ 18
Full size outdoor field and oval – winter*			- 7
Junior outdoor field and oval – summer	7	26	+ 19
Junior outdoor field and oval – winter			+ 13
Outdoor court	5	113	+ 16
Indoor court	9	15	- 5
Bowls & Croquet	0	13	+ 5
Golf	0	2	- 1
Swimming	0	3,835m²	- 697m²

Source: SGS Economics and Planning 2020 * Improvements are also planned for some existing facilities which will increase the capacity of the network, but are not reflected in an increase in the number of facilities.

Accessibility

The planned sport and recreation facility enhancement projects will also improve access to sports facilities. This is illustrated for those components for which there are planned projects – i.e. outdoor fields and ovals, outdoor courts and indoor courts – in Sections 10.4 to 10.6, below.

10.4 Impact of planned projects – outdoor fields & ovals

Capacity - full size field and oval

The planned projects will reduce the forecast 2036 facility gap or shortfall from 13 to 7 facilities, as a result of the proposed facility upgrades in Meadowbank Park, Gannan Park, Pidding Park and Christie Park, as follows:

- 1 additional full size outdoor field/ oval at Gannan Park
- 3 additional full size outdoor field/ ovals at Meadowbank Park
- 1 additional full size outdoor field/ oval at Pidding Park
- 1 additional full size outdoor synthetic field/ oval at Christie Park
- Upgrade of LH Waud Oval to synthetic
- Upgrade of Smalls Rd Upper to synthetic
- Upgrade full size field/ovals so that all facilities have lighting.

Floodlighting of currently unlit fields/ovals and the synthetic surfacing of facilities (2 existing and one proposed facility) will increase the capacity of those facilities. The benefits (in terms of increased user hours) will, however, mainly accrue to mid-week evening use and therefore to training, given most competitions occur during the day on weekends and many fields are already at capacity over these peak times. Synthetic surfacing can, in some cases, facilitate some increased weekend use, particularly during wet weather periods.

Increased capacity gains for competition can therefore generally only be achieved through additional fields.

Accordingly, despite the substantial benefits for mid-week training provided by the lighting projects and greater flexibility for weekend use provided by the synthetic surface projects, the facility shortfall will still be around 7 facilities following implementation of the above projects given that most sports will continue to schedule competitions during weekend.

Access - full size field and oval

The planned projects – six new fields and facility upgrades – will also improve access (i.e. travel distance) to full size fields and ovals, as summarised below for the summer and winter seasons, respectively.

Summer

- Overall surplus of facilities with planned projects.
- Despite the overall Citywide surplus of facilities, both currently and towards 2036, the western part of the City of Ryde, primarily Denistone-Denistone East-Denistone West, is less well served due to travel distances to existing and proposed facilities.
- However, there is a slight improvement in access from the planned projects as illustrated in Figure 35.

FIGURE 34: FULL-SIZE OUTDOOR FIELD AND OVAL SUMMER ACCESS GAPS (2019 AND 2036)

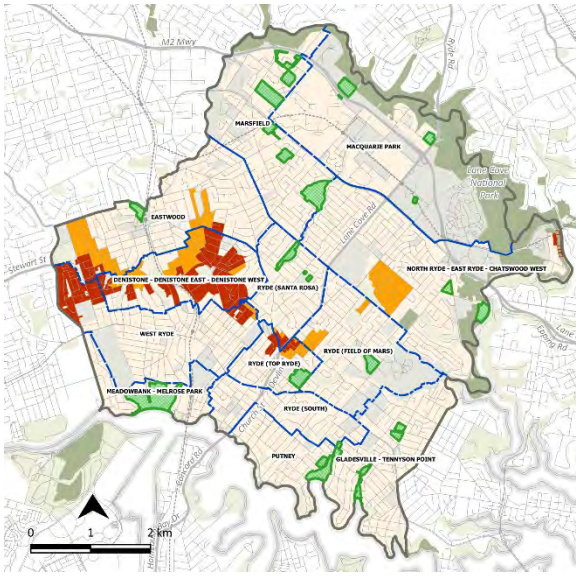
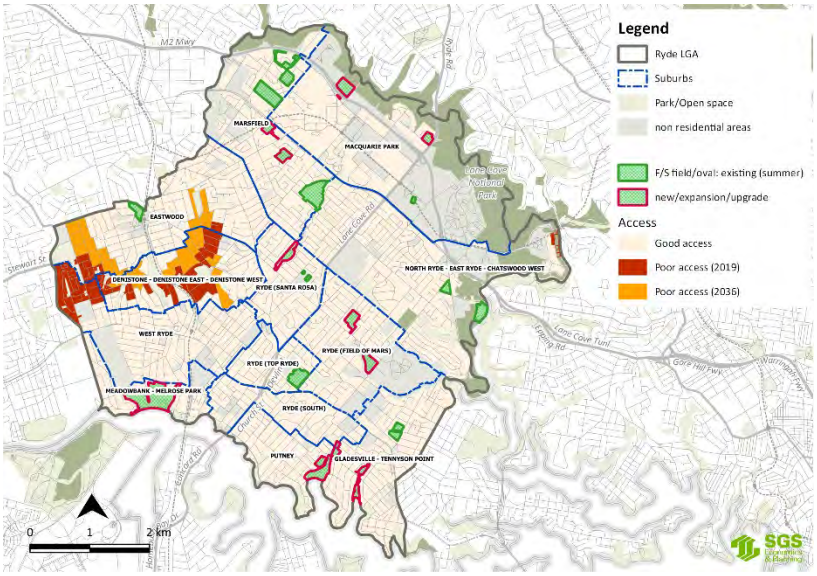


FIGURE 35: FULL-SIZE OUTDOOR FIELD AND OVAL SUMMER ACCESS GAPS (2019 AND 2036) WITH PLANNED PROJECTS



Source: SGS Economics and Planning

Winter

- Supply gap of 7 facilities projected for 2036, even with full implementation of the additional 6 planned facilities – with access gaps concentrated in the West Ryde-Denistone- Eastwood and East Ryde precincts, as illustrated in Figure 36.
- Supply gaps reduce significantly with planned projects, and are more confined to a smaller area to the west of the City, as illustrated in Figure 37.

FIGURE 36: FULL SIZE OUTDOOR FIELD AND OVAL WINTER ACCESS GAPS (2019 AND 2036)

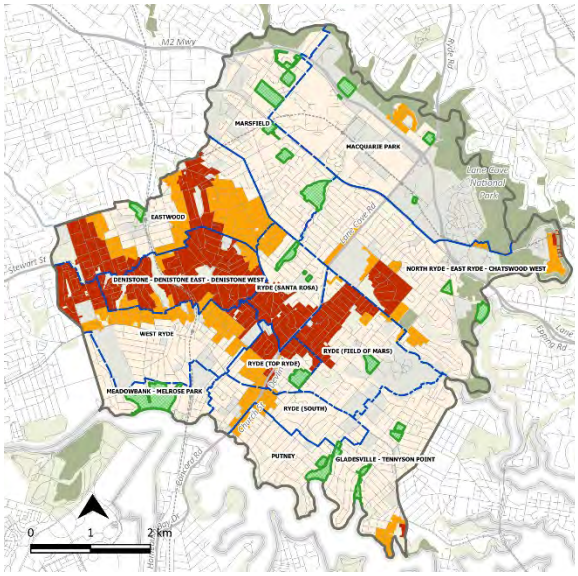
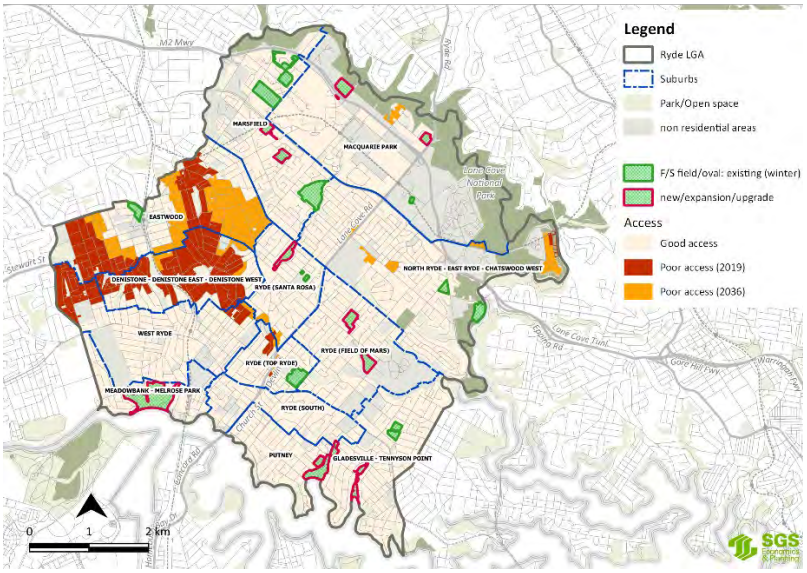


FIGURE 37: FULL SIZE OUTDOOR FIELD AND OVAL WINTER ACCESS GAPS (2019 AND 2036) WITH PLANNED PROJECTS



Source: SGS Economics and Planning

Capacity - junior outdoor field and oval

The planned projects will ensure adequacy of supply until 2036, as a result of proposed facility upgrades in Meadowbank Park, Gannan Park, Pidding Park, as follows:

- 1 additional junior/mod outdoor field/ oval at Gannan Park
- 3 additional junior/mod outdoor field/ oval at Meadowbank Park
- 3 additional junior/mod outdoor field/ oval at Pidding Park
- Upgrade junior field/ outdoor field/ovals so that all facilities have lighting.

The overall supply is greater than demand in both winter and summer. However much of this 'surplus' is likely to be taken up by baseball users from the broader catchment and teams that would typically play on full sized fields and ovals, particularly during winter, and by informal users.

Access – junior outdoor field and oval

- The planned projects – seven new fields and facility upgrades – do not improve access (i.e. travel distance) significantly as they are located beyond the travel time threshold for areas currently experiencing poorer access, as illustrated in Figure 38 and Figure 39.
- Given that overall there is ample supply, it is likely that people will travel to the facilities located in the south.

FIGURE 38: JUNIOR OUTDOOR FIELD AND OVAL SUMMER ACCESS GAPS (2019 AND 2036)

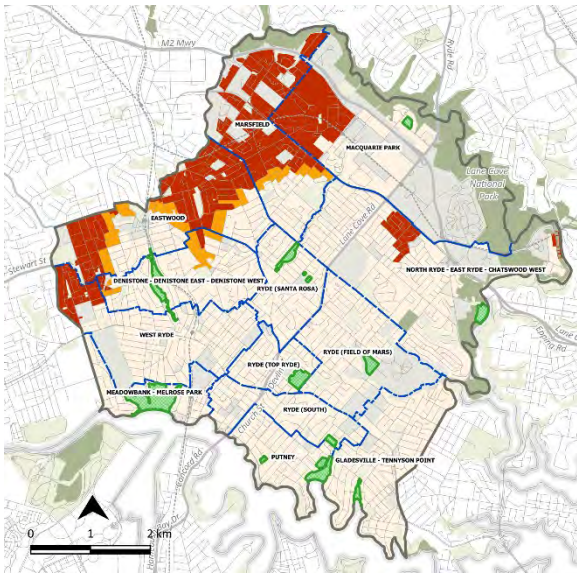
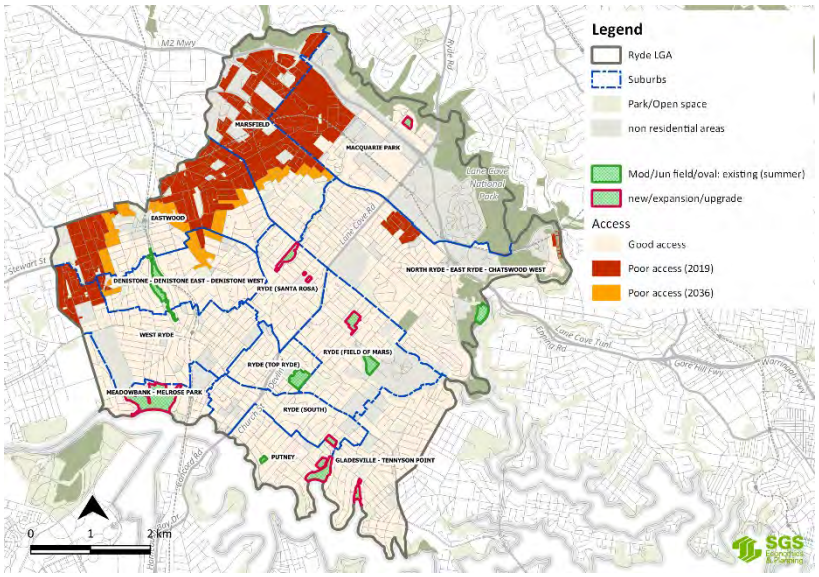


FIGURE 39: JUNIOR OUTDOOR FIELD AND OVAL SUMMER ACCESS GAPS (2019 AND 2036) WITH PLANNED PROJECTS



Source: SGS Economics and Planning

FIGURE 40: JUNIOR OUTDOOR FIELD AND OVAL WINTER ACCESS GAPS (2019 AND 2036)

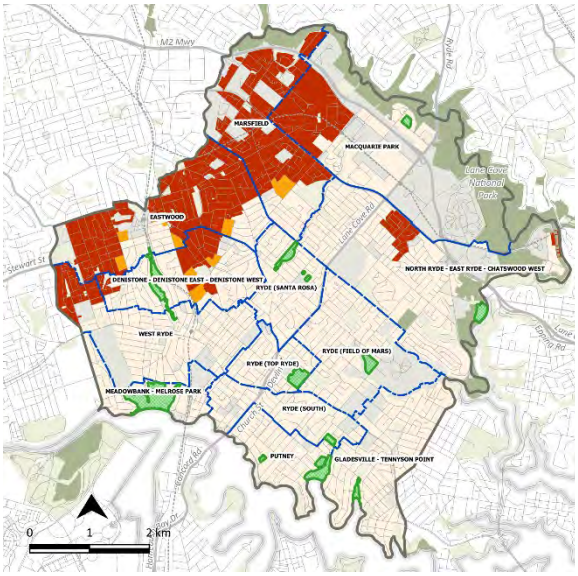
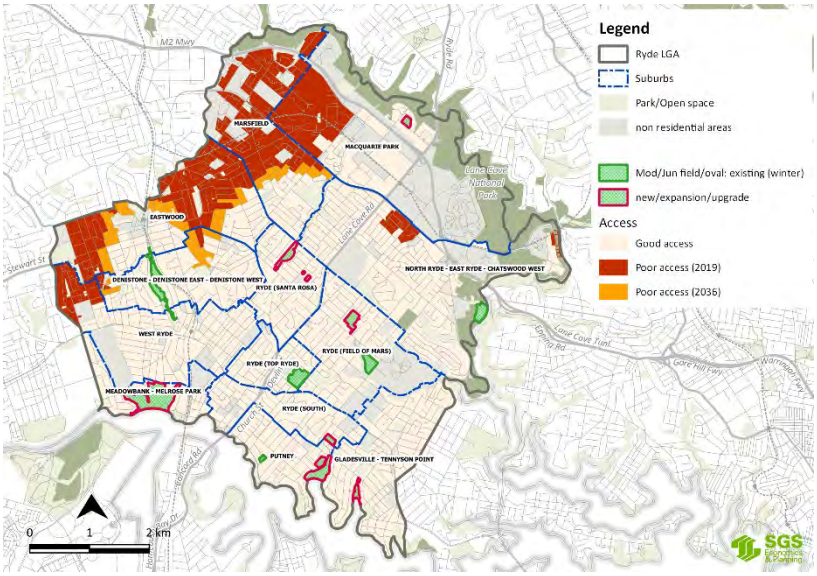


FIGURE 41: JUNIOR OUTDOOR FIELD AND OVAL WINTER ACCESS GAPS (2019 AND 2036) WITH PLANNED PROJECTS



Source: SGS Economics and Planning

10.5 Impact of planned projects – outdoor courts

Capacity

The planned projects will ensure adequacy of supply until 2036, as a result of proposed facility upgrades in Meadowbank Park and Christie Park, as follows:

- 1 outdoor court at Meadowbank Park
- 4 outdoor futsal courts at Christie Park
- 28 outdoor courts transferred from Meadowbank Park to Marsden High School site
- The overall supply is greater than demand

Access

- Most outdoor courts are concentrated in large facilities which accommodate multiple courts. Therefore, when looking at supply spatially, there are a number of areas that have limited access to outdoor courts. Ryde-Santa Rosa, Denistone- Denistone East, Eastwood, and Gladesville – Tennyson Point have poor access both before and after the planned projects.
- The transfer of 28 outdoor courts means that parts of West Ryde and Denistone will have poorer access by 2036.
- The travel threshold for users to access outdoor courts is the cause of the supply gaps for outdoor courts. As with other sports, it may be reasonable for users to travel further than 1.5km to a regional level facility.

