



PART 6 - RECREATION & OPEN SPACE

6. Recreation and Open Space



FuturesPlan 20 - A Healthy city

I feel a sense of health and wellbeing

There are places for me to participate in sport and other outdoor recreation

I feel safe and comfortable accessing community spaces

There are services that meet my needs

6.1. Planning Context

6.1.1. The State Plan

The NSW State Plan was launched by the Premier on 14 November 2006 with the overall purpose being to deliver better results for the NSW community from government services. The State Plan identifies 34 priorities under five broad areas of activity and sets targets, actions and new directions for each priority area.

The State Plan contains two targets relevant to Parks and Recreation, which include:

R4 Increase participation and integration in community activities

The State Plan target includes increasing the proportion of the community involved in volunteering, group sports and recreation activity by 10% by 2016 and to halve existing gaps in participation rates for key groups.

E8 More people using parks, sporting and recreational facilities, and participating in the arts and cultural activity

The State Plan target aims to increase participation in sporting activities and physical exercise by 10% by 2016 and increase the number of visits to State Government parks and reserves by 20% by 2016.

6.1.2. Metropolitan Strategy Parks and Public Places Actions

The Metropolitan Strategy has a vision to provide fair access to quality parks and public places for leisure, sport and recreation and a network of recreation trails for walking and cycling by linking centres and parks.

Local Government's role in addressing the Metropolitan Strategy objectives for parks and public spaces includes:

- Working in partnership with other government agencies for the improvement of local and regional walking and cycling trails;
- Improving local walking and cycling infrastructure;
- Investigating funding options to improve existing open space; and
- Improving access to the foreshore, parks and centres.

6.1.3. Inner West Subregion - Draft Subregional Strategy

The draft Subregional Strategy recognises much of the Inner West's public life is carried out in civic spaces often located near town and village centres. While these spaces may not be traditionally thought of as public spaces in the manner in which green parks are, they contribute significantly to the civic,

public and cultural life of residents and visitors to the inner west. The network of parks, public places and urban civic spaces in the region also plays a major role in meeting the recreational, cultural and entertainment needs of the population.

A key focus of the draft Subregional Strategy is to continue to improve access to quality leisure spaces to meet the needs of the growing population and enhance the cultural life of the region. Council's role in addressing the draft Inner West Subregional Strategy in relation to parks and public places includes:

- Work with the NSW Government to improve the carrying capacity of existing sporting fields and possible provision of facilities in passive parks to increase utilisation (IW F1.2.1);
- Work in partnership with the Department of Environment and Climate Change and the Roads and Traffic Authority to explore opportunities to improve access to waterways and links between bushland, parks and centres (IW F1.3.1);
- Maintain or enhance the provision of local open space, particularly in centres and along transport corridors (IW F2.1.1);
- Consider an open space embellishment program for improving facilities (IW F2.1.2);
- Consider mechanisms to increase the capacity of local sports fields to a district level (IW F2.1.3);
- Work with NSW Government to develop links between smaller reserves to create diversity and broader user experience (IW F2.1.4);
- Work with NSW Government to investigate opportunities for future open space within the subregion (IW F2.2.1);
- Consider the need for civic spaces in planning for the future growth of centres (IW F2.3.1); and
- Work with Tourism NSW and the Department of Planning to identify opportunities to improve and enhance public access to Sydney Harbour Foreshore (IW F4.3.1).

6.1.4. Premiers Council for Active Living

The Premier's Council for Active Living (PCAL) aims to build and strengthen the physical and social environments in which communities engage in active living.

The goals of the PCAL are to:

- facilitate and encourage active living through supportive:
 - Policy and legislative environments
 - Physical environments
 - Social environments;
- support leaders in the public, private and non-government sectors to make decisions that facilitate and encourage active living;
- build sustainable partnerships across the public, private and non-government sectors for policies, programs and products that facilitate and encourage active living.

6.2. Existing Open Space

The Recreation Areas map provides an illustration of public domain areas in the City of Canada Bay (see Recreation Areas map - Map 6.1).

6.2.1. Quantity x Function

According to Council's Open Space Asset Register, Council-managed open space comprises 150 parks totalling around 218 hectares – as illustrated in Table 6.1.

Map 6.1: Recreation Areas

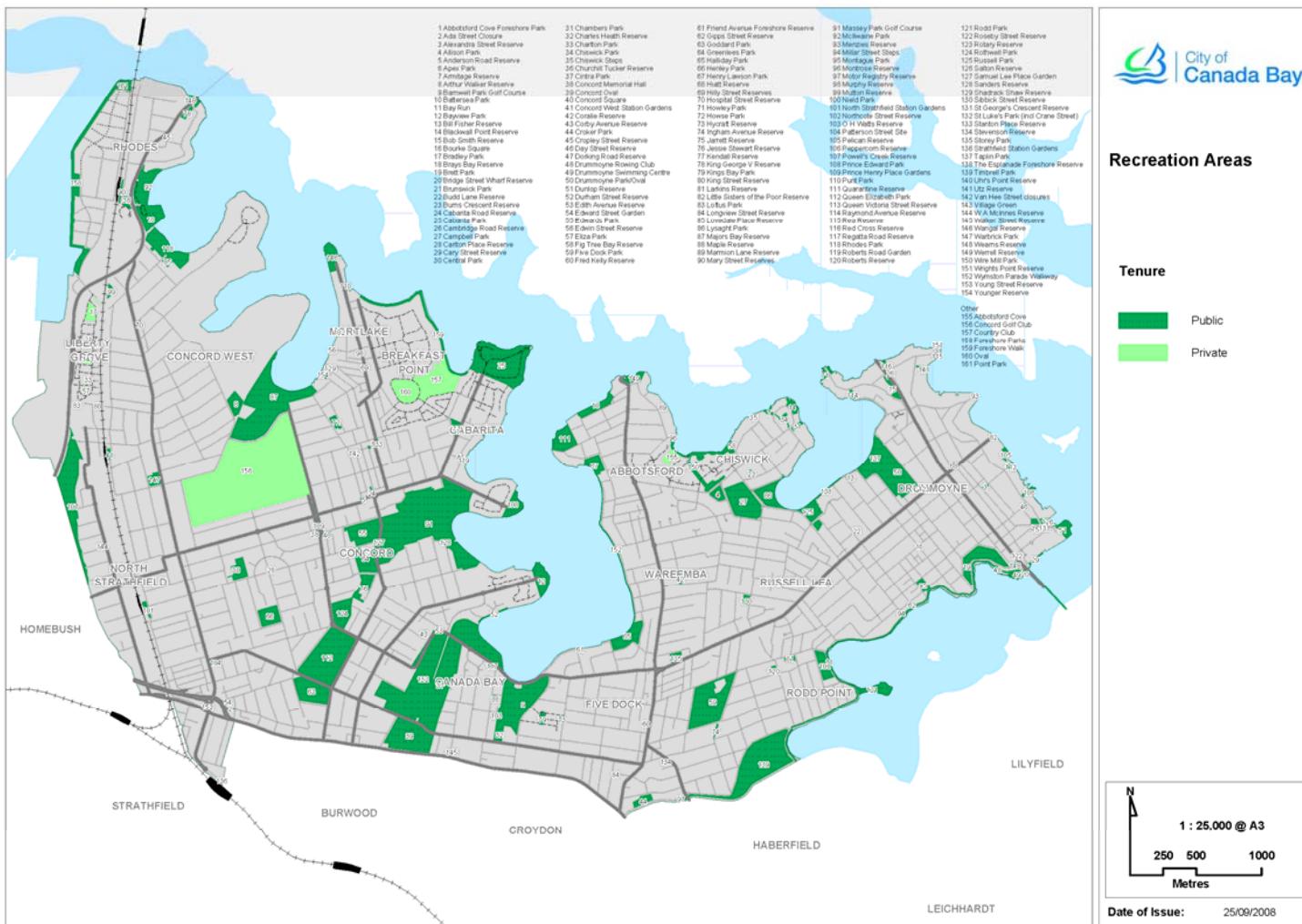


Table 6.1: Provision of Open Space Per Capita by Type

Open Space Type/function	No. of parks	Total Hectares	Ha/1,000
Parks	86	93.66	1.42
Ancillary space (road closures; road & rail reserves)	52	4.28	0.07
Sports/active (fields/courts)	20	80.40	1.22
Golf course	2	40.01	0.61
Total	*160	218.35	3.32

* Greater than 150 because 10 parks have both 'sports' and 'park' components

Table 6.1 shows that around 45% of the City's open space comprises 'passive' open space (parks and ancillary space), 37% is 'active' open space (sports fields and courts) and 18% is public golf course.

The per head supply of these different types of open space (3.32 hectares per thousand people overall or 33 m² per capita) is also illustrated in Table 6.1.

Council's open space resources are supplemented by some private open space – including the Concord Golf Club (43.92ha), a community title village green within the Abbotsford Cove development (0.8ha) which has a 'public access' easement, and a community title village green and open space areas at Breakfast Point (5.7ha).