FIGURE 42: OUTDOOR COURT ALL YEAR ACCESS GAPS (2019 AND 2036)

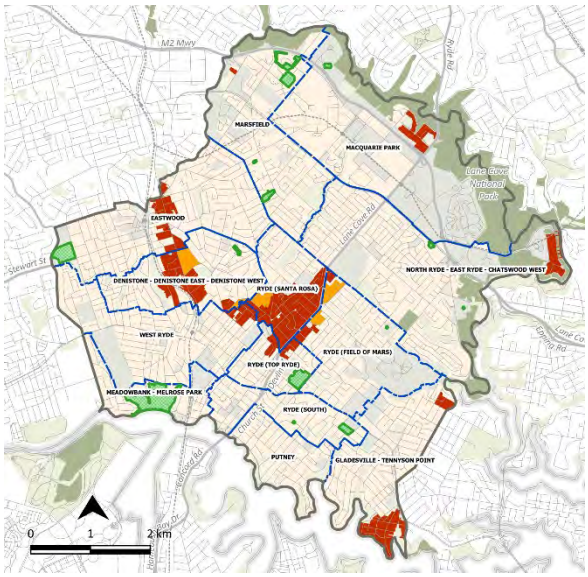
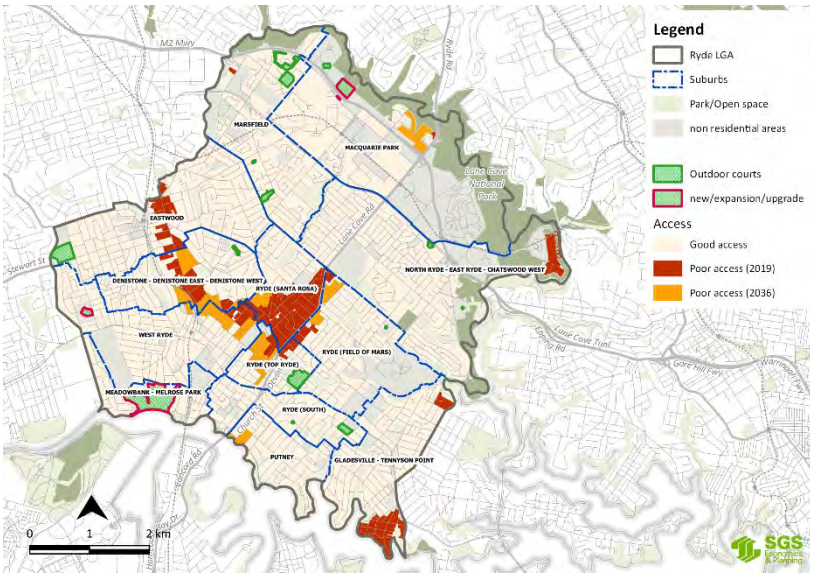


FIGURE 43: OUTDOOR COURT ALL YEAR ACCESS GAPS (2019 AND 2036) WITH PLANNED PROJECTS



Source: SGS Economics and Planning

10.6 Impact of planned projects – indoor courts

Capacity

The planned projects will reduce the forecast 2036 facility gap or shortfall from 14 to 5 facilities, as a result of the following planned new facilities:

- 4 indoor courts at Marsden High School site
- 2 additional indoor courts at ELS Hall Park
- 1 additional indoor court at Meadowbank Education and Employment Precinct
- 2 additional indoor courts at the Ryde Aquatic and Leisure Centre

The planned projects will more than double the current supply from 6 to 15 courts. By 2036, however, there is forecast to be a requirement for 20 courts and a consequent deficit of 5 courts.

Note: Another concurrent study, the *Indoor Facilities Sports Facilities Review*, focused on indoor sports courts and used a slightly different methodology and identified a 2036 requirement of 18 courts (two less than the current study) and a shortfall of 3 courts.

Access

The planned projects – nine new courts – will also improve access (i.e. travel distance) to indoor court facilities, as demonstrated in Figure 44 and Figure 45.

- The planned projects make a significant difference to access, due to both the quantum, and location of the additions.
- Following implementation of the planned projects, undersupply is reduced, and concentrated in the north-east of the City around North Ryde – East Ryde - Chatswood West, where there are no planned indoor courts.

Macquarie Park will create substantial demand for sports facilities by 2036, and indoor courts could be incorporated into those development precincts.

FIGURE 44: INDOOR COURT ALL YEAR ACCESS GAPS (2019 AND 2036)

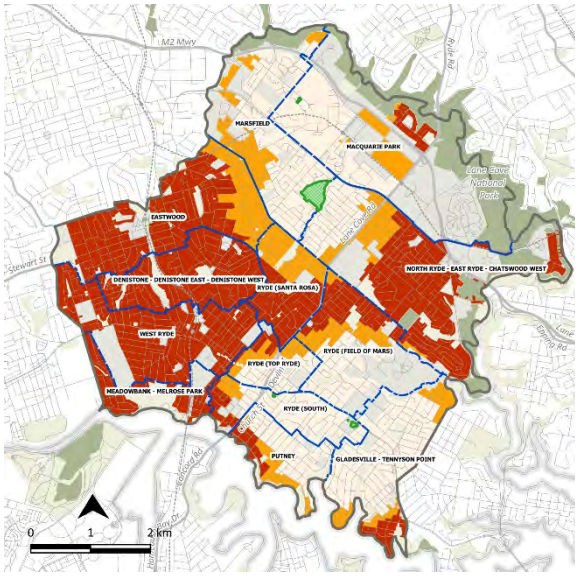
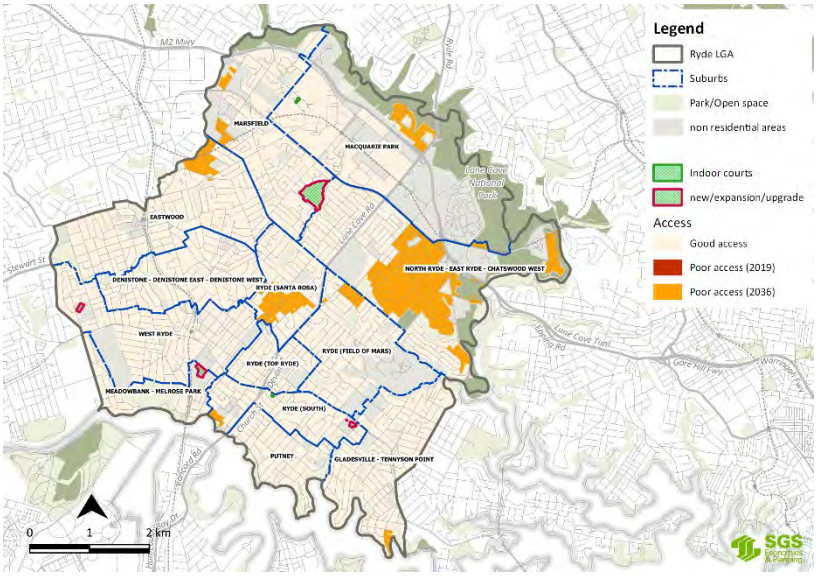


FIGURE 45: INDOOR COURT ALL YEAR ACCESS GAPS (2019 AND 2036) WITH PLANNED PROJECTS



Source: SGS Economics and Planning

10.7 Summary

- Structure Plans and Local Area Planning has identified a range of **open spaces** that improve overall access to open space, although some gaps remain. Undersupply and areas of poor access to open space include Ryde (Santa Rosa), West Ryde, North Ryde-East Ryde - Chatswood West.
- For **full size outdoor fields**, in summer, there is overall sufficient supply at an LGA level, however, access is poor in the western part of the City of Ryde, primarily Denistone-Denistone East-Denistone West. In winter, there remains an overall supply gap. This primarily affects Denistone-Denistone East-Denistone-West, Eastwood, Ryde (Santa Rosa), and Ryde (Top Ryde).
- For **junior outdoor fields and ovals** there is overall adequate supply however some residents in the north of the City will have to travel further to reach facilities (which are concentrated in the south). Given many of the junior fields and ovals are located within a regional facility, the propensity of people to travel to these higher order regional facilities and competitions means this is not of significant concern. There is also the potential to access full size fields.
- There is, overall, ample supply of **outdoor courts**, and the City of Ryde's significant assets serve a regional catchment. Residents in Ryde-Santa Rosa, Denistone- Denistone East, Eastwood, and Gladesville – Tennyson Point have to travel further than the nominated threshold. Investment in new outdoor courts for local use in undersupplied areas is an opportunity including shared use of facilities. This offers the opportunity for the programming of courts to become multipurpose to achieve greater utilisation of facilities by other users.
- The substantial investment planned for **indoor courts** will mean that supply will be met in the short term. By 2036, however, there will again be a supply gap. This study has estimated this shortfall to be 5 indoor courts however the concurrently prepared Otium Study (*Indoor Facilities Sports Facilities Review)*, focused on indoor sports courts and, using a slightly different methodology, and identified a 2036 shortfall of 3 courts[19]. Given the targeted nature of the Otium study, it is proposed that the shortfall of 3 be used as the appropriate metric.
- Access issues relating to **lawn bowls and croquet** can be addressed by accessing facilities close to, but outside the City. There are opportunities to consider repurposing some Council owned lawn bowls facilities for use by other sports which are experiencing gaps in provision. This could include repurposing of underutilised existing lawn bowl facilities to outdoor courts such as futsal courts, or for creating adaptive re-use opportunities in the long term - for example, creating multipurpose indoor sport facilities that can be used by multiple different sports.

The gaps in recreation supply and access following delivery of the planned projects are as follows.

TABLE 37: GAPS IN RECREATION SUPPLY AND ACCESS REMAINING AFTER PLANNED PROJECTS

Open Space All suburbs within the City have areas with no open space within 400m. Areas ***without*** 400 metre access are extensive and these should be a priority focus for new provision. These areas include parts of: ▪ North Ryde – East Ryde - Chatswood West ▪ Ryde (Top Ryde) ▪ West Ryde ▪ Eastwood (western area) ▪ Eastwood (south east area)
Full size fields and ovals will have an undersupply of 7 facilities by 2036
Indoor courts will have an undersupply of 3 facilities by 2036[20]
Golf will have an undersupply of 1 facility by 2036
By 2036, there will be an undersupply of 697m² of **swimming pool** space

Source: SGS Economics and Planning

[19]. The difference in approaches is discussed further in Section 7.
[20] See footnote 19.

11. PLANNED PROJECT PRIORITIES

The planned projects have been assessed against a multi-criteria assessment (MCA) framework, based on the Strategy vision and policy objectives as outlined in Section 9, above.

11.1 MCA Framework

This MCA framework has been developed to help prioritise the various actions included in Council's existing adopted masterplans and strategies (as detailed at Section 10).

Each potential project is assessed against the extent to which it delivers the relevant objectives. The specific criteria and weightings for each category of the MCA are included in the Appendix.

The MCA draws on the objectives in the Strategy, where they are relevant to consider for specific projects.

TABLE 38: MCA FRAMEWORK

Category	Objectives
Ample, Accessible Open Space	▪ Adds sufficiently sized open space to the network of open space ▪ Increases the number of residences with appropriate access to open space and recreation facilities
Shared and enjoyed by all	▪ Provides diverse and inclusive spaces
Founded on a healthy natural environment	▪ Enhances biodiversity and mitigate climate change ▪ Encourages active transport use to access open space
Conserving our rich history, culture and local character*	▪ This will be delivered via planning, design and delivery stages
Managed sustainably now and for future generations	▪ Optimises the use of Council resources

*not included in evaluation

Each of the planned projects have been assessed against the MCA framework. The results are shown in Table 39 for open space and Table 40 for sport and recreation facilities.

11.2 Open space network project assessment

TABLE 39: ASSESSMENT OF PLANNED OPEN SPACE PROJECTS

Planned Project	Source of project	Size	Score
West Ryde new open space	Council plan -LSPS	7,227m²	3.0
County Road Corridor	Council plan – LEP	45,977m²	2.8
North Ryde Hospital	Council plan- LSPS	10,000m²	2.8
Macquarie Park – Catherine Hamlin Park	Council plan – LEP	7,000m²	2.7
Lachlan's Line	Council plan- LEP	16,267m² including 1,930m² for passive recreation	2.5
Ryde Park Expansion	Council plan- LSPS	8,030m²	2.4
Meadowbank Primary school site	Council plan – LSPS	11,970m²	2.4
Parramatta River foreshore in Melrose Park	Council plan -LEP	4,466m²	2.3
Expansion of Charity Creek Cascades	Council plan – LSPS	990m² + 1,703 m²	2.2
Glen Reserve expansion	Council plan- LSPS	1,612m²	2.2
Blenheim Park	Council plan- LEP	1,984m²	2.1
Ryde Park	Council plan – LEP	524m²	2.0
Expansion of Carrara Reserve	Council plan – LEP	2,038m²	2.0
New connection into Blenheim Park from Moreshead	Council plan – LEP	613m²	1.9
Gladesville town centre	Council plan – LEP	1,170m²	1.8
Expansion of Lions Park	Council plan – LEP	1,929m²	1.8

Macquarie Park – Catherin Hamlin Park, County Road Corridor and North Ryde Hospital site were the three highest scoring open space planned projects, and are therefore the priority projects for delivery.

Catherine Hamlin Park is in Macquarie Park which has poor access to open space, and an inadequate supply of open space. Most of Macquarie Park currently does not have access to open space within 200m. It is sufficiently large enough to support a diversity of uses on site and is proximate to an active transport corridor. It also leverages a non-Council facility, optimising the use of council resources.

County Road Corridor is also located between Eastwood and Macquarie Park, an area with poor access to open space, and an inadequate supply of open space. Residents living adjacent to the corridor do not have access to open space within 400 metres, and the corridor provides immediate access. It is sufficiently large enough to support a diversity of uses on site and is proximate to 2 or more active transport corridors and leverages a non-Council facility, optimising the use of council resources.

The new West Ryde open space responds to the area's poor access to open space and inadequate supply of open space. It is sufficiently large enough to support a diversity of uses on site and is proximate to 2 or more active transport corridors. It is also located within a recognised biodiversity corridor.

The North Ryde Hospital responds to the area's poor access to open space and inadequate supply of open space. It is a large site that can support a diversity of uses on site and is proximate to active transport corridors and is located within a potential biodiversity corridor. It leverages a non-council facility, optimising the use of Council resources.

Eastwood Town Centre, Land acquisitions for Terry's Creek and Rowe St Eastwood were the lowest scoring projects.

Eastwood Town Centre open space is an essential land acquisition to provide open space within the heart of Eastwood. The planned town centre park is very small at 400m^2 so does not make a significant impact on the undersupply of open space in Eastwood. The small scale inhibits the diversity of uses that can be supported, and it is not aligned with regional, local or potential biodiversity corridors or active transport corridors. The project will benefit from investing in high quality design to support a broad range of uses, and from looking at adjacent streetscapes to complement the design of the town centre open space.

A new land acquisition near Terry's Creek improves access to the Terry's Creek corridor in Eastwood where there is poor access to open space and an undersupply of open space. The location of the land acquisition links land from the east and west to create a corridor link. The small scale also inhibits the diversity of uses that can be supported, although this can be addressed through quality design. It is not aligned with regional, local or potential biodiversity corridors or active transport corridors. Future land acquisitions could be made to better integrate this acquisition with Eastwood.

Rowe St Eastwood is a response to poor access in Eastwood. The small size of the land acquisition and lack of alignment with active transport corridors resulted in a relatively poor score, although it does leverage non-Council facilities. Small open spaces make an important contribution to the overall open space network, and high quality design will allow for a diversity of use.

11.3 Sport & Recreation facility project assessment

TABLE 40: ASSESSMENT OF PLANNED RECREATION PROJECTS

Planned Projects	Description	Score
Marsden High School site	4 indoor courts 28 outdoor courts transferred from Meadowbank Park	2.8
RALC	2 indoor courts	2.7
ELS Hall Park	2 indoor courts	2.5
Install lighting at all facilities	Upgrade 15 full size field/ovals and 15 Junior field/ovals so that all facilities have lighting.	2.2
Christie Park	4 outdoor futsal courts 1 full size field or oval	2.2
Meadowbank Park	3 full size field or oval Upgrade of LH Waud Oval to Synthetic, 3 Junior/mod fields/ovals, 1 outdoor court 28 outdoor courts transferred to Marsden High School	2.1
Gannan Park	1 full size field/ oval 1 Junior/mod field/oval	2.1
Meadowbank Education and Employment Precinct	1 indoor court	2.0
Pidding Park	1 x full size field/ oval 3 x Junior/mod field/oval	2.0
Smalls Road Upper (school)	Conversion to synthetic	2.0

Planned new indoor court projects at **Marsden High School, RALC** and **ELS Hall Park** all received high scores in the MCA. Indoor courts are the most undersupplied facility in Ryde, and so these projects are directly addressing the undersupply, and, are addressing the supply gap in the areas with poor access to existing indoor courts. Indoor courts also allow for sport to be played regardless of weather conditions or extreme climate change related temperatures.

The addition of 4 outdoor futsal courts and a full sized field/oval at **Christie Park** significantly increases the capacity of outdoor courts and responds to a spatial gap in access for each facility type. The additional full-sized field addresses, in part, the forecast undersupply in full-sized fields by 2036.

Installing lighting at all facilities will increase the capacity of Ryde's existing fields to sustain use. It allows fields to be played on for up to 30 hours a week in winter rather than only 18. This is a cost-effective way of responding to the forecast undersupply in full sized fields and ovals across the City.

12. ADDRESSING SERVICE GAPS: SPORT & RECREATION

A number of gaps in capacity and access – for both open space and recreation/sport facilities - remain after the implementation of planned projects. A range of potential future projects which respond to and address those gaps have been identified.

12.1 Service gaps remaining after planned projects

Despite their significant potential to provide a range of enhanced opportunities for sport and recreation activity, there are some remaining areas where planned projects fall short of addressing all future demand to 2036. A range of potential future open space and recreation facility projects and initiatives have been identified to address these remaining gaps.

This section discusses these potential future projects for sport and recreation, including the impacts on capacity and accessibility of sport and recreation facilities.

12.2 Potential future sport & recreation facility projects

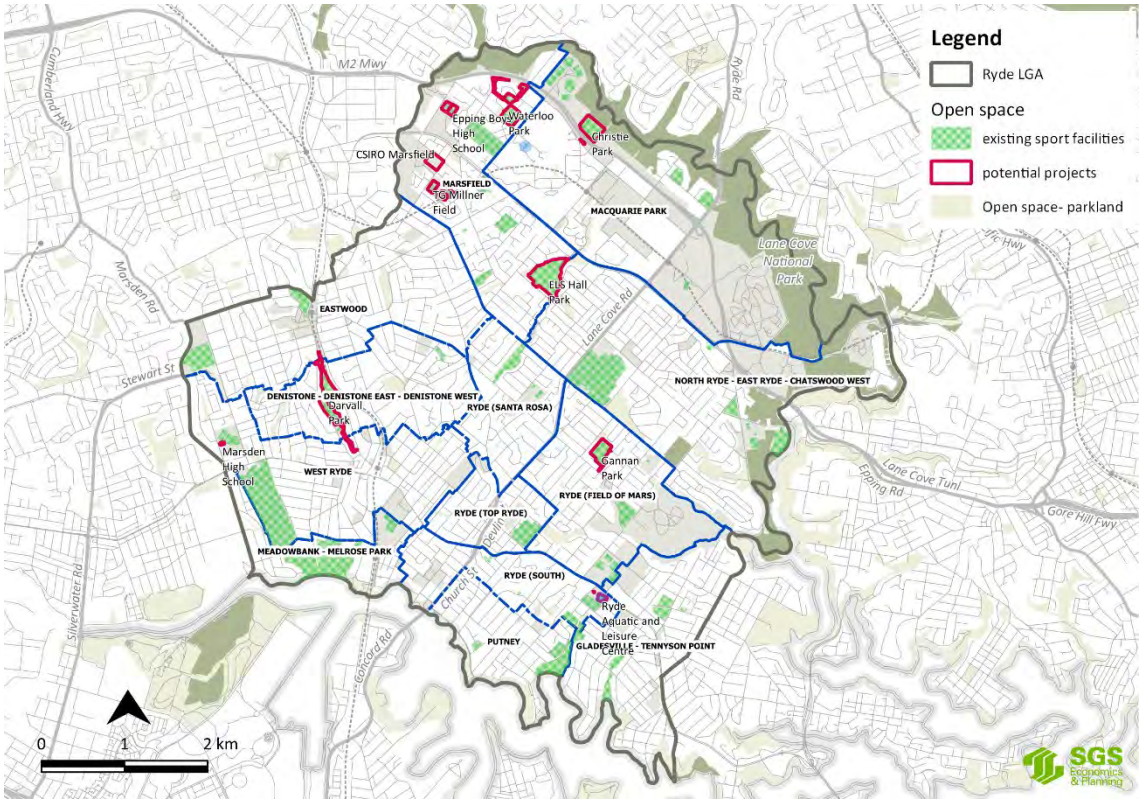
The potential future projects are summarised in Table 41.