6.2.2. Hierarchy

The hierarchy concept is widely used – along with 'function' – in the classification of open space.

By far the most common hierarchy typology used in all States of Australia (and typically promoted by various state level planning agencies⁶) is the continuum from local through neighbourhood, district, regional, state and national/international open space.

'Functional' classifications have been mainly based on the simple 'active/passive' typology – or more recently on a 'settings' based approach (i.e. sport, bush land, foreshore, formal garden etc).

Using both the 'hierarchy' and 'function' concepts, therefore, results in the following types of classification:

- Local sports ground;
- Local park;
- Local linkage, amenity and ancillary space;
- District sports ground;
- District park;
- Regional sports ground;
- Regional park; and

⁶ NSW Department of Planning (1992) *Outdoor Recreation and Open Space*; Regional Planning Advisory Group (1993) *South East Qld 2001 Project – Open Space and Recreation*; SA Urban Land Trust (1988) *Human Services Planning Kit*; Victorian Ministry for Planning and Environment (1989) *Planning Guide for Urban Open Space*; National Capital Development Commission (1981) *Urban Open Space Guidelines*.

- Natural areas (of local, district or regional significance).

The current functional and hierarchical structure of the City's open space (excluding golf courses) is illustrated in Table 6.2.

Table 6.2: Open Space Function and Hierarchy

Open space function	Hierarchy			
	Local	District	Regional	Total
Park*	42.42	15.97	36.06	94.45
Sports ground	-	48.34	32.05	80.39
Natural area**	-	-	-	-
Ancillary (road closures etc)	4.28	-	-	4.28
Total	46.7	64.31	68.11	179.12

* Includes 'community title' parks
** Not separately identified in the current data base (21 of Council's 150 parks are categorised as having at least some 'natural area' values – but this has not yet been quantified)

Table 6.2 illustrates the high proportion of regionally significant open space in the City – with this accounting for 38% of total open space. This is principally due to the generous number of large foreshore and sports parks in the City, including Majors Bay Reserve, Timbrell Park, St Luke's Park, Cintra Park and Queen Elizabeth Park.

While ancillary open space accounts for 32% of total open space (in terms of the number of spaces), it only accounts for 2% in terms of hectares.

6.2.3. Distribution

Council's open space is distributed unevenly through the City. This is illustrated in Table 6.3, which shows the relative quantity of open space in the Concord and Drummoyne Statistical Local Areas (SLA) – in terms of both hectares and numbers of parks.

Table 6.3: Sub-Area Distribution of Local and District Parks

District	Pop*	No. parks/1000 people	Ha/1000 people	No.	Ha
Concord SLA	31,163	1.8	3.60	57	111.73
Drummoyne SLA	34,582	1.9	1.95	65	67.39
TOTAL	65,745	1.9	2.72	122	179.12

* 2006 Census population

There is 179 hectares of public open space in the City and, as illustrated in Table 5.3, 112 hectares of this (or 63%) is in the Concord SLA even though Concord only has 47% of the City's population.

The average is 2.72 hectares of open space per 1,000 population, but the difference between Concord and Drummoyne SLAs is significant – with Concord SLA having 3.60ha/1,000 population and Drummoyne SLA 1.95ha/1,000.

The generous per capita provision of parkland in Concord SLA is mainly due to the location within this district of several of the City's larger parks, including Majors Bay Reserve, St Luke's Park, Cintra Park and Queen Elizabeth Park

The uneven distribution implies that opportunities to enhance the quantity of local open space need to be pursued more urgently and vigorously in some parts of the City than in others.

This should be done within the context of also identifying the locations of future residential development – because the additional per capita amounts of open space in some precincts may be 'eroded' by population growth in the medium to long-term future.

6.2.4. Recreation Facilities

The City's public (and private) open space system accommodates a range of recreation facilities - including outdoor sports courts and fields, golf courses and facilities for 'unstructured' play and recreation (including open grassed areas, picnic areas, playgrounds, bike tracks and walking paths).

Specific facilities as identified in the Open Space and Recreation Needs Analysis (June 2008) include the following:

- 150 parks (13 'regional', 13 'district level sports grounds or multi-purpose parks', and 124 'local' parks and ancillary spaces);
- 17 sportsground complexes (with 68 summer and winter season sports fields as summarised in Table 6.4 , below);
- 3 golf courses (one private and two public);
- 17 barbecue/picnic areas;
- 11 unrestricted dog 'off-leash' areas;
- 1 bicycle training track and several walk/cycle routes;
- 48 playgrounds and one skateboard facility;
- 24 tennis courts (at five centres) and 34 netball courts (at one centre);
- 2 swimming/aquatic centres; and
- 1 indoor leisure centre (Five Dock Leisure Centre).

Table 6.4: Existing Sports Facilities in Canada Bay City

Facility type	Current Provision	
	No. of Facilities	Population/facility
Soccer fields (Senior)	17	3,900
Soccer fields (Mini/junior)	14	4,700
Rugby League	2	33,000
Rugby Union	7.5	8,800
Hockey	1	66,000
Australian Football	1.5	44,000

	Current Provision	
Baseball diamonds	7	9,500
Softball diamonds	0	-
Cricket fields	17	3,900
Athletics	1	66,000

6.2.5. Adequacy of existing open space

The question of whether or not open space provision (including space for formal and informal sport) is sufficient to meet demand has traditionally been answered via the use of quantity based standards (such as the 2.83 hectares/1000 people – comprising 1.21ha of ‘active’ space and 1.62ha of ‘passive’ space – that has been traditionally used in NSW). It was often perceived that open space provision obligations were met when the standards were achieved.

Overall, the existing supply of open space in the City (at 1.50 ha/1,000 people of parkland space and 1.22 ha/1,000 of sports space - is comparative to the historical standard of 2.83 hectares/1000 people (1.62ha for ‘passive’ parks and 1.21 ha for sport)⁷.

However, it is now well understood that general standards are unreliable and not necessarily valid for particular areas. A particular region or locality – depending on its demographics, climate, traditions, local cultural and natural resources and its investments in particular facilities - may have very different than average (that is, standard) needs⁸.



Populations with an older than average age profile, for example, are likely to have a lower than average need for sports fields and a higher than average need for ‘passive’ space. But other factors may complicate this scenario. If the area, for example, has only poor quality sites for sports grounds (filled land or flood prone sites) it may actually have a higher than average requirement for sports facilities (despite the age profile) due to the lower-than-average carrying capacities of the facilities.

Open space adequacy issues in Canada Bay were addressed in the study undertaken in preparing the City’s Recreation Plan⁹. This found that the quantity of open space in the City was generally sufficient – but only just so, with little spare capacity to accommodate the additional open space needs generated by new development.

The study also identified a range of issues surrounding the quality and distribution of the City’s open space resources.

Relevant specific findings – for the main categories of open space – are summarised in Table 6.5

⁷ Not including specific-purpose (and often privatised) sports spaces such as golf courses, tennis courts, and lawn bowls/croquet greens

⁸ It is, in fact, possible that 2.83 hectares/1000 people of open space (or even more) is *inadequate* in some circumstances – where, for example demand is robust and where the quality and/or accessibility of the open space is poor. Alternatively, a lesser amount of space could be sufficient – where, for example, the space is well designed, accessible and effectively managed

⁹ City of Canada Bay, *Canada Bay Recreation Plan*, adopted 20 March 2007

Table 6.5: Canada Bay Recreation Study – Key Findings

Attribute	'Passive'	'Active' (Sports)
Quantity	The provision of (non-sport) parks (at 1.33+ ha/thousand people) is comparative to the traditional standard (of 1.62 ha/thousand)	The provision of sportsground space (at 1.20 ha/thousand people) is comparative to the quantity specified in the traditional standard (of 1.21 ha/thousand)
Distribution /access	The distribution of parks in the City is uneven – with relatively low per capita provision in the Drummoyne/Rodd Point area and very high provision in Concord West/Rhodes/ Liberty Grove	The organisations' surveys identified a perception of a 'lack of sporting and recreation facilities in Canada Bay'
Quality/diversity	A fairly high proportion (42%) of local parks are less than 0.3 hectares – a size which does not facilitate the provision of a diversity of 'walk to' recreation opportunities Very limited supply of natural areas (including remnant vegetation communities)	Many sportsgrounds have lower than optimal carrying capacities (due to poor quality turf and insufficient floodlighting) Some sports organisations rated the quality of grounds (and associated facilities - amenities, spectator facilities, kiosks) in the 'poor' to 'adequate' range These organisations are seeking improvements in sports turf quality, improved floodlighting, better amenities maintenance and more spectator seating

While the overall provision of open space in the City was found to be quite reasonable (and considerably more than in most surrounding Councils), the distribution of open space is moderately uneven, with low per capita provision in some areas (e.g. Drummoyne and Rodd Point). In these areas, many households are beyond reasonable walking distance to high quality open space.