TABLE 41: POTENTIAL ADDITIONAL PROJECTS – SPORT & RECREATION

Facility type	Description	Issue addressed
Full size outdoor field/oval	Gannan Park ▪ 1 additional full size field/oval (and loss of 1 junior/mod field/oval) Waterloo Park ▪ 1 additional full size field/oval Darvall Park: ▪ 1 additional full size (and loss of 1 junior/mod field/oval) Synthetic conversions: ▪ Upgrade of 6 outdoor full size fields and ovals to synthetic to address gap in remaining gap in full size fields and ovals provision (Note: the number of synthetic field upgrades can be reduced if government land opportunities are realised) Government land opportunities: ▪ Epping Boys High: 2 full size field/oval ▪ Land east of Christie Park: 1 full size field/oval ▪ CSIRO Marsfield – 2 full size field/oval Private land opportunities: ▪ TG Milner Fields: 2 full size fields	Responds to gap of 7 full size outdoor fields and ovals
Indoor courts	ELS Hall Park (a further 1 court beyond *planned projects*) and Marsden High School site (a further 2 courts beyond *planned projects*) if Macquarie University 3 court expansion does not occur	Responds to gap of 3 indoor courts
Golf	No projects identified	
Bowls/croquet	No projects identified	

Facility type	Description	Issue addressed
Swimming/ aquatic	RALC Masterplan delivery: 240m^2 program/learn to swim pool	Increases capacity of RALC in the short term and responds to the forecast gap in swimming facilities

FIGURE 46: POTENTIAL FUTURE SPORT AND RECREATION PROJECTS



Source: SGS Economics and Planning, 2020

Delivery of both the planned and potential future projects would result in the following total publicly accessible sport and recreation facilities in the City of Ryde.

TABLE 42: SUMMARY SPORT & RECREATION FACILITIES INCLUDING PLANNED & POTENTIAL PROJECTS

Facility type	Existing facilities	Planned facilities	Potential additional facilities	Total facilities incl. planned & potential projects
Full size outdoor field and ovals	38	6	7	51
Junior/mod outdoor field and ovals	19	7	-2	24
Outdoor courts	108	5	0	113
Indoor courts	6	9	3	18
Bowls and croquet	13	0	0	13
Golf courses	2	0	0	2
Swimming (m^2 water)	3,835m^2	0	240m^2	4,075m^2

12.3 Impact of potential future projects – sport/recreation facilities overview

The potential future projects will enhance the **capacity** and **accessibility** of the open space network and sport and recreation facilities. They will eliminate the forecast 2036 facility shortfalls for outdoor field/ovals and indoor courts, as illustrated in Table 43. The capacity of bowls and croquet facilities, golf courses and outdoor courts will remain unchanged as there are no additional enhancement projects planned for these facilities at this point of time.

The specific impacts on capacity and access are outlined further, below.

TABLE 43: SUMMARY – POTENTIAL SPORT/RECREATION FACILITIES

Facility Type	Total facilities including planned projects	Gap/ surplus at 2036 (# facilities)	Potential Projects	Total facilities including planned & potential projects	Gap/ surplus at 2036 (# facilities)
Full size outdoor field and oval – summer	**44**	+ 18	7	51	+25
Full size outdoor field and oval – winter	**44**	- 7	7	51	0
Junior outdoor field and oval – summer	**26**	+ 19	-2	24	+17
Junior outdoor field and oval – winter	**26**	+ 13	-2	24	+11
Outdoor court	**113**	+ 16	0	113	+16
Indoor court	**15**	- 5	3	18	2
Bowls & croquet	**13**	+ 5	0	13	+5
Golf courses	**2**	- 1	0	2	-1
Swimming (m^2 of water)	**3,835m^2**	697m^2	240m^2	4,075m^2	457m^2

12.4 Impacts of potential future projects – full size fields & ovals

Capacity

There are limited opportunities for potential future projects to address the remaining gaps in full size fields and ovals; the projects identified through Council master planning have been captured in planned projects. The opportunities that remain are:

- Gannan Park: 1 additional full size field/oval (and loss of 1 junior/mod field/oval)
- Waterloo Park: 1 additional full size field/oval
- Darvall Park, 1 additional full size (and loss of 1 Junior/mod field/oval)

These sites have the potential to provide an additional 3 full-size fields, thereby reducing the anticipated 2036 shortfall from 7 to 4 fields.

The remaining options for closing the forecast supply gap of 4 fields (or 120 playable hours per week) by 2036 include one or a combination of the following:

- Synthetic conversions (to gain an additional 20 hours per conversion),
- New turf field, via access to Government or private owned land (30 hours per turf field)
- New synthetic field, via access to Government or private owned land (50 hours per new synthetic field)

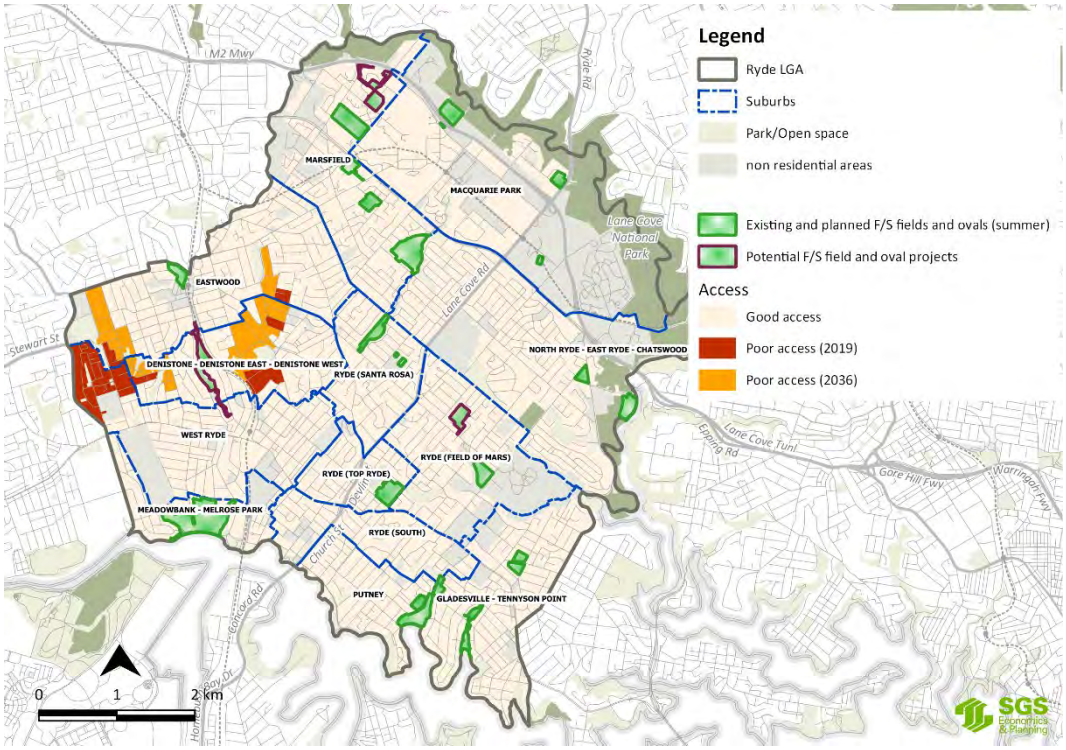
Access

The potential future projects – 3 new Council owned fields and 4 non-Council owned fields or equivalent – will also improve access to full size fields and ovals, as summarised below for the summer and winter seasons, respectively.

Summer

Despite the LGA level surplus of facilities, the western part of the City, primarily Denistone-Denistone East-Denistone West, is less well served due to travel distances to existing and proposed facilities. The potential future 3 Council facilities provide an improvement in access, as illustrated in Figure 47.

FIGURE 47: FULL-SIZE OUTDOOR FIELD AND OVAL SUMMER ACCESS GAPS (2019 AND 2036) WITH POTENTIAL FUTURE PROJECTS

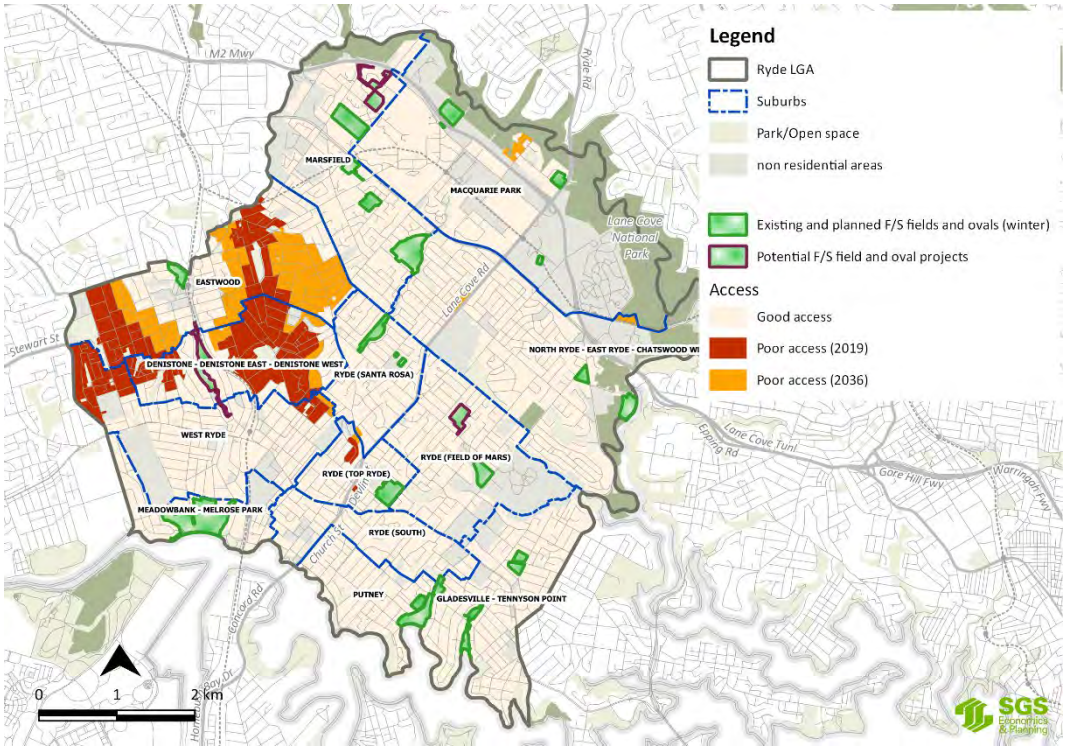


Source: SGS Economics and Planning 2020

Winter

While implementation of the potential future facilities will provide an overall balance in the forecast supply-demand of full size grounds to 2036, some accessibility gaps remain but are confined to a smaller area to the west of the City, as illustrated in Figure 48.

FIGURE 48: FULL-SIZE OUTDOOR FIELD AND OVAL WINTER ACCESS GAPS (2019 AND 2036) WITH POTENTIAL FUTURE PROJECTS



Source: SGS Economics and Planning

The lower levels of access to full sized fields and ovals in these parts of the City could be addressed, in part, through the further leveraging of non-Council owned facilities for community use, including:

- Joint use agreements with schools to increase the supply of sports facilities and/or upgrade facilities to synthetic
- Continue to partner with institutions (Marsden High, Macquarie University) to provide access to sports facilities
- Identify additional opportunities at Denistone and Eastwood (e.g. Eastwood Leagues Club) to increase access to sports facilities

Beyond these options, a further opportunity would be to encourage the use of junior/modified fields by senior teams for training.

12.5 Impacts of potential future projects – junior/mod fields & ovals

Capacity

The potential future full size projects will reduce the number of junior/modified fields from 26 to 24.

The overall supply will remain significantly greater than the forecast demand, in both winter and summer. As indicated in Section 10, above, much of the surplus is likely to be taken up by baseball users from the broader region, and by informal users.

Access

As indicated in Section 10, above, while some residents in the northern precincts of the City are beyond the benchmark travel distance to junior fields, they are likely to travel to the facilities located in the south of the City or where the fixtures are scheduled.

12.6 Impact of potential future projects – indoor courts

Capacity

Potential future projects for indoor courts have been identified in the Otium Group study:

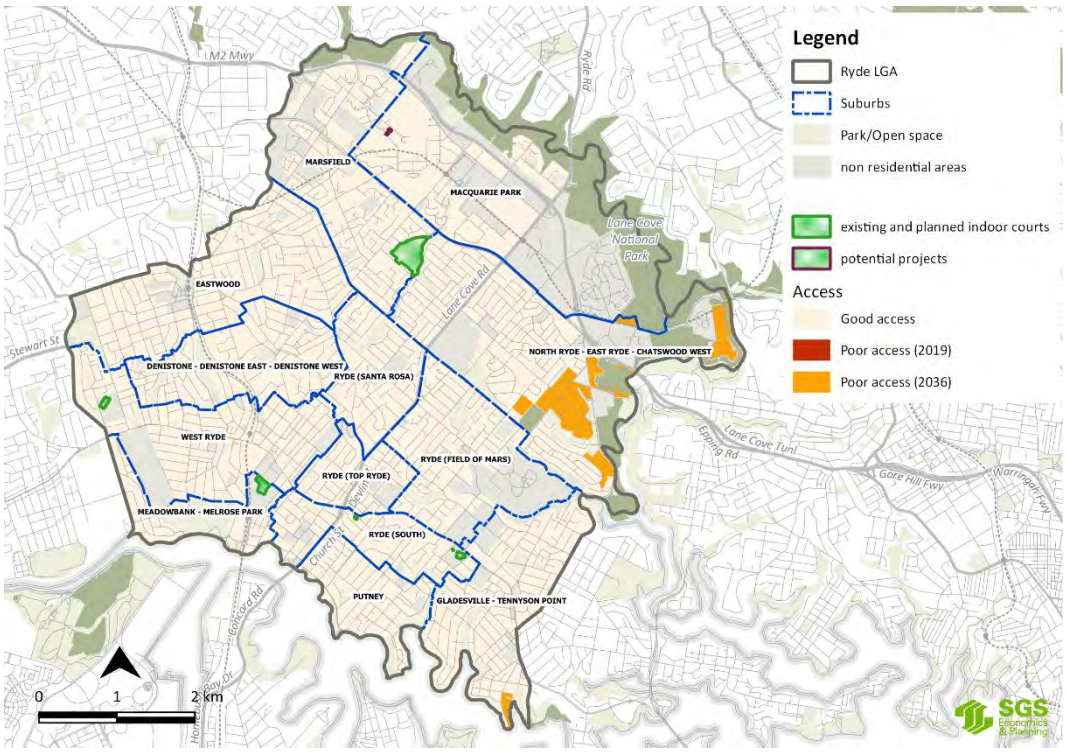
- Expanding the current 1-court stadium to a 4-court stadium at Macquarie University Sports and Aquatic Centre (MUSAC), as illustrated in Figure 49, **or**
- Council providing 1 additional court at ELS Hall Park, and working with the NSW State Government to expand the Marsden High School site project from 4 to 6 courts.(this has not been modelled in this report)

Both these alternatives would result in an additional 3 indoor courts, and would address the forecast 2036 facility gap of 3 courts (as identified in the Otium Group study).

Access

The potential future project at MUSAC – 3 new courts – will improve access to indoor court facilities, as illustrated in Figure 49.

FIGURE 49: INDOOR COURT (2019 AND 2036) WITH POTENTIAL FUTURE PROJECTS (MUSAC EXPANSION ONLY)



Source: SGS Economics and Planning

The MUSAC project will make a significant difference to access and in particular, for Macquarie Park, resulting in undersupply being confined to parts of East Ryde and Chatswood West.

12.7 Impacts of potential future projects – outdoor courts

With an overall surplus of outdoor courts, both currently and to 2036, there are no proposed additional projects.

Opportunities to provide additional courts in the Ryde (Santa Rosa), Denistone- Denistone East, Eastwood, and Gladesville – Tennyson Point should however be reviewed on an on-going basis due to the poorer access to outdoor court facilities in these areas.

Given the very high anticipated growth in Macquarie Park, there is a longer term opportunity to adapt the private Tennis World facility (11 outdoor courts on leased NSW Government land) to multi-use courts to cater to the large residential and worker populations in the area.

Additionally, if and where required, there are opportunities for surface improvements and installation of lighting to improve the user experience.

12.8 Impacts of potential future projects – golf

Based on the assumption of a continuation of current golfing participation rates, there is likely to be demand for additional golf facilities in the City by 2036. Council will not be able to provide a new golf course so it is imperative that the existing 18-hole courses be protected to ensure their on-going viability.

It is anticipated that some of the demand can be met by facilities outside of the City of Ryde, such as the courses in Willoughby and Ku-ring-gai LGA's.

It may also be possible to increase capacity at golf courses via changes to the structure and timing of game formats, however this will be a decision for the private operators who manage the courses.

12.9 Impacts of potential future projects – bowls & croquet

There is sufficient capacity for lawn bowls and croquet facilities to 2036 albeit with some accessibility gaps in the north of the City. It is likely that these gaps can be addressed by accessing facilities close to, but outside the City (in Hornsby and Ku-ring-gai LGAs).

There are opportunities to consider repurposing some Council owned lawn bowls facilities for use by other sports which are experiencing gaps in provision. This could include repurposing of underutilised existing lawn bowl facilities to outdoor courts such as futsal courts, or for creating adaptive re-use opportunities in the long term e.g. creating multipurpose indoor sport facilities that can be used for multiple sports.

12.10 Impacts of potential future projects – aquatics & swimming

Swimming and aquatic facilities are major items of urban infrastructure, requiring significant planning and investment to realise new facilities.

This study has identified that the two publicly accessible facilities in the City provide 3,835m^2 of water space compared to the 4,532m^2 needed by 2036, resulting in a shortfall of 697m^2.

Some of this shortfall (i.e. 240m^2) has been addressed in the RALC Masterplan's proposal for a learn-to-swim/program pool. Following this, there is a remaining shortfall of 457m^2.

Given the complexities and cost of indoor aquatic centres, this service shortfall should be addressed via a dedicated Aquatic/Swimming Strategy. In particular, further work is required to identify the scale and nature of the additional facilities which are required to meet the community's complex aquatic needs.

This preliminary analysis undertaken during the current study, indicates that this planning exercise should commence around 2025, as while the overall supply of water space is sufficient at present, there are some currently less well served areas, and these are projected to continue.

A complementary initiative is to improve access to pools outside of the LGA, such as the Epping Aquatic Centre (in Dence Park) in the City of Parramatta. Provision of a bridge over Terry's Creek

would improve access to this facility and cater to demand in the Marsfield and Eastwood precincts of the City of Ryde.

12.11 Multi-Criteria Assessment (MCA) of potential future recreation facility projects

The application of the MCA to the **potential future** sport and recreation facility projects is shown below.

TABLE 44: MCA OF POTENTIAL FUTURE PROJECTS

Additional Projects	Description	Score
Indoor courts	ELS Hall Park (1) and Marsden HS site (2) (if Macquarie University 3 court expansion does not occur)	2.5
Government land opportunities – Epping Boys HS	2 full size field/oval	2.2
Government land opportunities – CSIRO Marsfield	2 full size field/oval	2.2
Darvall Park	1 additional full size (and loss of 1 junior/mod field/oval)	2.1
Private land opportunities: TG Milner Fields	2 full size fields	2.1
Government land opportunities – Land east of Christie Park	1 full size field/oval	1.9
Synthetic conversions:	Upgrade of 5 outdoor full size fields and ovals to synthetic to address gap in remaining gap in full size fields and ovals provision (Note: the number of synthetic field upgrades can be reduced if government land opportunities for new fields are realised)	1.9
Gannan Park	1 additional full size field/oval (and loss of 1 junior/mod field/oval	1.8
Waterloo Park	1 additional full size field/oval	1.8

Source: SGS Economics and Planning

The highest scoring potential future projects are indoor courts at ELS Hall Park and the Marsden High School site and government land opportunities at Epping Boys High School and the CSIRO site in Marsfield. The upgrade of a junior to a full-sized field at Darvall Park scores well due to its location in an area where there is poorer spatial access to full sized fields.

The scores are compared with the planned sport and recreation facility projects (detailed in Section 11.3, above) in

Table 45.

TABLE 45: COMPARISON OF PLANNED AND POTENTIAL FUTURE SPORT AND RECREATION PROJECTS

Project	Description	Project Status	Score
Marsden High School site	4 indoor courts 28 outdoor courts transferred from Meadowbank Park	Planned	2.8
RALC	2 indoor courts	Planned	2.7
ELS Hall Park	2 indoor courts	Planned	2.5
Indoor courts - Marsden High and ELS Hall	ELS Hall Park (1) and Marsden HS site (2) (if Macquarie University 3 court expansion does not occur)	Potential Future	2.5
Install lighting at all facilities	Upgrade full size field/ovals and junior field/ovals so that all facilities have lighting.	Planned	2.2
Christie Park	4 outdoor futsal courts 1 full size field or oval	Planned	2.2
Government land opportunities – Epping Boys HS	2 full size field/oval	Potential Future	2.2
Government land opportunities – CSIRO Marsfield	2 full size field/oval	Potential Future	2.2
Meadowbank Park	3 full size field or oval Upgrade of LH Waud Oval to Synthetic, 3 junior/mod fields/ovals, 1 outdoor court 28 outdoor courts transferred to Marsden High School	Planned	2.1
Gannan Park	full size field/ oval junior/mod field/oval	Planned	2.1
Darvall Park	1 additional full size (and loss of 1 junior/mod field/oval	Potential Future	2.1
Private land opportunities: TG Milner Fields	2 full size fields	Potential Future	2.1
Meadowbank Education and Employment Precinct	1 indoor court	Planned	2.0
Pidding Park	1 full size field/ oval 3 junior/mod field/oval	Planned	2.0
Smalls Road Upper (school)	Conversion to synthetic	Planned	2.0
Government land opportunities – Land east of Christie Park	1 full size field/oval	Potential Future	1.9
Synthetic conversions x 5:	Upgrade of 5 outdoor full size fields and ovals to synthetic to address gap in remaining gap in full size fields and ovals provision (Note: the number of synthetic field upgrades can be reduced if government land opportunities for new fields are realised)	Potential Future	1.9
Gannan Park	1 additional full size field/oval (and loss of 1 junior/mod field/oval	Potential Future	1.8
Waterloo Park	1 additional full size field/oval	Potential Future	1.8

Source: SGS Economics and Planning

12.12 Summary

- For **full size outdoor fields and ovals**, in summer, there is overall sufficient supply at an LGA level, however, there remains some small gaps in access in the western part of the City of Ryde, primarily Denistone-Denistone East-Denistone West. In winter, there remains an overall supply gap. This primarily affects Denistone-Denistone East-Denistone-West, Eastwood, Ryde (Santa Rosa), and Ryde (Top Ryde). Opportunities to address these gaps include upgrading existing facilities to synthetic surfaces and exploring opportunities to further leverage non-Council owned facilities for community use.
- For **junior outdoor fields and ovals,** despite the conversion of two junior sized facilities to full sized fields/ovals, there is overall adequate supply. Some residents in the north of the City will continue to have to travel further to reach facilities (which are concentrated in the south). Many of the junior fields and ovals are located within a regional facility, and it is likely that people will travel to these higher order regional facilities and competitions.
- For **indoor courts**, the potential future projects identified in the Otium Group study will address the supply gap forecast for 2036. That is, that there is no need for additional indoor courts beyond the potential future projects. This should be monitored and updated regularly, as there may be greater demand generated by the culturally diverse population (which has indicated higher than average preferences for indoor facilities).
- For **swimming and aquatic facilities,** the expansion of RALC to increase pool space by 240 m^2 will ensure that there is a sufficient supply of aquatic facilities in the short term. However, there will be a remaining shortfall of 457 m^2 by 2036. This indicates that further work is required to identify the scale and nature of the additional facilities which are required to meet the community's aquatic needs.

The gaps in recreation supply and access following the delivery of the potential future projects is summarised below.

TABLE 46: REMAINING GAPS IN RECREATION FACILITIES FOLLOWING PLANNED AND POTENTIAL PROJECTS

Remaining gaps in supply and access	
Golf course	By 2036, there will be an undersupply of 1 facility by 2036
Swimming (m^2 of water)	By 2036, there will be an undersupply of 457m^2 of pool space

Source: SGS Economics and Planning

13. ADDRESSING REMAINING SERVICE GAPS: OPEN SPACE

A number of gaps in capacity and access for the open space network will remain after the delivery of planned projects. This section discusses the range of options to help address those gaps, both at the neighbourhood and City-wide levels.

13.1 Introduction

Options to address the gaps in open space which remain after the delivery of the planned projects include: open space acquisition and green link options, space enhancement options, partnership leverage opportunities, and demand management approaches. These could be applied in a number of different ways, and as they are high level options, will require additional planning and design to identify which options will address specific local context and needs.

A number of options have been identified for the five neighbourhoods where there are still significant gaps in open space - Ryde (Top Ryde), West Ryde, North Ryde, Eastwood and West Eastwood. In addition, Macquarie Park, because of its particularly high growth scenario and relative lack of existing open space and recreation facilities, is also addressed in detail (refer Section 14).

Outside these neighbourhoods, there are other areas of the City which are also anticipated to experience open space capacity and accessibility shortfalls following implementation of the planned projects. These are scattered throughout the City as illustrated on the open space accessibility maps (Figure 32 and Figure 33 in Section 10).

This section sets out these high level options, and then outlines some potential ways these could be applied in the five neighbourhoods which have the most significant gaps in open space access. Some specific requirements or principles for this remaining planning are also outlined.

13.2 Potential future projects

Potential future projects to help respond to the remaining gaps include:

- Green corridor and links
- Options to improve access to open space
- Acquisitions
- Enhancements to parks and open spaces
- Collaboration and partnerships opportunities

This list of high level options provides a range of choices about addressing gaps. Particular combinations of projects may be required in different areas, and it is not the case that all projects on this list are required to deliver an appropriate open space network for the City of Ryde.

Table 47 sets out the project, a short description, and a short overview of the open space issue it could respond to.

TABLE 47: POTENTIAL FUTURE PROJECTS – OPEN SPACE

Project	Description	Issue addressed
Green corridors/link options		
Acquisitions and/or landscaping to create/enhance foreshore links	Between Putney Park and Kissing Point Park Create foreshore link between Bennelong Park and Settlers Park Between Meadowbank Park and Wharf Rd (NSW Govt. initiative) Improve access to foreshores and waterways ▪ Prioritise green and blue grid projects (Greener Places) ▪ Lane Cove National Park ▪ Parramatta River	Improve links with natural assets and connectivity along Parramatta river foreshore Enhance regional open space network connectivity Realise green grid (Greener Places)
Acquisitions and/or landscaping to create/enhance other green corridors	Connect Shrimptons Creek Green Corridor with Denistone Green corridor	Connecting existing green corridors (identified connectivity opportunity in City of Ryde Biodiversity Plan)
	Improve connections between Shrimptons Creek Corridor and West Ryde Centre	Connecting existing active and green corridors (identified connectivity opportunity in City of Ryde Biodiversity Plan)
	Create East west connection across Ryde through Abuklea Road reserve and Twins Rd to connect Dence Park Pool in City of Parramatta with Pittwater Road	Create regional east west biodiversity connection (See City of Ryde Biodiversity Plan)
	Create new green corridor connecting Top Ryde to Parramatta River	Provide access to Parramatta River open space corridor for residents in Top Ryde who have poor access and supply of open space
	Create Green connection between ANZAC Park, West Ryde train station and shopping precinct at west	Responds to poor access to and supply of open space in West Ryde
	Create links from Macquarie Park with Lane Cove National Park	To create connection between Macquarie Park and valued natural asset
Other corridor linkages	Create new corridors from North Ryde to Macquarie Park	To implement local active and biodiversity corridors along existing cycleway and improve access to open space for residents of North Ryde
Improvement works to enhance foreshore links and green corridors	Increased tree canopy cover (parks and streets) Integrated stormwater treatment for riverside parks	Realise green grid (Greener Places)
Improving access to open space		
Extended active transport routes	Providing mid-block breaks to improve access to parks >1,500 m²	Increases access to open space by improving pedestrian network. Responds to poor access to open space in North Ryde,

Project	Description	Issue addressed
		Ryde (Top Ryde), Ryde (Field of Mars) and Meadowbank
Open space acquisitions		
Acquire land for parks/open space	Pursue opportunities to increase open space in Top Ryde.	Responds to poor access to and supply of open space in Ryde (Top Ryde)
	Acquire new land for open space or expand existing small reserves to >1,500 m² in areas of Eastwood, West Ryde, Putney, Gladesville/ Tennyson Point, Ryde (Santa Rosa) and North Ryde-East Ryde-Chatswood West with poor access	Responds to poor access to and supply of open space in those areas
	New >1,500 m² open space excised from golf course while retaining 18-hole golf course. Location to be determined during design process	Responds to poor access to and supply of open space in West Ryde
	Develop masterplan for Eastwood Park to maximise its potential Repurposing of Council assets e.g. carpark Extend Rowe Street pedestrian mall Reinforce recommendations from Eastwood structure plan Improve access to Brush Farm Park Improve connectivity to Terry's creek	Responds to poor access to and supply of open space in Eastwood
	Opportunistic acquisitions of land when residential properties come up for sale	Responds to poor access to and supply of open space in under-serviced areas
	Land acquisitions next to small parks to increase size to greater than 1,500 square metres	Responds to poor access to and supply of open space in under-serviced areas
Funding of acquisitions	Specify where development contributions should provide new facilities and or open space, or be provided as cash in lieu In some cases, divestment of parks <1,500 m² could generate funds which could be used to expand other parks to >1,500 m². This should only occur in suburbs with oversupply, and where there are committed plans to deliver open space improvements which would improve access to open space	To support funding of additional open space and facilities.
Park/open space enhancement options		
Park lighting	Lighting, visibility, programming to enable night time use of parks	To expand capacity of open space
Streetscape upgrades	To provide quasi open spaces	To expand open space network in areas where providing 1,500m² is challenging
Leveraging supply via collaboration/partnerships		
Community use of schools	Shared use of passive open space around schools	To expand open space network in areas where

Project	Description	Issue addressed
		providing 1,500m² is challenging
Roof top open space	Investigate opportunities for publicly accessible roof top open spaces within new developments	To expand open space network in areas where providing 1,500m² is challenging

13.3 Priority areas for open space enhancements

Section 10.2 outlined the impact of *planned* projects on open space provision rates and accessibility to open space. It concluded that there are several areas within the City which have low levels of provision following the planned projects, including West Ryde, Ryde (Top Ryde), North Ryde, West Eastwood and South Eastwood.

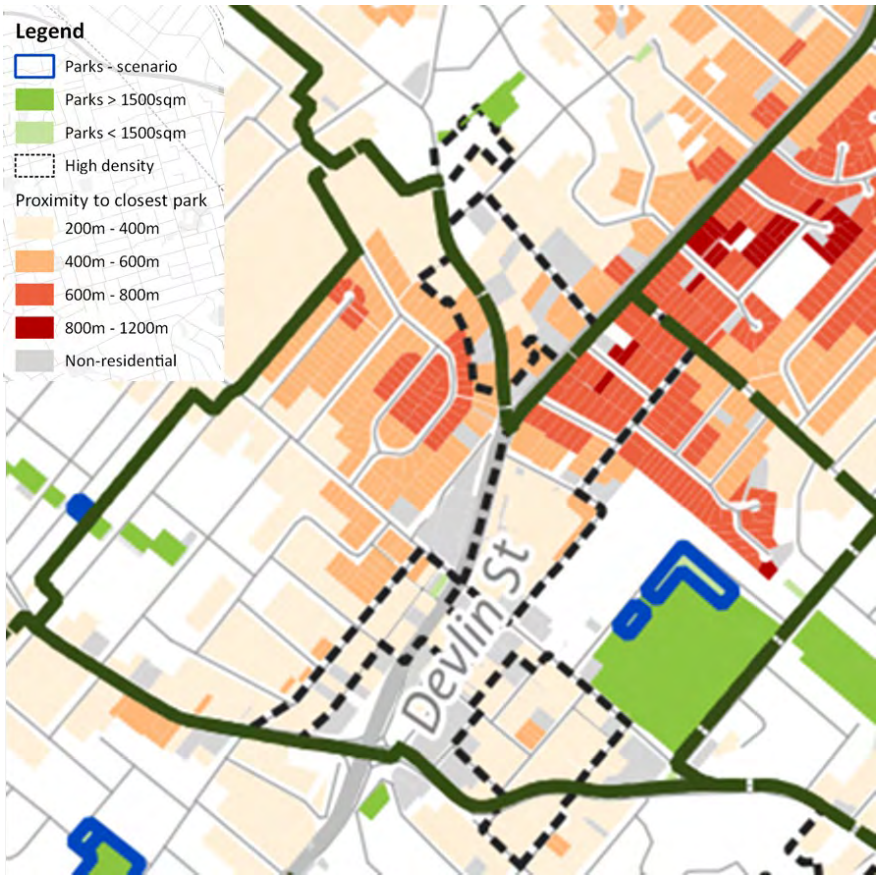
This section outlines the remaining gaps, a response framework and next steps for each of the five priority neighbourhoods.

- The *remaining gaps* section summarises the key issues that have been identified in previous analysis.
- The *response framework* outlines the focus for planning for open space in each of these locations, and some suggested options to improve access, drawing on the potential future projects outlined in Table 47.
- The *next steps* set out the key tasks that will need to be undertaken to progress the delivery of these.

Top Ryde

Remaining gaps

FIGURE 50: TOP RYDE REMAINING ACCESS GAPS



Source: SGS Economics and Planning

The analysis has so far indicated that:

- The Top Ryde activity centre accommodates some high-density housing but there are parts of the centre that do not have access to open space within 200m, and some parts do not have access within 800m.
- The overall per capita provision of open space is low.
- Parts of Top Ryde currently have poor access to outdoor courts, and this is anticipated to be exacerbated by 2036.

Response framework

There are a number of options which could help respond to these remaining gaps:

Open space

- Creating a new green corridor connecting Top Ryde to Parramatta River. This could take the form of a dedicated pedestrian and cycling link, either on road or separated, with high levels of planting and vegetation. This would provide a more attractive link to a significant area of open space, as well as providing some additional green space along the corridor. This will contribute to improving the rate of open space per capita.
- Creating new mid-block breaks and small connections to Ryde Park. Mid-block breaks improve access to open space by providing small pathways through residential blocks creating more direct links to open space. They are not necessarily green corridors, but function as pedestrian pathways better linking people with green space.

- Acquiring additional spaces opportunistically as residential properties become available. This is a particularly high cost option, given the relative land values in the centre.
- Creation of new open spaces through Special Infrastructure Contributions or Voluntary Planning Agreements when the planning controls for the area are reconsidered.
- Streetscape upgrades to provide quasi-open spaces. While not a suitable replacement for significant open spaces, the following measures can improve liveability in the short term, and provide relief in high density areas:
    - increased planting in public realm particularly along main streets and in car parks,
    - the creation of medians, and
    - conversion of individual parking spots into permanent or pop-up picnic spaces.
- Redeveloping Council owned land to provide additional open space. This could include redeveloping Council owned car parks or other large or small spaces.

Sport and Recreation

- Negotiating to provide indoor courts as part of any future medium and higher density development in the area.