Demand pressures were found to be particularly critical for active sports open space – as summarised in Table 6.5. Issues were identified in regard to the quantity of space as well as facility suitability, quality and maintenance issues.

A more recent study¹⁰, has largely confirmed these earlier findings. Specifically, it has found that, while the City has a relatively high provision of sports fields and courts¹¹, most grounds are being used at or above capacity in the winter season – as summarised in Table 6.6.

Table 6.6: Provision of Active Sports Open Space - Summary

Season	Attribute	Hours of use per week		
		City of Canada Bay	SSROC	SSROC NW sub-region ¹²
Summer	Average ground capacity	56	38	36
	Average ground use	27	31	26
	Highest use ground	42	82	61

¹⁰ Recreation Planning Associates, SSROC Regional Sport Ground Study (July 2008)

¹¹ (1.22ha/1,000 population) compared to the South Sydney Region as a whole (0.91ha/1,000).

¹² Ashfield, Burwood, Canada Bay, Canterbury, Leichhardt, and Marrickville Councils

		Hours of use per week		
Winter	Average ground capacity	24	27	27
	Average ground use	29	37	31
	Highest use ground	41	78	56

In the summer season, there appears to be a considerable amount of spare capacity – with a ground capacity average of 56 hours a week compared to average ground use of only 27 hours. But the Council-nominated summer-season capacity of 56 hours a week is very high compared to the average for the SSROC Region and north-west sub-Region (of 38 and 36 hours, respectively) and may need to be reviewed.

6.3. Population Growth and Change

6.3.1. Existing and Forecast 2031 Population

The 2006 (Census) and 2031 forecast¹³ populations for City of Canada Bay and the Sydney Statistical Division are detailed in Table 6.7.

This shows that the City population on census night 2006 was 65,743 and that this is forecast to grow by just over 22,000 (33%) to nearly 88,000 people by 2031.

Table 6.7: Population Profile – City of Canada Bay & Sydney SD

Age	2006			2031		
	City of Canada Bay		Sydney SD	City of Canada Bay		Sydney SD
	No.	%	%	No	%	%
0-14	10,829	16.5	19.5	11,690	13.3	16.6
15-29	12,660	19.3	21.2	14,630	16.7	19.1
30-49	21,848	33.2	30.4	27,060	30.8	28.6
50-64	11,127	16.9	16.6	16,770	19.1	17.4
65+	9,279	14.1	13.3	17,630	20.1	18.2
TOTAL	65,743			87,780		

The existing (2006) population has a lower proportion of children and young adults than the Sydney population as a whole and a higher proportion of older adults.

This is illustrated in Table 6.7 which shows, for example, that children aged 0-14 years comprise only 16% of Canada Bay's population compared to Sydney's 19.5%. Conversely, people over 65 years comprise a higher 14.6% of Canada Bay's population compared to Sydney's 13.3%.

This shows that, while the populations of Canada Bay and Sydney are both forecast to age significantly over the next 25 years, Canada Bay's population will continue to have an 'older' profile compared to Sydney's as a whole (e.g. only 13.3% of the population aged 0-14 years compared to Sydney's 16.6%).

¹³ Transport and Population Data Centre & NSW Department of Planning, 2005, New South Wales Statistical Local Area Population Projections 2001 – 2031 (2005 Release)

Conversely, those over 50 years are forecast to comprise 39.2% of Canada Bay's population by 2031 compared to 35.6% for Sydney overall.

The population ageing is likely to be accompanied by growth in the proportion of people living in flats and apartments with significantly less private open space than traditional detached housing.

6.3.2. New Population Distribution

The population forecasts are not uniform across the City of Canada Bay. In fact, most of the growth (75%) is forecast to occur within the Concord area – as illustrated in Table 6.8. The Concord Statistical Local Area (SLA) is forecast to grow more than 50% (from 31,000 to nearly 48,000) with the Drummoyne SLA only growing 14% (from around 35,000 to 40,000) from 2006 to 2031.

Because of this, the Concord SLA will experience a substantial net increase in all age groups to 2031, whereas the Drummoyne SLA will face net losses in the 0-14 year age groups and only very marginal increases in the 15-54 year age groups.

There is only a slight area-based divergence in the forecast age structure of the future populations - with the Concord population 'ageing' slightly less than Drummoyne's (probably due to the higher expected in-migration of younger families into that area). Between 2006 and 2031, for example, the proportion of Concord's population aged up to 19 years is forecast to decrease by 17% compared to Drummoyne's 19%.