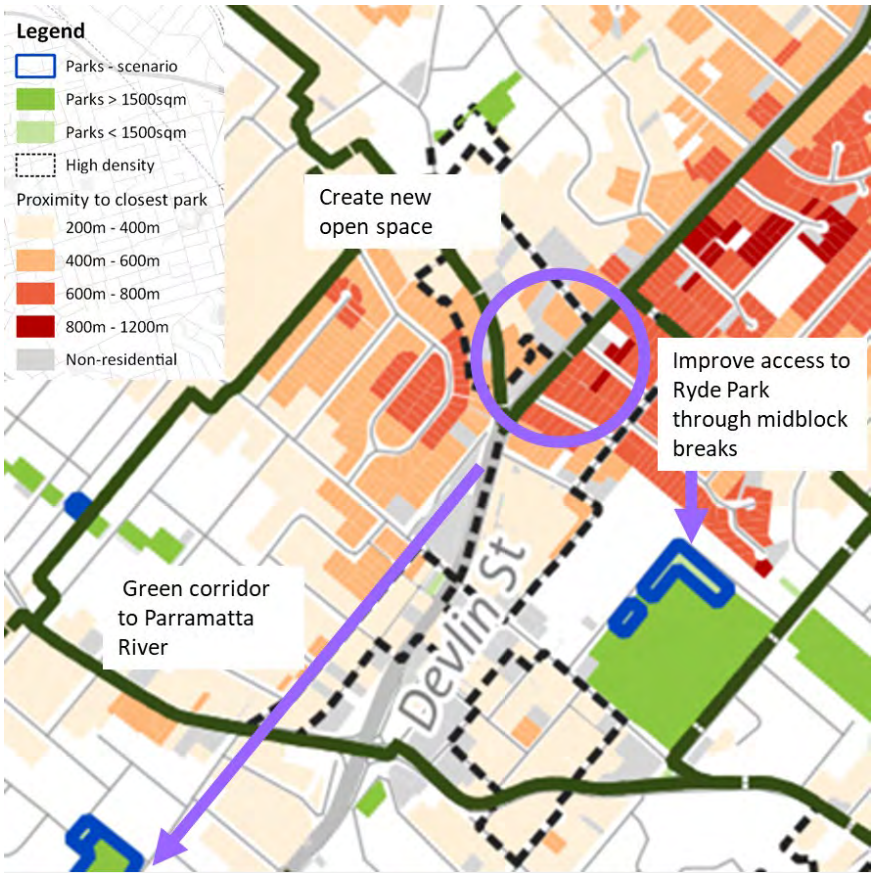
As well as these options, Council should, as part of any rezoning or major development, require contributions to either open space or recreation. This is a resource effective mechanism to secure additional open space.

Next steps

There are a number of key steps to address the challenges in Top Ryde to implement the response framework:

- As part of structure planning for Top Ryde, identify an open space and pedestrian network to ensure all areas of high density are within 200m of an open space at least 1,500 m². This should include identifying the most appropriate locations for new mid-block breaks and links, opportunities for Council-owned or dedication/strategic purchase of sites, and the most suitable opportunities for streetscape upgrades. This will need to consider:
    - Land values of mid-block break land acquisitions,
    - Council owned sites and opportunities for strategic purchase or dedication,
    - The principal pedestrian and active transport network, and
    - Links between key destinations and places of interest.
- Undertake detailed design analysis to identify options, and the most appropriate corridor to connect Top Ryde to Parramatta River through Charity Creek Cascades. This will need to consider local site conditions and opportunities, visual access and attractiveness of potential pathways as well as relative costs.

FIGURE 51: TOP RYDE RESPONSES TO REMAINING GAPS

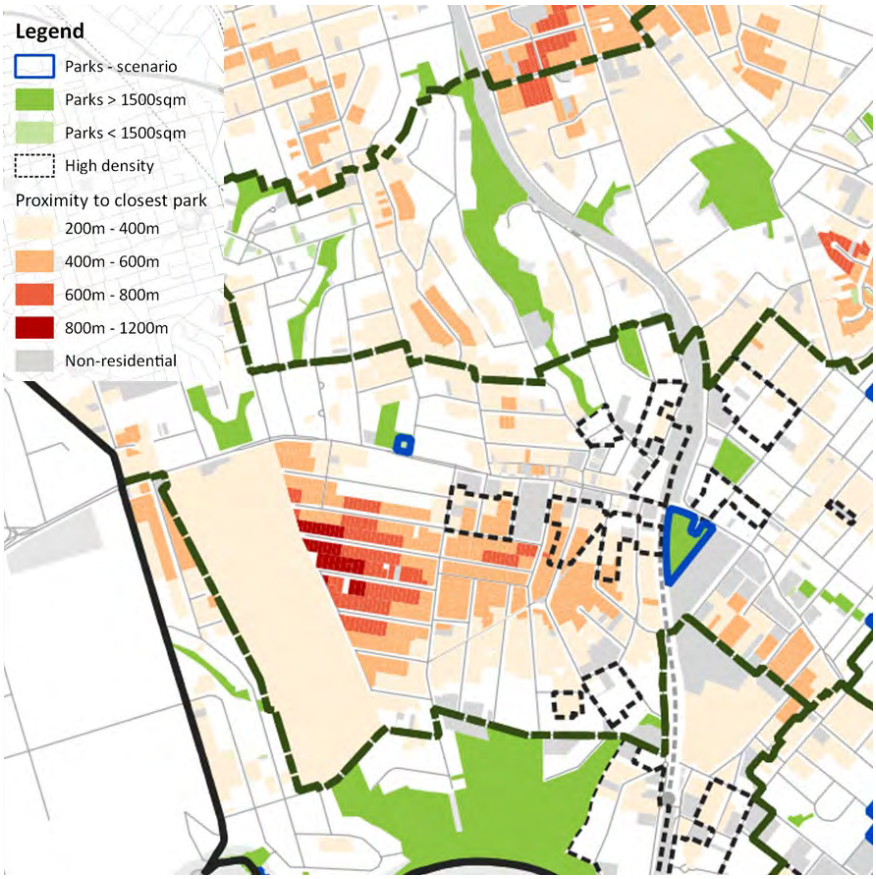


Source: SGS Economics and Planning

West Ryde

Remaining gaps

FIGURE 52: WEST RYDE REMAINING ACCESS GAPS



Source: SGS Economics and Planning

The analysis has indicated that:

- Residents in a large area of West Ryde south of Victoria Road do not have access to open space within 400m and, within this area, some do not have access within 800m.
- The overall per capita provision of open space is very low.

Response framework

There are a number of options which could help respond to these remaining gaps:

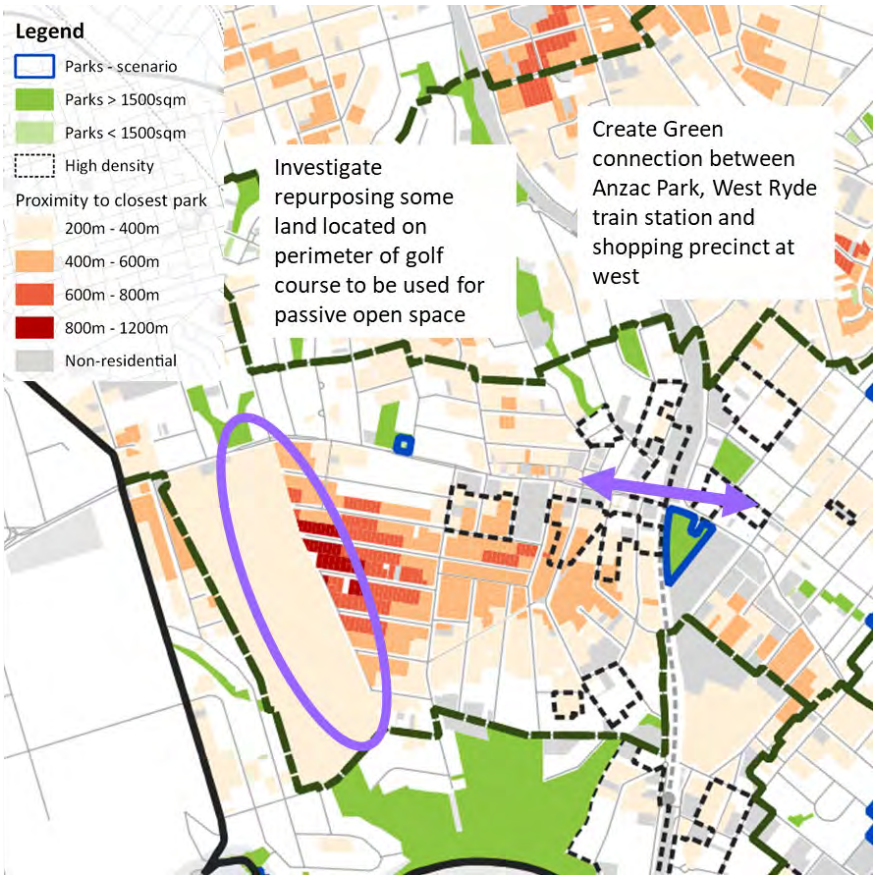
- Require new open space in those areas of West Ryde that have poor access as part of new developments.
- Investigate repurposing 3,000m² land located on perimeter of the Parramatta –Ryde Golf Club course, for the purposes of passive open space.
- Acquire additional spaces opportunistically as residential properties are put on the market. This is a particularly high cost option, given the relative land values in the centre.
- Create a green connection between Anzac Park, West Ryde train station and shopping precinct.

Next steps

There are a number of key steps to address the challenges in West Ryde to implement the response framework:

- Undertake structure planning of West Ryde centre including open space and pedestrian walkability. As part of this, ensure all future high density dwellings are within 200m of open space and low density dwellings with 400m, identify the most suitable locations for a new green connections linking the eastern and western site, opportunities for either Council owned or strategic purchase of sites, and the most suitable opportunities for streetscape upgrades. This structure planning will consider
    - Land values of mid-block break land acquisitions,
    - Council owned sites and opportunities for strategic purchase,
    - The principal pedestrian and active transport network, and
    - Links between key destinations and places of interest.
- Consider exploring redevelopment options for Ryde Parramatta Golf Club, to identify the most suitable part of the course for creation of a new publicly accessible open space. This analysis could consider fairway redesign (but not any reductions to the 18 holes due to the forecast increasing demand for golf as the population increases) and identify more efficient use of the site area to allow for new open spaces to be created on the eastern perimeter of the site.
- Seek out developer contributions and Voluntary Planning Agreements to finance land acquisitions and new open spaces in West Ryde.

FIGURE 53: WEST RYDE RESPONSES TO REMAINING GAPS

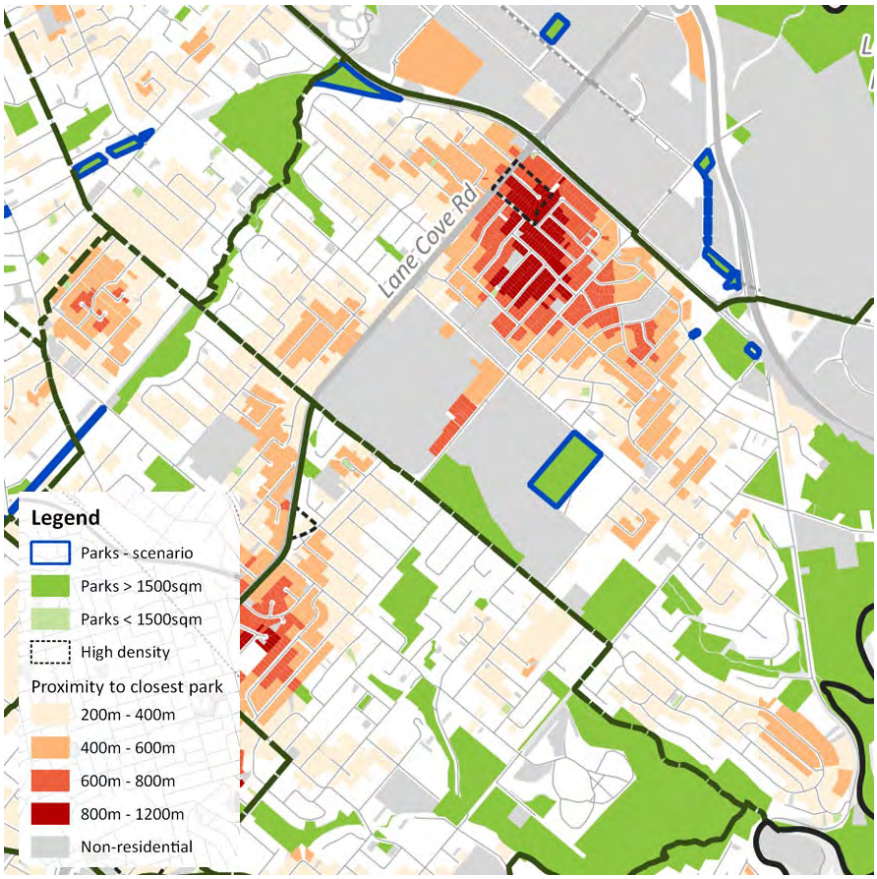


Source: SGS Economics and Planning

North Ryde

Remaining gaps

FIGURE 54: NORTH RYDE REMAINING GAPS



Source: SGS Economics and Planning

The analysis indicates that:

- A large area of North Ryde does not have access to open space within 400m, and many areas do not have access within 800m. This represents a severe deficit in open space access.
- The overall per capita provision of open space is low.
- Parts of North Ryde currently have poor access to junior/modified outdoor fields and ovals, and there is forecast to be poor access to indoor courts by 2036.

Response framework

There are a number of options which could help respond to these remaining gaps:

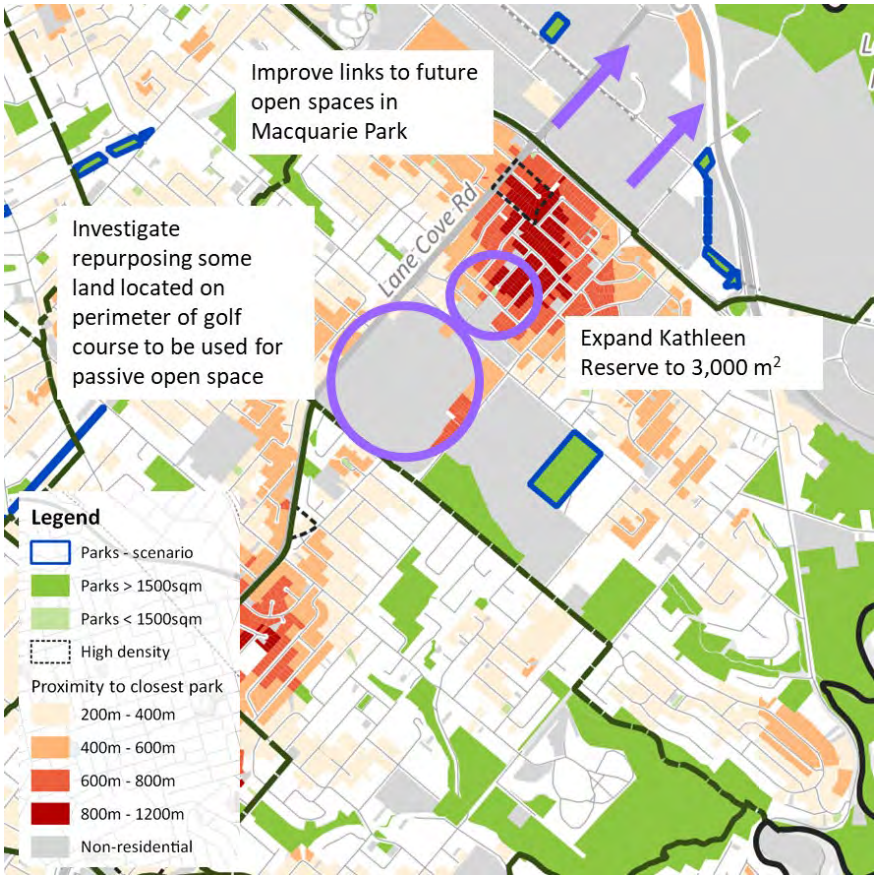
- Require new open space in areas of North Ryde that have poor access as part of new developments,
- Enhance access by linking North Ryde with Macquarie Park via green corridors,
- Investigate repurposing 3,000m² of land located on perimeter of Ryde Golf Club course, for the purposes of passive open space,
- Expand Kathleen Reserve to 3,000m² , and
- Identify opportunities to acquire new open space nearby, including via acquisitions of land when residential properties come up for sale.

Next steps

There are a number of key steps to address the challenges in North Ryde to implement the response framework:

- Undertake structure planning of North Ryde (Cox's Road) Town Centre including open space and pedestrian walkability. As part of this, ensure all potential high density dwellings are within 200m of 3,000m² (minimum 1,500 m²) of open space, identify the most suitable locations for connections linking the centre to the north, opportunities for either Council owned or strategic purchase/dedication of sites, and the most suitable opportunities for streetscape upgrades. This structure planning will consider
    - Land values of mid-block break land acquisitions,
    - Council owned sites and opportunities for strategic purchase,
    - The principal pedestrian and active transport network, and
    - Links between key destinations and places of interest.
- Undertake detailed design analysis to identify options, and the most appropriate corridor to connect North Ryde to Macquarie Park. This will need to consider local site conditions and opportunities, visual access and attractiveness of potential pathways as well as relative costs.
- Undertake detailed design analysis of Kathleen Reserve to identify whether expansion is feasible. Should it be feasible, link the expansion to a review of the areas planning controls.
- Seek out developer contributions and Voluntary Planning Agreements to finance land acquisitions and new open spaces in North Ryde.

FIGURE 55: NORTH RYDE RESPONSES TO REMAINING GAPS

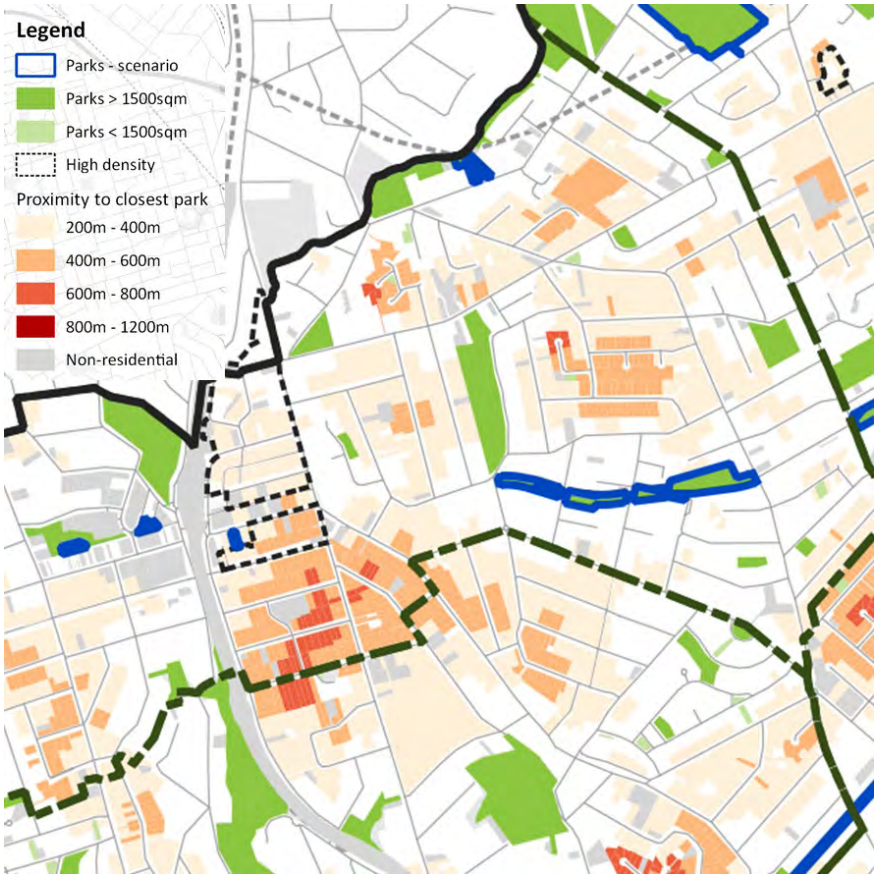


Source: SGS Economics and Planning 2020

South East Eastwood

Remaining Gaps

FIGURE 56: SOUTH EAST EASTWOOD REMAINING ACCCESS GAPS



Source: SGS Economics and Planning

The analysis indicates that:

- A large area south of the Eastwood Town Centre and train station does not have access to open space within 400m, and there are also areas without access within 600m.
- The overall provision rate of open space remains low.
- Poor access to full sized fields and ovals, particularly during winter and poor access to outdoor courts remain.

Response framework

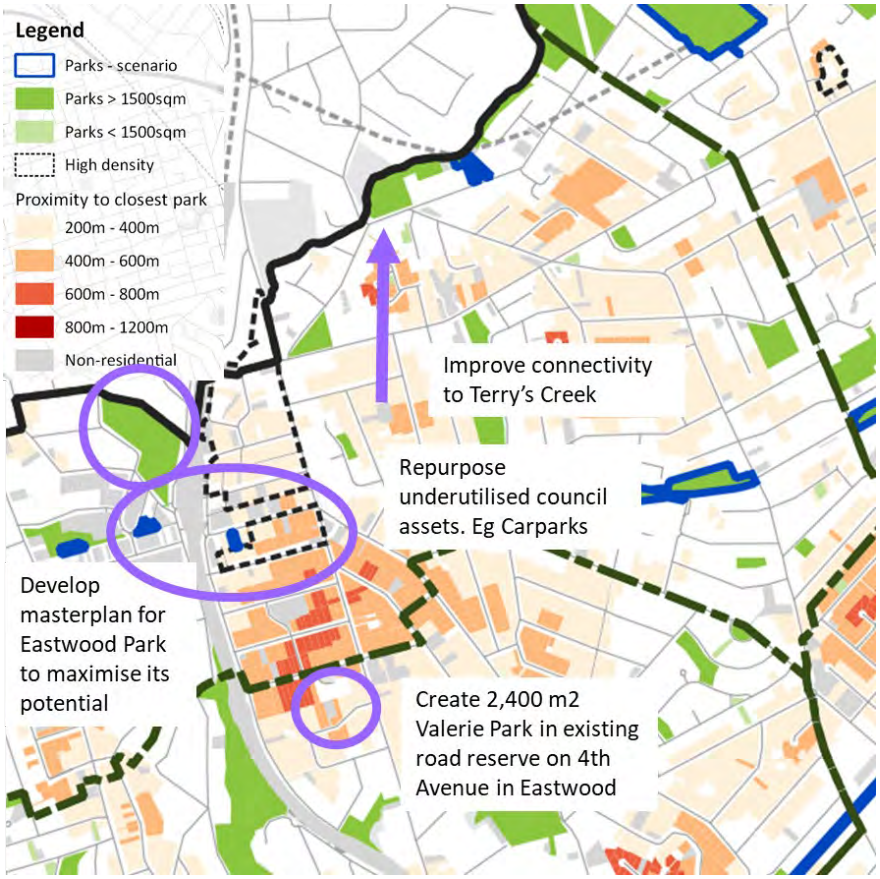
There are a number of options which could help respond to these remaining gaps:

- Create 2,400m² Valerie Park in existing road reserve on 4th Avenue in Eastwood,
- Require new open space in areas of South East Eastwood that have poor access as part of new developments ,
- Develop masterplan for Eastwood Park to maximise its potential,
- Consider opportunities to repurpose underutilised council assets, for example carparks,
- Improve connectivity to Terry's Creek,
- Deliver recommendations from Eastwood Structure Plan, and
- In the event of redevelopment in areas of Eastwood (particularly in northern areas) that have poor access, require new open space as part of the development process.

Next steps

- Undertake structure planning of Eastwood Town Centre including open space and pedestrian walkability. As part of this, ensure all high density dwellings are within 200m of 3,000m² (minimum 1,500m²) open space, identify the most suitable locations for a new open space, opportunities for either Council owned or strategic purchase of sites, and the most suitable opportunities for streetscape upgrades. This structure planning will consider
    - Land values of mid-block break land acquisitions,
    - Council owned sites and opportunities for strategic purchase,
    - The principal pedestrian and active transport network, and
    - Links between key destinations and places of interest.
- Undertake detailed design planning to identify options for the creation of Valerie Park.
- Prepare a technical brief for the Eastwood Park Masterplan.
- Undertake detailed design planning and feasibility modelling for more open space on Council owned or acquired land.
- Undertake detailed design planning to identify options, and the most appropriate new connections that improve access to Terry's Creek. This will need to consider local site conditions and opportunities, pedestrian networks, visual access and attractiveness of potential pathways as well as relative costs.
- Undertake detailed design and technical analysis to identify the most suitable and efficient approach to naturalising the section of Terry's Creek that remains underground.
- Review Eastwood Structure Plan and implement recommendations.
- Seek out developer contributions and Voluntary Planning Agreements to finance land acquisitions and new open spaces in Eastwood Town Centre.

FIGURE 57: SOUTH EAST EASTWOOD RESPONSES TO REMAINING GAPS

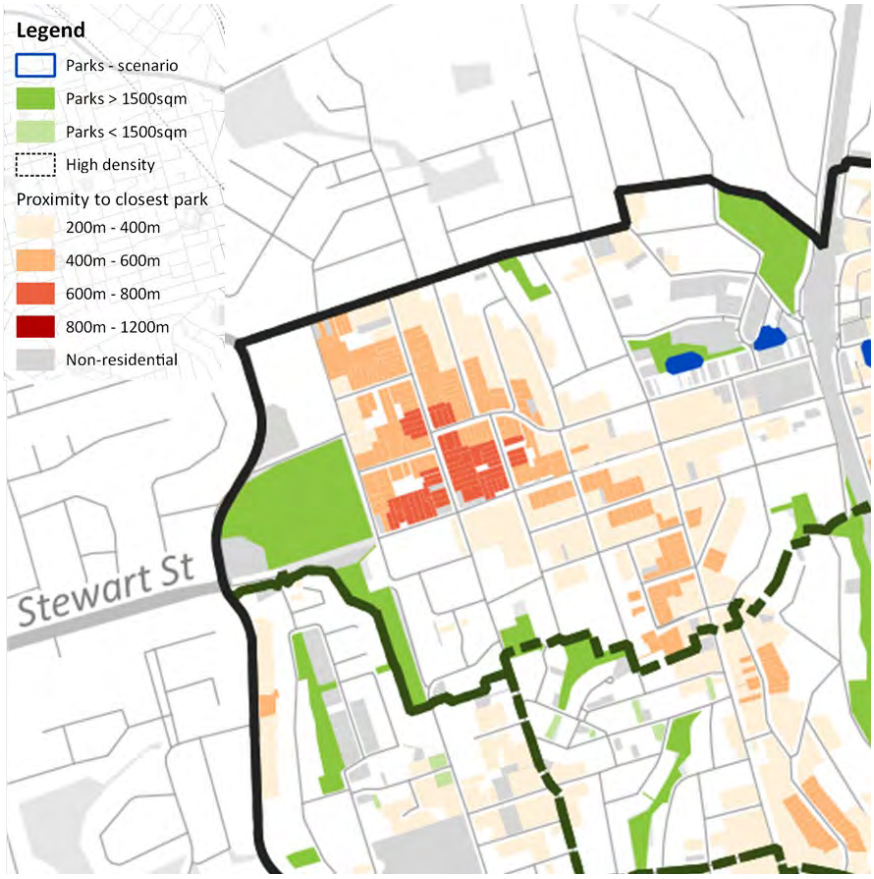


Source: SGS Economics and Planning

West Eastwood

Remaining Gaps

FIGURE 58: WEST EASTWOOD REMAINING ACCESS GAPS



Source: SGS Economics and Planning

The analysis indicates that:

- A large area in the west of Eastwood does not have access to open space within 400m, and there are also areas without access within 600m.
- The overall provision rate of open space remains low.
- Poor access to full sized fields and ovals, particularly during winter and poor access to outdoor courts remain.

Response framework

There are a number of options which could help respond to these remaining gaps:

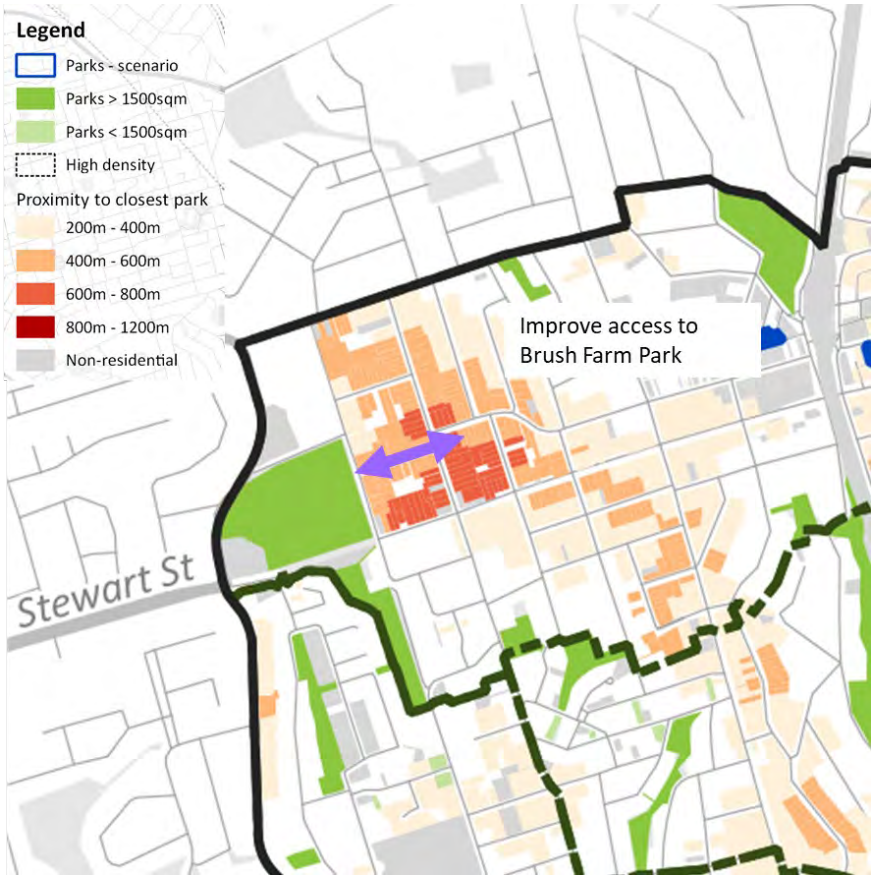
- Improve access to Brush Farm Park.
- Develop masterplan for Brush Farm Park to maximise its potential.
- As part of new developments, require new open space in the area of Eastwood (near Brush Farm Park) that has poor access.

Next steps

- Undertake detailed design planning to identify options, and the most appropriate new connections that improve access to Brush Farm Park. This will need to consider local site conditions and opportunities, pedestrian networks, visual access and attractiveness of potential pathways as well as relative costs.
- Prepare a technical brief for the Brush Farm Park Masterplan.

- Seek out developer contributions and Voluntary Planning Agreements to finance land acquisitions and new open spaces in West Eastwood.

FIGURE 59: WEST EASTWOOD RESPONSES TO REMAINING GAPS



Source: SGS Economics and Planning

13.4 Approaches to remaining open space gaps

In addressing the remaining open space gaps, in high priority areas as well as across the City, the following should be considered:

- Council's LSPS indicates that it is not appropriate to rezone sites for residential purposes, unless there is open space within 400m, unless open space can be provided as part of development (i.e. on larger redevelopment sites).
- The GAO Guide (refer Table 48) outlines a range of factors relating to frontages and shape of open spaces, which need to be considered in addition to overall quantum, when delivering additional open space.
- It is recommended that Council adopt the GAO standards relating to "desirable minimum size of a local park (3,000m^2) including that in high-density areas, parks may be as small as 1,500m^2 where more efficient provision does not exist or opportunities for re-use of small spaces arise."
- In some cases, divestment of smaller parks (<1,500m²) could generate funds which could be used to expand other parks so they are to greater than 1,500m² or to create midblock breaks to improve accessibility. This should only occur in suburbs with oversupply, and where there are committed plans to deliver the park expansions.
- Green corridors can provide green space links to open space. While the corridors may not meet the guidelines relating to size, shape and frontage of open spaces (and therefore would not contribute to the formal assessment of open space provision) corridors can improve access to the open space network and provide relief from the urban environment.

TABLE 48: GREENER PLACES PERFORMANCE INDICATORS – VARIOUS

Size and shape
▪ High-density areas – the minimum size of a local park is 3,000 m^2. In high-density areas, parks are sometimes as small as 1,500 m^2. Smaller spaces can provide local amenity but are not adequate for a diverse range of recreational needs. Smaller parks need to be supported by larger open spaces in the network. Medium to low density areas – the minimum size of a local park is 5,000–7,000 m^2. Road frontage and visibility are key considerations, especially in high-density areas so open space is accessible for all. Sporting facilities have specific size and shape requirements that need to be met to provide functional space for their use
Quantity
▪ Quantity should be considered in the number of opportunities available. Larger public open space areas mean more opportunities can be provided in one location. Quantity of land available, along with size and shape, are critical in adequately meeting sporting needs. There are minimum areas needed for different sports, and different sporting spaces can only accommodate so many users.
Quality
Open space needs to be strategically planned and designed to create a quality open space network; the sum is greater than its parts. Key characteristics of open space that influence quality include: —visual and physical access —landscape setting —demographic, cultural, and community demand —condition of facilities and equipment —maintenance —number of activations within the space —size, shape, and topography —adjacent land uses —amount of vegetation and shade —biodiversity outcomes —safety —sustainability Key characteristics of open space that influence quality include: ▪ Visual and physical access ▪ Landscape setting ▪ Conditions of facilities and equipment ▪ Maintenance ▪ Number of activations within the space ▪ Size, shape, and topography ▪ Adjacent land uses ▪ Amount of vegetation ▪ Biodiversity outcomes
Diversity
These are not the only types of open space but represent a range of opportunities. They should be combined, as multi-use facilities: ▪ local play for the very young (LPY) ▪ local children's play (LPC) ▪ older children's activity space (OCA) —youth recreation space (YRS) —local recreation space (LRS) —active recreation space (ARS) —large community outdoor recreation area (LCOR) —fitness and exercise space (FES) —trail and path-based recreation (TPR) —organised sport and recreation (OSR) —off-leash dog exercise area (DEA).

Source: Draft Greener Places Design Guide (2020)

Next steps

The next steps are to:

- Identify most suitable corridor alignments and undertake concept planning for new and existing green corridors and foreshore links
- Acquisitions and/or landscaping to create/enhance foreshore links
- Concept implementation plans for stormwater treatment
- Negotiate with developers on site-by-site basis for access to open space
- Undertake MCA for potential future open space projects. The MCA framework was used to assess the *planned* projects (Section 11) and *potential future* sport and recreation facility projects (Section 12.11). It is not possible to undertake a MCA of the proposed additional open space network projects, as they are not sufficiently scoped. The MCA framework

approach should, however, be used as one of the assessment tools during the business case development of specific projects to ensure their alignment with the vision and objectives of this Strategy.

13.5 Summary

Following the delivery of the planned projects, there are a series of remaining gaps in the open space network.

A series of projects have been identified that could respond to the service gaps in the open space network. These include extending green corridors, improving access to open space through mid-block breaks, new open space acquisitions, park/open space enhancements and leveraging supply via collaboration and partnerships. Many of these projects have already been identified in the *City of Ryde Biodiversity Plan*, the *Green Grids* identified by the Government Architect of NSW and existing masterplans and structure plans. Other projects are a direct response to gaps in access (i.e. where there is no open space within 400 metres). To identify the combination of projects that are required, further detailed design and conceptual development is required. The MCA framework should also be used to help evaluate and prioritise these projects.

Five neighbourhoods, where there are remaining significant gaps, have been considered in more detail, and a range of potential options to address the gaps identified. Key next steps for these locations are also identified.

14. MACQUARIE PARK OPEN SPACE

The NSW State Government is currently leading a strategic planning process for the Macquarie Park Strategic Investigation Area, with the focus of creating 'a health and education precinct and an economic and employment powerhouse'. Planning for recreation and open space provision will be part of the planning for this extremely high density residential and commercial precinct.

14.1 Introduction

As detailed in Section 13, several neighbourhoods within the City, including Macquarie Park, Top Ryde, West Ryde, North Ryde, Eastwood and West Eastwood have significant open space provision shortfalls. Options for addressing these shortfalls were outlined in Section 13, with the exception of Macquarie Park.

This Section provides a more detailed description of the challenges and opportunities for Macquarie Park, acknowledging:

- The significant high growth scenario (which is projected to account for nearly 50% of the City's forecast population growth between 2019 and 2036),
- the relative lack of existing open space and recreation facilities and
- the status of the area as a Strategic Investigation Area.

14.2 Open space and recreation facility demand forecast

The outcomes of the Strategic Investigation Area planning, in terms of potential population scenarios, will not be known prior to the completion of this Strategy and therefore cannot be included in the analysis and recommendations. The analysis here is therefore informed by the current published forecasts for Macquarie Park, which indicate the area is projected to grow from 8,496 people in 2016 to 31,282 people by 2036; a net increase of 22,786 people (DPE forecasts 2019).

The modelling undertaken for the current study – and detailed in the above sections – is based on population growth between 2019 and 2036. Accordingly, Macquarie Park's estimated 2019 population of 13,084[21] is the relevant starting point and the forecast additional population, between 2019 and 2036, is 18,198 people. This growth accounts for 45% of the forecast City-wide growth between 2019 and 2036.[22]

Open space and recreation facility *provision benchmarks*, based on the following standards, have been applied to the forecast 2019-36 population increase of 18,198 people:

- City of Ryde's existing quantity standards for sports provision
- Recreation facility provision benchmarks developed by SGS Economics and Planning that are based on participation rates and facility characteristics (refer to Section 7)
- The NSW Government Architect Office for number of major/destination, district and local parks

These are illustrated Table 49.