Table 6.8: Population Distribution – City of Canada Bay

Age	2006				2031				Sydney SD	
	Concord SLA		Drummoyne SLA		Concord SLA		Drummoyne SLA			
	No.	%	No.	%	No.	%	No.	%		
0-4	2,015	6.5	2,146	6.2	2,364	5.0	1,785	4.5	6.6	
5-14	3,493	11.2	3,182	9.2	4,483	9.4	3,051	7.6	13.0	
15-19	1,877	6.0	1,446	4.2	2,467	5.2	1,477	3.7	6.6	
20-24	2,301	7.4	1,852	5.4	2,708	5.7	1,889	4.7	7.2	
25-34	5,151	16.5	6,266	18.1	6,760	14.2	6,287	15.7	13.3	
35-44	4,932	15.8	5,889	17.0	7,329	15.4	6,353	15.9	28.8	
45-54	4,347	14.0	4,574	13.3	6,996	14.6	5,528	13.8		
55-64	3,253	10.4	3,739	10.8	5,815	12.2	4,844	12.1	10.2	
65+	3,794	12.2	5,488	15.9	8,810	18.5	8,823	22.0	18.2	
TOTAL	31,163		34,582		47,732		40,037			

6.3.3. Residential Development Scenarios

The Department's forecasts are consistent with the City's future development scenarios and the development requirements under the Metropolitan Strategy and the (forthcoming) Inner West Sub-regional Strategy.

The latter requires Council to accommodate around 10,000 new dwellings in the period between 2004 and 2031.

Most of the new housing is expected to be located within a few major redevelopment sites – including Rhodes Peninsula (47%), Breakfast Point (19%), the Strathfield Triangle (6%) and the Westinghouse Brakes site, North Strathfield (3%). Three of these developments – Westinghouse Brakes site, Rhodes Peninsula and the Strathfield Triangle – are within walking distance of major transport options including rail and buses.

Another 2,500 dwellings (25%) will be within a range of relatively small infill sites approximately half of which will be proximate to major transport nodes.

The forecast dwelling occupancy for the future developments is around 2.1.

6.3.4. Population Growth - Implications for Open Space Demands

The forecast additional population is significant and will place substantial additional demands on public open space resources - including local and neighbourhood scale facilities (local passive parks, gardens and playgrounds) and district-scale facilities (such as playing fields and courts, swimming pools, indoor sports halls, golf courses, barbecue/ picnic facilities, natural areas and walking trails).

Specific needs and demands – according to the major age groupings (children, young adults and older adults) – are summarised in Table 6.9.

Table 6.9: Required Open Space and Recreation Opportunities x New Resident Age Profile

Age profile	Age profile trends	Key activities	Open space & outdoor recreation needs
0-14 years	Declining proportions of 0-4 years and 5-14 years across the City between 2006-2031 (but less so in Concord SLA) Absolute increase in 0-14 year olds (+1,350) in Concord SLA and decline (-500) in Drummoyne SLA	The recreation needs of children vary according to age – but all require safe, familiar environments, multi-sensory stimulation, challenge, opportunities for creativity For children 0-4 years, recreation primarily centres around the home, playgroups and small local parks Children 5-12 years will also use local parks but less as they grow older if equipment is not challenging. Some will play in streets, vacant lots, natural areas Many will get more involved in structured activities (eg. participation in sports clubs and activities)	Local and regional playgrounds and parks – with appropriate provision for both young children and adults (seating, shade) and located near schools, shops and community centres Sports fields and courts Safe cycle and pedestrian links between homes and parks and within parks
15-34 years	Declining proportions of 15-34 years across the City between 2006-2031 (but less so in Concord SLA) Absolute increase in 15-34 year olds (+2,600) in Concord SLA and virtually steady (+89) in	Young people, in general, have a high rate of participation in recreation – both structured and unstructured. Participation by young people (up to 25 years) in most recreation activities (including sport and physical activities) is significantly higher than it is for older age groups Youth-friendly public space and skate facilities are particularly important for young people not interested in structured activities	Sports fields & courts Cycle paths and walking trails Large park and or natural area settings for picnics and social activities Large park areas for informal play