[21] Based on Forecast.id and assuming linear growth, the average annual growth rate for Macquarie Park between 2016 and 2036 is 18%.

[22] Forecast.id and DPE 2019 forecasts

TABLE 49: MACQUARIE PARK RECREATION AND OPEN SPACE REQUIRED FOR 2036 POPULATION

Facility	Benchmark	Additional facility requirements	
		Unit	Qty
Industry benchmarks -Number of parks			
All open space (total)[23]	15% 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 3,000m² acknowledging that a minimum of 1,500m² 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]	1:5000 people	No. of parks	3.5
Local Parks (average size > 0.5ha, minimum size 0.15ha)[27]	1:2500 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 1,800 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	1,000 m^2 of pool space per 38,000 people[3]	m^2 of pool space	475

Source: Cred Consulting 2020, SGS Economics and Planning

[23] NSW Department of Planning State Government's Recreation and Open Space Planning Guidelines for Local Government 2010
[24] GA Greener Places: Open Space for Recreation Guide: Draft for Discussion 2020
[25] GA Greener Places: Open Space for Recreation Guide: Draft for Discussion 2020
[26] GA Greener Places: Open Space for Recreation Guide: Draft for Discussion 2020
[27] GA Greener Places: Open Space for Recreation Guide: Draft for Discussion 2020
[28] SGS Economics and Planning

The forecast *additional facility requirements* (Table 50) are a subset of and included in the additional facility forecasts for the whole of the City (as detailed in Sections 6 and 7, above).

TABLE 50: SUMMARY - MACQUARIE PARK ADDITIONAL RECREATION AND OPEN SPACE DEMAND TO 2036

Open space network	Sport and recreation facilities
▪ 36ha of open space – distributed to ensure that all residences are within 200m of 1,500m2 minimum space (high density) and 400m of 3,000m2 minimum (medium and low density) ▪ 1 major destination park (5ha+) ▪ 3 or 4 district parks (2h to 5ha) ▪ 7 local parks (0.5 to 1.5ha)	▪ 5.5 full sized fields or ovals ▪ 1.5 Junior/modified fields or ovals ▪ 10 outdoor courts ▪ 2 indoor courts ▪ 1 lawn bowls/croquet courts ▪ 0.3 golf course ▪ 475m² of aquatic space

Worker population

There is also anticipated to be demand for open space and recreation generated by the worker population. While this has not been considered elsewhere in this study, Macquarie Park is anticipated to accommodate significant employment growth, and this will generate significant demand for formal and informal recreation and open space use; some studies indicate that a worker generates demand of 30 per cent of a resident. This will need to be considered as part of the detailed planning for Macquarie Park.

14.3 Open space delivery options for Macquarie Park

Macquarie Park, due to its regional significance and high growth profile, provides a unique opportunity to plan for and provide open space and sport/recreation facilities commensurate with a high quality, high density urban neighbourhood.

The following sub-sections provide an overview of some of the unique open space, sport and recreation facility needs for Macquarie Park, including the impact of the large worker population.

Open space network

The high density form of development in Macquarie Park will mean that open space will need to function as backyard, meeting place, event space, play space for a range of age groups. It will also need to provide space for exercise and events, and be adaptable to different uses and needs from different groups.

This will require a hierarchy and diversity of connected, quality open spaces, including new regional/destination, district and local level public open space and semi-private (communal) and private open space. Given the size and diversity of spaces required, large sites will need to be identified for delivery of regional and district open space that cannot be delivered within individual development sites.

Some of these spaces, it is noted, have already been developed in Macquarie Park (e.g. Lachlan's Line, Catherine Hamlin Park) and others (e.g. Blenheim Park expansion, Holt Park extension, County Road Corridor, North Ryde Hospital) are in close proximity to Macquarie Park.

It will also be important to ensure that all residents in the high density housing areas have access to an open space within 200 metres. The GAO specifies access to 3,000 m² open space should be provided, but acknowledges in certain circumstances a minimum of 1,500 m² is acceptable.

The most appropriate format to deliver the required open space and recreation experiences for the population will need to balance the demand that higher density residential development generates, with the feasibility of providing significant open spaces in a built up area. In this context, planning for Macquarie Park will need to ensure residents have access to a range of public and open spaces and these spaces may need to deliver a higher level of open space *service* via increased infrastructure, multipurpose passive and active spaces, quality and other embellishments.

In recognition of the challenges of providing open space consistent with benchmarks, other potential and complementary responses could include providing common green spaces and improving access to nature.

Common green spaces

Intermediary common green spaces can help to create sub-communities in high density housing, "village-ifying" residents' experience. There should be a focus on the design of informal shared spaces, such as providing generous corridors and the presence of landscape in lift lobbies, to help develop neighbourliness and community. Recreation areas should be designed to feel safe, connected, and welcoming (as opposed to only owned by a small number of residents). Connections to the street and the community at ground level should be activated and contribute to social connection rather than designed only for security.

Privately owned, publicly accessible open space within developments should be co-located with adjoining developments and located with a public interface to create larger areas of open space.

Access to nature

There is a growing body of research that indicates that living in high-density housing can lead to a collective 'nature deficit'. There should be opportunities for residents to experience natural elements in their day to day lives including through 'biophilic' architectural elements such as green walls and roofs, indoor plants and nature-inspired design elements such as the use of fractal patterns in materials, as well as through access to green space. Macquarie Park is defined by Lane Cove River and National Park along the entire northern border, creating opportunities for future communities to be well connected to nature.

Sport and recreation facilities

As summarised above, the Macquarie Park population will generate demand for a range of formal sport and recreation facilities – including fields and ovals, outdoor and indoor courts, lawn bowls, croquet, golf and swimming/aquatic activities.

However, as discussed in Sections 7 and 8, above, some of these facilities are in oversupply and will remain so, under current population forecasts, at least until 2036. These include junior/modified fields, outdoor courts and lawn bowls/croquet facilities.

The needs for other sport and recreation facilities - those that are forecast to be in undersupply by 2036 (i.e. full-size fields/ovals, indoor courts and swimming/aquatic space) – will be addressed via the City-wide 'planned' and 'additional' projects discussed in detail in Sections 10 to 12 (planned projects) and Section 13 (additional projects), above.

This means that if the Macquarie Park population increases in accordance with the DEP's 2019 forecasts (i.e. approximately 31,000 in 2036), there will be no need to provide sport and recreation facilities additional to those identified in Sections 10 to 13. Some of these proposed facilities, it is noted, are within or proximate to Macquarie Park (e.g. Christie Park new sports field and futsal courts, ELS Hall Park indoor courts and floodlighting of Tuckwell Park and Fontenoy Park sports fields).

If, however, the Macquarie Park Strategic Investigations indicate a population greater than the DEP 2019 forecasts, then additional open space and recreation facility planning will be required for the precinct.

15. RECOMMENDATION & CONCLUSIONS

15.1 Conclusions and next steps

Open Space

- The City of Ryde currently has a relatively good supply of open space (based on commonly used benchmarks) and has access to substantial natural assets which contribute to the identity of the City and add diversity to the open space network.
- Projected population growth will generate demand for additional open space. Using benchmarks, the City is projected to be undersupplied at a whole of City level by 2036 but it will not be possible to provide additional open space at levels prescribed by traditional benchmarks.
- Accordingly, and as recognised in the Government Architect's draft *Greener Places Design Guide*, it will be necessary to focus more on optimising the accessibility, quality and adaptability of parks and other open space areas, and prioritising areas which require additional open space.
- Council have, in a number of previous studies, planned a series of open space projects. Analysis indicates these *planned* projects will improve access to open space and will increase the number of residents who have reasonable access to open space, but there will still be significant gaps across the City.
- Some *potential future* project opportunities have also been identified to address these remaining gaps, including for five neighbourhoods which have significant gaps. Further work is required to identify how to address these gaps, including the consideration of options for rationalising existing open space assets
- The planned projects and identified potential projects address many of the significant access gaps and, to deliver optimal outcomes, it will be important to ensure that their locations and layouts optimise access.

Sport and recreation

- The City has a wide range of sport and recreation facilities. A number of these facilities are used by people from outside the City for regional competitions. This means that while there are ample facilities to meet the needs of residents of the City of Ryde, in practice many facilities are often used at full capacity.
- New sports facilities with increased capacity are needed to keep up with population growth and demand for recreation. As the demographics of the City continue to diversify, it will be essential that the facilities reflect the changing needs of the community. This implies, for example the need to respond to increasing interest in indoor sports such as table tennis and badminton.
- The planned projects identified by Council address the immediate shortage of indoor courts. This study has identified an undersupply of indoor courts in the future however a more detailed study undertaken by the Otium Group identified there would be sufficient supply once the potential future projects are delivered. Planned and potential future projects address the gaps in all other facility types
- In the future it will become more challenging to cater to outdoor field sports as new land becomes more expensive and difficult to acquire. Promoting alternative sports will alleviate some of the pressure on full sized fields, and increases to capacity through lighting and surface upgrades will provide additional capacity for training. The new futsal courts that are

planned for Christie Park are an example of an opportunity to shift some demand to a more efficient use of land.

Next steps

- Planned projects for open space and recreation respond to major gaps and undersupplies in open space and recreation facilities. Priority projects have been identified, and address Council's objectives for open space and recreation most effectively. However all projects will enhance the open space and recreation network and are needed. **Detailed project planning** for planned and potential projects is required.
- Open space provision rates are declining. It is not realistic to provide benchmark rates of open space provision. Instead, **upgrading existing facilities** to cater to more uses, combined with **high quality spaces** in high density locations can help to address demand in built up areas.
- **Macquarie Park** is anticipated to generate substantial demand across all facility types, including full sized fields and ovals (See separate discussion for Macquarie Park in Section 14), and for open space. Macquarie Park is a major opportunity to see new large public open spaces and sports facilities delivered. Advocacy to the NSW Government, that communicates the demand for sport and recreation facilities likely to be generated by the development of Macquarie Park, is essential.
- The **locally developed provision ratios** summarised in Table 51 have been calculated based on the findings of this study, and therefore include consideration of sport and recreation participation rates, the sports played at various facilities in the City of Ryde, and the estimated capacity of the City's facilities. These ratios can be used to assist in determining timing and thresholds for the delivery of various sport and recreation facility types.

TABLE 51: PROVSION RATIOS FOR RECREATION FACILITIES

Recreation facility	Approximate ratio	Unit
Full size fields and ovals	1 per 3,400 people	No. of full size fields and ovals
Junior/Mod fields and ovals	1 per 13,000 people	No. of junior/ mod fields and ovals
Outdoor court	1 per 1,800 people	No. of outdoor courts
Indoor court	1 per 9,500 people	No. of indoor courts
Lawn bowls and Croquet	1 per 21,000 people	No. of lawn bowls/croquet facilities
Golf course	1 per 56,000 people	No. of 18-hole golf courses
Swimming pool	1,000m² of pool space per 38,000 people	Square metres of pool space

Source: SGS Economics and Planning 2020

- Engaging with stakeholders, including **Macquarie University**, to understand the likelihood of the proposed 3 new indoor courts being delivered.
- Developers recognise the value of high amenity urban environments. **Advocating to developers** to provide sports facilities and open space within development sites will create a better open space and recreation network and improved development outcomes.
- Investment in new **outdoor courts** to create more opportunities for informal local use in undersupplied areas is required. This could include shared use of facilities with schools and other organisations
- **Swimming pools** are major items of urban infrastructure, requiring significant planning and investment to realise new facilities. Given the complexities, this should occur via a dedicated

Aquatic Strategy. Further work is required to identify the scale and nature of the additional facilities which are required to meet the community's needs. This preliminary analysis indicates that this planning exercise should commence around 2025, as there are currently poorly served areas, and these are projected to continue. Improving access to pools outside of the City, such as a bridge over Terrys Creek to the Epping Aquatic Centre (in Dence Park) in City of Parramatta will improve accessibility and contribute to managing demand.

- Golf courses occupy large land areas and are privately managed. They are a key part of the green space network, but there are opportunities for the land to be used more efficiently. A study to review opportunities for excising some publicly accessible land (for new parks) from the two golf courses, while retaining their 18-hole layouts, should be undertaken.

15.2 Monitoring framework

The following framework provides a mechanism for Council to monitor the outcomes associated with the Strategy.

TABLE 52: MONITORING FRAMEWORK

Strategy	KPIs for open space planning
Ample, Accessible Open Space	
▪ Increase the provision of open space in areas which are underserved – particularly those areas where households do not have access within 400m to a minimum 1,500m^2 park	▪ Percentage of households with access to open space within 400m walking distance, and 200m in higher density areas to ideally 3,000m^2, min 1,500m^2
▪ In higher density areas such as town centres, deliver high quality public and civic spaces	▪ Percentage of households with access to open space within 400m walking distance, and 200m in higher density areas to smaller open space
▪ Plan for recreation facilities in locations which provide equitable access	▪ Number of City of Ryde residents using facilities
▪ Improve connections to and between open spaces	▪ Kms of continuous walking/cycling trails ▪ % respondents in satisfaction surveys rating quality and access to walking/cycling trails as good or excellent
Shared and enjoyed by all	
▪ Actively plan for formal and informal recreation and use of open space	▪ Number and hectares of different types of open spaces ▪ Number of different types of sport and recreation facilities ▪ Participation rates for various population group including different ethnicity/age/ gender/ disability groups
▪ Consider the needs and preferences of specific groups in the design and location of recreation facilities	▪ Identification of specific issues via community satisfaction surveys that include questions on unmet needs ▪ Number of user groups consulted as part of design of new or upgraded open space and recreation facilities
Founded on a healthy natural environment	
▪ Improve connections and links with the riverfront	▪ Number of links connecting riverfront to main trail network/s ▪ Kms of riverfront walking/cycling trail/number of signposted pedestrian access routes to riverfront trails
▪ Develop corridors and spaces which link existing open spaces, and link to regional open spaces/ access paths, and increase tree canopy to provide shade and relief from heat through creation of cooler microclimate	▪ Increase in tree canopy cover on public land ▪ Number of trees planted ▪ Number of Green Grid projects completed
▪ Encourage active transport by providing attractive and comfortable paths to walk and cycle	▪ Relative attractiveness and comfort of open space connections
▪ Provide opportunities for indoor recreation	▪ Number of indoor sports facilities which can be used on hot days

Strategy	KPIs for open space planning
▪ Consider the micro climate, permeability and water required to maintain recreation playing surfaces	▪ Water use required to maintain facilities and species ▪ Selection of playing surfaces in accordance with WSUD principles
Conserving our rich history, culture and local character	
▪ Ensure local history, culture and character is a key element in the design and decision making regarding the location of new and expanded open space and recreation facilities	▪ Number of facilities which include: - Aboriginal cultural heritage - Post settlement history ▪ Number of facilities which are not on culturally sensitive sites
Managed sustainably now and for future generations	
▪ Prioritise investment in existing facilities to increase their capacity, over new facilities	▪ Expenditure on existing facility upgrades
▪ Where new facilities are required, design them to maximise future adaptability for use with other sports	▪ How many sports can facilities be used for?
▪ Leverage non-Council owned and private spaces for community use including schools, Universities and privately owned facilities through joint use agreements to increase capacity and choices	▪ Community use of non-Council facilities (playing hours attributable to non-Council facilities – total and %) ▪ Number of hours access to private facilities x facility x sport; Percent of total use of sports grounds ▪ Percent capacity used x facility x sport x precinct
▪ Investigate options to enable use over broader number of hours, or to provide a wider range of activities in existing facilities to increase capacity and choices	▪ Number of hours access to facility x sport
▪ Engage with users, residents and community groups to help inform the design, planning and management of open space with particular emphasis on diverse communities.	▪ Number of community engagements undertaken ▪ Number of strategies and plans of management adopted ▪ % of respondents in annual satisfaction surveys who are satisfied with the quality of and access to open space and recreation facilities

Source: SGS Economics and Planning 2020

CASE STUDIES

Streets as parks and recreation spaces

Like few other places in cities, streets are public places of encounter where everyday life takes place. Councils have the ability to drive the re-design of streets in a way that they can perform recreational open space functions through verge planting, traffic calming, wider footpaths, seating, shade, and places to stop such as micro-parks (as found at Barbara Street Play Ground), parklets or skate and play elements.

In built up areas such as Eastwood, Epping and Top Ryde, where there may be limited opportunities for new public parks, the improvements to the network of streets can deliver needed public spaces and maximise recreational opportunities that lend richness to the social, civic, and economic fabric of the community.

Active, green, walkable streets extend opportunities for recreation beyond the boundaries of parks, and improve connections to parks in areas with low provision, and where there are limited opportunities to deliver new open space. They also increase recreational spaces for walking, which is the number one recreational activity in the City of Ryde and across Greater Sydney.

Passeig De St Joan Boulevard, Barcelona

The 'Passeig De St Joan' is a promenade in the Eixample district that connects two key destinations in Barcelona – Ciutadella Park and the district of Gracia. Eixample is one the districts with the lowest availability of green space per inhabitant.

St Joan was one of Barcelona's first Green Corridors projects, aiming to provide pedestrian and cycle priority, improve biodiversity, manage storm water run-off, and provide new leisure recreation spaces for a range of different age groups. To do this, the number of traffic lanes was reduced to make way for new playgrounds, seating areas, outdoor dining areas, dedicated cycle ways and tree plantings. A mixed paving system was chosen to ensure rain water stayed in place and did not drain away in gutters.

Throughout the City of Ryde, there will be opportunities in high density areas and near high streets to ensure verge space is working hard to deliver health and wellbeing outcomes for the community through re-imaging streets (and verge space) as places for people and nature.

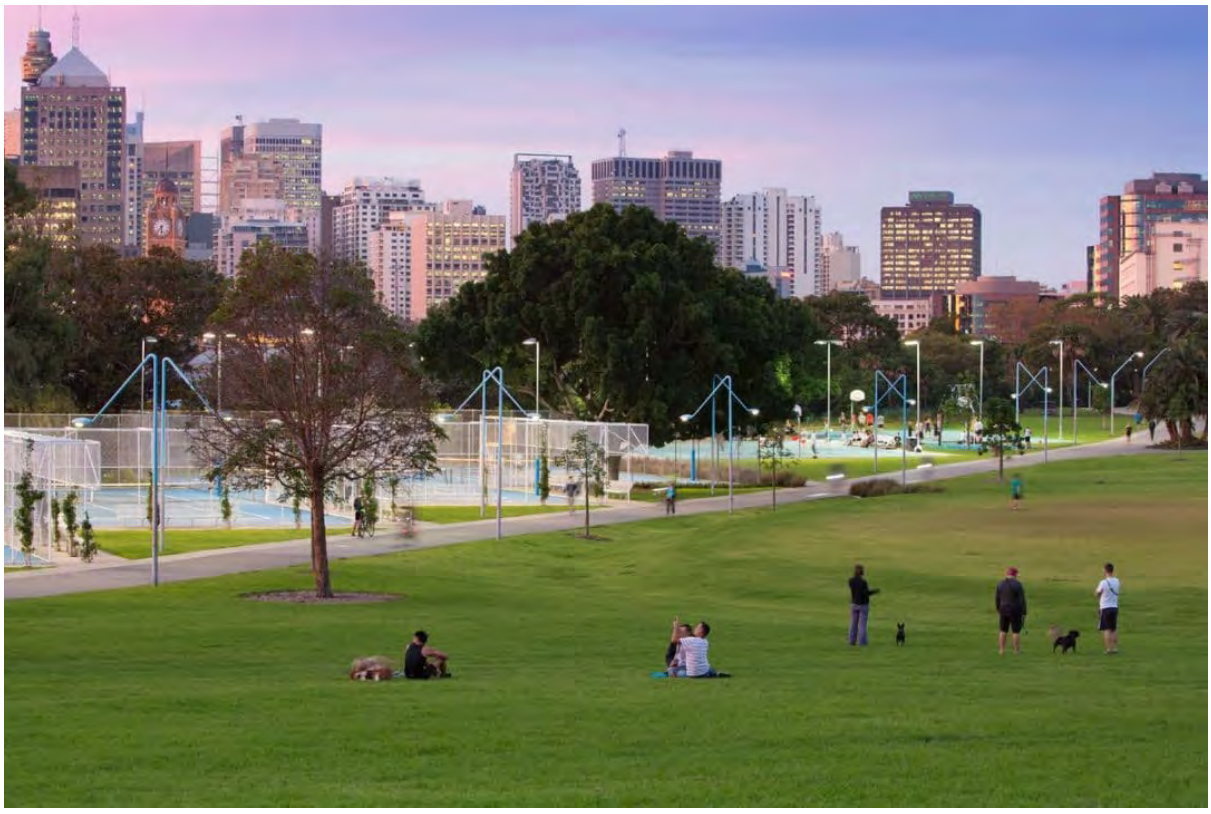
Photographer: Adrià Goula

Designing parks for after dark - Prince Alfred Park, Redfern, NSW

Prince Alfred Park underwent a major transformation in 2013 - from a largely unembellished passive field space to an intensely used park throughout both the night and day. The co-location of tennis and basketball courts with exercise equipment, passive field space and dog recreation areas attracts hundreds of workers and residents each day after 5pm for different levels of exercise and socialisation. One of the most iconic features of the park is its creative blue pole lighting. Well-lit pathways and sports courts mean that the park can be used late into the evening.

- 5 tennis courts
- 2.5 basketball courts
- 1 community centre
- 2 kids playgrounds with seesaws, swings, and custom-made play equipment
- Fitness equipment
- Grassed picnic area
- Off-leash dog area, and
- An outdoor heated swimming pool.

In areas where there will be a mix of workers and residents living in high density (e.g. future Macquarie Park, Eastwood and Meadowbank), parks such as Prince Alfred Park, that include both casual and formal sports space, are likely be in high demand, especially after work in the evenings .



Prince Alfred park after sark (Source Regal Innovations)

Centenary Plaza, Parramatta

Centenary Plaza is an example of how an urban space can be completely transformed and reinvigorated with the installation of a water fountain, enhanced street lighting, new furniture and umbrellas and expanded space for outdoor events and shows. Previously a space where people felt unsafe, and avoided, it is now a bustling civic space providing a cool place for workers, locals and visitors to enjoy their lunch, meet and linger. The colourful lighting and activity of the water also improves the perception of safety in the public space. The fountain can easily be turned off to cater for events, with the colourful lights continuing to make the space inviting into the evening.

Investment in creative lighting and urban features like Centenary Plaza would need to be located in an existing or planned night time activity precinct or ‘eat street’ such as West Ryde Plaza, future Macquarie Park, along Meadowbank Foreshore and Eastwood Plaza.

Lighting the fountain ensures the space continues to delight and feels safe into the evening. Source: The Daily Telegraph

Recreation for seniors - Dedicated seniors playground: Hyde Park, London

Across the world governments are seeking to keep their older population healthy and active by introducing 'senior playgrounds'. These are being installed in places as diverse as London, Berlin, Toronto and China. Hyde Park Senior Playground in London is a dedicated space for seniors located amongst existing sports facilities and cafes, surrounded by trees and shrubs and close to public transport and accessible parking spaces. The recreation facility includes six pieces of age appropriate exercise equipment that provide twisting, cycling and cross training motions to help users improve core strength, flexibility and balance. The gym equipment can be used by any age group.

As a space designed for older people, the playground also allows older people to meet new people while being active, acting as an important social connector and helping to minimise the high levels of social isolation often felt by older residents.

In the City of Ryde, these playgrounds could be located within existing high quality parks that are easily accessible by car and public transport, and potentially located in areas where there may be a concentration of aged care and retirement villages.

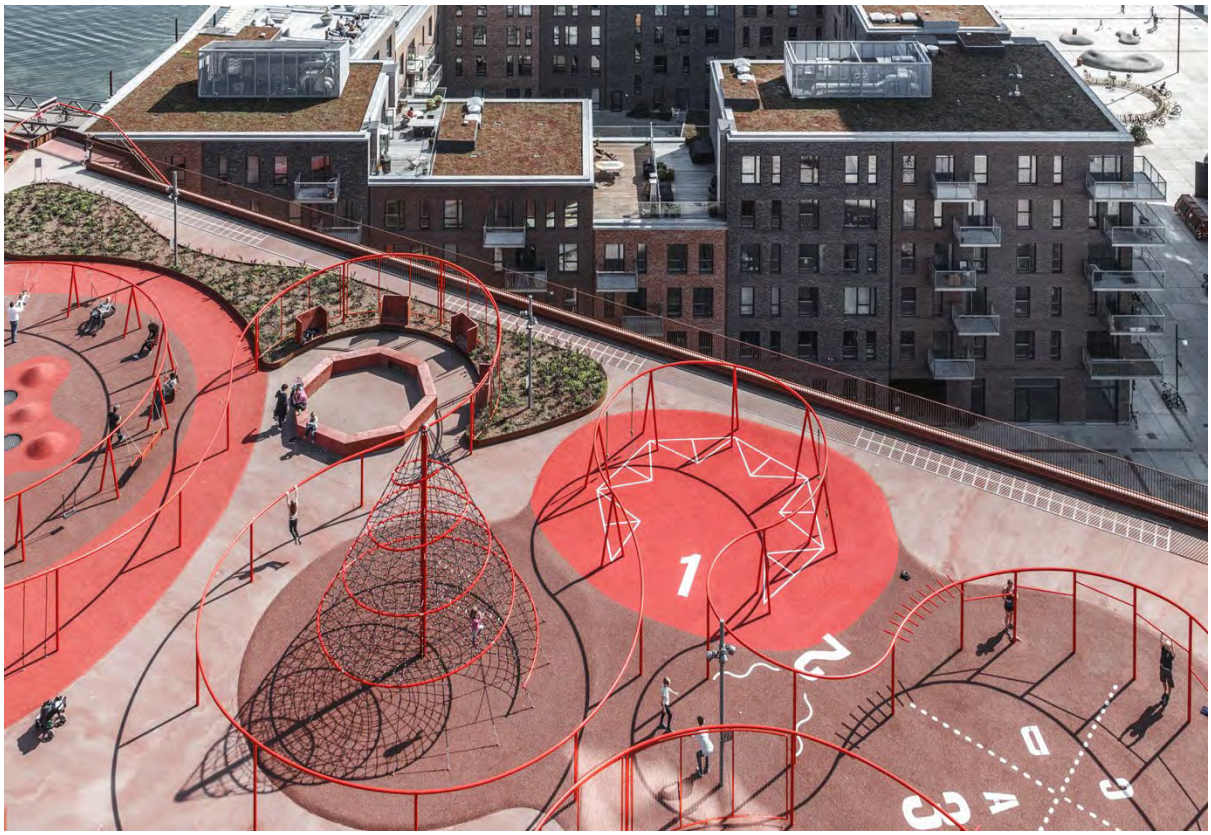
Recreation on rooftops

Rooftop recreation is an important opportunity in urban renewal areas where there is limited land available at ground level for new open space and recreation facilities. From the provision of communal rooftop gardens or pools, to publicly accessible basketball courts, there is potential for future and existing, public and private roofs to provide additional recreation spaces for a growing population. Leftover spaces can also provide opportunities for recreation such as converting redundant road or rail infrastructure, pedestrian tunnels, laneways, transport hubs and irregular or vacant parcels of land. Simple and small design interventions to these spaces, such as the installation of mirrors for residents to practice their dance moves, or the installation of a pop-up park can turn these spaces around from unused and often unsafe places, to lively spaces for recreation and fun.

Park 'n' Play, Nordhaven, Denmark

A playground called 'Park 'n' Play' has been built above Copenhagen's harbour scenery in bright red. It is located 24m above sea level on the roof of a car park and it has set new standards in the way people think about designing public spaces. This project's challenge was to create centrally located parking facilities that would optimally integrate into the surroundings of the modern Nordhavn city district. Nordhavn is a rapidly growing urban city which will have thousands of new residents. Such an ambitious urban renewal required ambitious approaches to recreation spaces addressed by this playground.

There are a number of multi-level car parks throughout the City of Ryde, and multiple future development sites that could be explored to deliver iconic and publicly accessible rooftop recreation opportunities.



Playspace on a carpark rooftop in Copenhagen (Image source: JAJA Architects)

Ultimo Community Centre, Sydney

Ultimo Community Centre is an example of an innovative and compact multi-purpose community and recreation facility. Hosting a library, multi-purpose hall (community hall and indoor courts), childcare, seniors centre, art & craft room, and two multi-purpose outdoor courts on the building's rooftop, Ultimo community centre is a successful example of how, in dense urban areas where space for recreation on the ground is sparse, rooftops can be used to provide for community sport and recreation. The rooftop is suitable for basketball, netball, soccer and tennis and can be set up to include:

- 2 basketball courts: 15m x 28m each
- 2 tennis courts: 15m x 28m each, and
- 1 netball court 15m x 18m.

In areas where there is limited space for new recreation spaces, rooftops are the next best thing.

Foreshore planning - Glebe Foreshore, City of Sydney

In 2006, The City of Sydney redeveloped the foreshore along Rozelle Bay and Blackwattle Bay in 5 stages over 10 years, investing a total of $20 million in order to transform a disconnected, partly privatised waterfront into a continuous and publicly accessible linear foreshore park.

The Glebe Foreshore Walk is an uninterrupted 2.2km stretch of waterfront that connects Bicentennial Park in the west to the Fishmarkets and Wentworth Park in the east. The foreshore now includes walking and cycling paths, seating, walls, new water stairs, the construction of new habitats, including mangroves, terrestrial habits, and intertidal habitats, beach access, decks, pontoons, ramps and bioswales. Items of heritage and archaeological significance were incorporated along the foreshore, all contributing to the balance of increased usability of the area, water interactions, recreation opportunities and ecological restoration.

Image source: City of Sydney

Image source: JMD (Project landscape architects)

APPENDIX

Capacity of sports facilities

The average capacities are taken from the Stage 1 report and reflect 'remaining' capacity for organised sport after school use, social sport and minor uses are taken into account. The 'raw' capacities are:

Summer senior – 32

Summer junior – 30

Winter senior - 27.7

Winter junior – 21

The averages also only reflect current level of development capacities (i.e. 18 hrs in winter for a non-floodlit ground and 30 hrs for floodlit grounds.

The summer season Senior field capacity is actually 23 hours and is calculated as follows:

Average raw capacity = 32 hrs (average of 30hrs for turf fields and 50 for synthetic)

Less summer soccer average = 4.8hrs

Less school use average = 3.5 hrs

Less minor uses (social sport Frisbee) = 0.7 hrs

Adjusted average capacity = 32 hrs minus 9 hrs = 23 hrs

It may be more accurate and useful to treat soccer as an all year round sport and include it in the modelling – with the average adjusted Senior field capacity being 28 hrs (or, more accurately, 26 hrs for turf fields and 46 for synthetic fields after allowing for school and minor uses).

TABLE 53: CURRENT CAPACITY SUMMARY BY SPORT

Council sports	Season	Maximum capacity (Hrs/ week)*
Cricket	Summer	30
Athletics	Summer	30
Baseball	Summer	30
Touch Football	Summer	30
Frisbee	Summer	30
Oztag	Summer	30
Softball	Winter	30 (18 if no lighting)
Winter Baseball	Winter	30 (18 if no lighting)
Winter Oztag	Winter	30 (18 if no lighting)
Frisbee	Winter	30 (18 if no lighting)
Rugby League	Winter	30 (18 if no lighting)
AFL	Winter	30 (18 if no lighting)
Hockey	Winter	50 for lit synthetic, 30 for grass and 18 if grass and no lighting
Soccer	Winter	30 (18 if no lighting)
Netball	Winter	30 Winter, 50 Summer

Golf	All year	1,470 rounds
Lawn Bowls	All year	50
Croquet	All year	50
Tennis	All year	50
Basketball (outdoor)	All year	30
Basketball (indoor)	All year	50
Badminton	All year	50
Volleyball	All year	50
Futsal	All year	50
Gymnastics	All year	50
Martial arts	All year	50
Swimming	All year	N/A

*many outdoor fields have competing uses, such as informal unstructured sport and recreation. Figures in this table represent the maximum capacity a facility may have for sport, although in reality it may be lower.

Planned projects capacity

The following table summarises the additional capacity from the planned projects.

TABLE 54: PLANNED PROJECTS – ADDITIONAL CAPACITY

Project	Additional capacity
Gannan Park	30 hours from new full size field/oval 30 hours from new junior/mod field/oval
Meadowbank Park	90 hours from 3 new full size field/ovals 20 hours from upgrade of LH Waud Oval to synthetic 50 hours from new outdoor court
ELS Hall Park	100 hours from 2 new indoor courts
Marsden High School	200 hours from 4 new indoor courts
Meadowbank Education and Employment Precinct	50 hours from new indoor court
RALC	100 hours from 2 new indoor courts
Christie Park	200 hours from 4 new outdoor futsal courts 50 hours from new synthetic full size field or oval
Pidding Park	30 hours from new full size field/oval 90 hours from 3 new junior/mod field/ovals
Smalls Road Upper (school)	20 hours from upgrade full size field/oval to synthetic + 12 hours from lighting upgrade
Lighting upgrades Full size field/oval Bill Mitchell Park x1 Bremner Park x1 Dunbar Park x1 Meadowbank Park x4 Morrison Bay Park x2 Peel Park x1 Pioneer Park x1 Santa Rosa Park x1 Smalls Road School x1+	13 full size field/oval lighting upgrades = 156 additional hours capacity

Tuckwell Park x1 <u>Junior/mod field/oval</u> Bill Mitchell Park x1 Cleves Park x1 Darvall Park x1 Fontenoy Park x4 Meadowbank Park x2 Morrison Bay Park x1 Pidding Park x1 Santa Rosa Park x1 Tyagarah Park x1 Smalls Road School x1+	14 x junior /mod field/oval lighting upgrades – 168 additional hours capacity

Summary

Additional capacity for full size fields and ovals from planned projects	408 hours
Additional capacity for junior/mod fields and ovals from planned projects	288 hours
Additional capacity for outdoor courts from planned projects	250 hours
Additional capacity for indoor courts from planned projects	450 hours
Total	**1,396 hours**

MCA framework Criteria

		Ample, accessible open space		Shared and enjoyed by all	Healthy natural environment		Conserving rich history, culture and local character	Managed sustainably now and for future generations
		Add 'walkable' open space of sufficient size	**Increase the number of residences with appropriate access to open space and rec facilities**	**Optimise potential for diverse and inclusive spaces**	**Optimise potential to enhance biodiversity and mitigate climate change**	**Active transport**	**Optimise conservation and interpretation of history, culture and character**	**Optimise use of council resources**
	Weighting	***20%***	***20%***	***20%***	***10%***	***10%***	***n/a***	***20%***
Open space / corridor								
	1	Provide new open space or expand existing open space to 1,000-1,199m2	In low density areas, project is located in areas that are within 400m of open space In high density areas, project is located in areas that are within 200m of open space	corridors and narrow spaces or spaces less than 1,500m2	Not located within regional or local biodiversity corridor	Not located within an active transport corridor	To be identified during design process	new open space
	2	Provide new open space or expand existing open space to 1,200-1,499m2	In low density areas, project is located in areas that are within 400-600m of existing open space In high density areas, project is located in areas that are within 200-400m of existing open space	Regular shape spaces between 1,500 - 2,499m2	Located within potential local biodiversity corridor (City of Ryde Biodiversity Plan)	Improves access to an active transport corridor (City of Ryde Bicycle Strategy)	To be identified during design process	expansion of existing space
	3	Provide new open space or expand existing open space to 1,500m2 +	In low density areas, project is located in areas that are further than 600metres of existing open space In high density areas, project is located in areas that are further than 400metres of existing open space	Regular shape spaces greater than 2,500m2	Located within regional or local biodiversity corridor (City of Ryde Biodiversity Plan)	Located within an active transport corridor (City of Ryde Bicycle Strategy)	To be identified during design process	leveraging non council owned space
Recreation								
	1	Does not increase capacity (playable hours per week) in LGA for facility type	Project not located in area with a spatial gap in access	Addresses a minor forecast 2036 service gap	all oudoor facilities	Not located within an active transport corridor	To be identified during design process	new facility
	2	Increases capacity (playable hours per week) in the LGA for the facility type by up to 30 hours in summer	Project located in an area with a spatial gap in access at 2036	Addresses a major forecast 2036 service gap	indoor facilities	Proximate to at least one active transport corridor (City of Ryde Bicycle Strategy)	To be identified during design process	expansion of existing facility
	3	Increases capacity (playable hours per week) in the LGA for the facility type by more than 30 hours in summer	Project located in an area with an existing spatial gap in access	Addresses a current AND forecast 2036 service gap	n/a	Proximate to 2 or more active transport corridors (City of Ryde Bicycle Strategy)	To be identified during design process	leveraging non council facility

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