Age profile	Age profile trends	Key activities	Open space & outdoor recreation needs
	Drummoyne SLA	Participation in sport declines slightly after 25 years but is offset by higher participation in family activities in the child-rearing years	
35+ years	<p>Increasing proportions and absolute numbers of +35 year across the City between 2006-2031</p> <p>Substantial absolute increase in 35+ year olds of 12,600 (Concord) and 5,600 (Drummoyne)</p> <p>The greatest growth is forecast to occur in the 65+ year age groups</p>	<p>Participation in structured sport and recreation activities declines steadily with age</p> <p>Family recreation activities – such as visits to district scale parks – is popular for the 40 -55 age groups</p> <p>Many less structured activities – walking, walking the dog, golf – remain popular through all age groups</p> <p>Some people over the age of 60 years will be regular users of ‘mainstream’ recreation facilities and programs. Others will require various levels of assistance – including transport, facilities designed and constructed in accordance with ‘access for all’ requirements and/or special programs</p>	<p>Cycle paths and walking trails</p> <p>Large park and or natural area settings for picnics and social activities</p> <p>Swimming pools</p> <p>Dog ‘off leash’ areas</p> <p>Golf courses and lawn bowls</p>

Additionally, as indicated in section 6.2, the City's forecast additional population of 22,000 (by 2031) people are anticipated to have a substantially older age profile. As a consequence – in keeping with the lower participation rates in most sport and recreation activities by older people - the new population's (per capita) sport and recreation needs and demands are likely to be lower than average.

This does not imply that overall open space demands will decrease. On the contrary, they will increase. The lower per capita participation rates will be more than offset by the overall substantial increase in the population (30% between 2006 and 2031).

Specific estimates of the quantities of the different types of open space likely to be required by the additional populations are provided in Sections 6.4 to 6.6.

6.4. Future Demands and Needs

The forecast population increases between 2006 and 2031 will place additional demands on existing open space. In fact, in the absence of further acquisitions, the supply of ‘passive’ open space is forecast to drop from 1.50 to 1.12 hectares/1,000 people and ‘active’ open space from 1.22 to 0.92 hectares/1,000 by 2031.

The key question for this study is: ‘can the existing open space system accommodate the additional population’s demands – at these reduced per capita levels of supply – or will the system need to be supplemented and/or have its carrying capacity raised?’.

The answer depends on the future population’s levels and types of recreation participation and the capacity of existing spaces to accommodate these demands – as explained in the sub-sections below.

6.4.1. Future recreation participation rates

As indicated in Section 6.2, Current population projections indicate that the population of Canada Bay will increase by around 22,000 (or 33%) between 2006 and 2031. A 33% increase in the number of people means, other things being equal, a 33% increase in recreation and open space demands.

It means an additional 22,000 potential users of Council's open space and recreation services by 2031.

The City's current population structure with its lower proportion of children and young adults and higher proportion of older adults than the Sydney population as a whole implies that, overall, the demand for developed open space and recreation facilities is likely to be lower than average. That is, the relatively low proportions of (high-participating) children and young adults and the high proportion of (low participating) older people (55+ years) will have a 'dampening' effect on demand.

However population structures and recreation needs are not static. The growth in population size will be accompanied by changes in the population age structure and broader changes in recreation interests and needs.

In particular the forecasts include substantial growth in the 50+ age groups and possible associated changes in socio-economic profiles (due to the expensive nature of new housing developments).

As the population ages over the next 20 or so years, recreation interests and capacities will also change – and this will impact the demands for and use of open space and recreation facilities.

Key issues include the following:

- An ageing population is normally associated with a trend to lower participation rates across most away-from-home sport and recreation activities (although there are exceptions to this, such as walking for pleasure);
- The participation rates of aging people in the future may not decline in the same way as they have in the past due to increased health awareness, changing expectations and higher participation rates;
- If participation rates do decline with age, their impacts may be offset by other population shifts – such as the possible inflow of 'high-participating' younger well-educated adults and children with the implementation of Council's residential strategies;
- Offsetting these trends, to some extent, will be the absolute (though not proportional) increases in younger age groups in the Concord SLA – with the most recreationally active age groups (i.e. those 5-34 years) increasing by 3,600 (28%) by 2031; and
- The likelihood of changing participation rates (as the population ages) are taken into consideration in the future demand forecasts in Sections 6.5 and 6.6, below.

6.4.2. Open space system capacity

As summarised in 6.2, the current provision of open space in the City, while generous compared to most surrounding Councils, is not excessive. Recent studies have shown that most open space is well used – with sports' open space actually used at above-capacity levels during the winter months.

The additional demands of the new population will therefore exacerbate existing demand pressures – even with some reduction in participation rates with the ageing of the



population. In these circumstances many parks and spaces, due to their specific locations and/or capacities, are unlikely to be able to cater adequately to the increased demands.

Sections 6.5 and 6.6 discuss and estimate the likely additional demands, respectively, for 'passive' and 'active' open space.

6.5. Future Needs - Passive Open Space/Parks

6.5.1. Introduction

The forecast additional population will substantially increase the needs and demands for parklands at all levels of the hierarchy – from local 'walk to' parks to large district and regional scale spaces with a diversity of recreation opportunities.

In order to meet the demands and needs identified in Section 6.3 (Table 6.9), a range of open space types will be required – including local parks, district parks, town parks/urban squares, open space linkages and (if and where possible) natural areas.

The broad requirements - in terms of quantity, function, size and configuration, access, key uses and desirable embellishments - are summarised in the following sub-sections.

6.5.2. Quantity

As summarised in Section 6.2, the City currently has around 99 hectares of parkland open space – or 1.5 ha/1,000 people. This amount of supply has been found to represent a fairly good balance with the demands and needs for the space.

Accordingly, the existing benchmark could be argued to be a reasonable benchmark for future population open space needs.

However, this would be a maximum benchmark because per capita open space needs are likely to be less in the future as a result of population 'ageing' and the higher densities of proposed residential developments. That is, there will be less per capita demand for space (due to the lower participation rates of older people) and, in higher density residential areas, less space is required to meet local space accessibility criteria.¹⁴

There are also likely to be land availability and acquisition affordability issues. Land values are high in the City – and probably too high to acquire 33 hectares (15m² per capita) of parkland open space. The initial embellishment and on-going maintenance costs would also be substantial.

In this context, it needs to be emphasised that the quantity of space is not the most important criterion in identifying future 'passive' open space needs. The key requirements, instead, are the suitability of spaces (in terms of size, shape, attractiveness and diversity of opportunity) and accessibility (in terms of proximity to user populations and presence/absence of access barriers).

Quantity is important – but only up to the point that suitability and accessibility criteria are met. These latter criteria are discussed in the following sections – for local and district parks, town parks and linkage open space, respectively.

¹⁴ The traditional standards, in fact, are based on low density suburban requirements and are predicated on providing a particular amount of space (parks of particular sizes etc) within an accessible travel distance. For example, in a 33 persons/hectare density development, the provision of parks at least 0.5ha in size within 300m of all residences will require a minimum of 0.8ha/1,000 population

Table 6.10: Parkland

Attribute	Local Parks	District Parks
Function	Accessible and close-to-home ('walk to') recreation opportunities in residential areas. They are important for most residents - but particularly for children, the parents of children and older people	Larger, less accessible ('drive to') parks providing for larger scale or specialist recreation opportunities that cannot be readily accommodated in small local parks.
Catchment	1. Small local reserves that provide for people within immediately adjacent areas - probably within 200-300 metres walking distance 2. Larger neighbourhood parks that may attract users from surrounding suburbs/areas (but still usually within walking or cycling distance).	Desirably within 2-3 kilometres of all households
Key uses	The small reserves provide short-term play and rest opportunities and landscape features, primarily for local residents. The larger parks may comprise more comprehensive play equipment, more significant landscape features (views, significant vegetation etc) and linkages with other open space.	As for larger local parks plus longer-term activities – family/group social gatherings, picnicking, walking/cycling Greater range of facilities – playgrounds, nature walks, cycle tracks, dog exercise areas, walking circuits Cultural & natural heritage resources may be important elements of district scale parks
Minimum size	Parks should be at least 3,000m ² in size.	Desirably three hectares or more
Design and location requirements	User friendly in terms of attractiveness, diversity of opportunity, perceived safety, proximity to user populations and presence/absence of access barriers Ideally, parks that combine a variety of features and uses – contact with nature, pleasant social settings, children's play, cultural interest and varied topography.	As for local parks – but also large enough to accommodate a much greater variety of uses while protecting and enhancing natural features, cultural heritage, views and/or visually significant areas.

6.5.3. Town Parks

Town centre (or commercial area) parks provide rest/relaxation and perhaps entertainment opportunities for workers, shoppers and visitors within commercial/retail centres.

They range in size from small landscaped squares to large pedestrian malls and usually incorporate seating, toilets, paving, public art and plantings.

Town parks will usually comprise a 'hard' landscape (rather than natural grass). They will vary in size according to the size of the town centre, but should generally aim to meet the minimum area requirement of local parks (3,000m²). Smaller areas may provide for basic recreation such as seating areas and 'breakout' spaces.

6.5.4. Open Space Linkages

The provision of open space connectivity (via linear open spaces and/or appropriate linking with streets, 'greenways' and other pedestrian facilities should be a high priority in any community.

Open space linkages add value to the usability and recreation potential of open space parcels.

Specifically, they facilitate the high (and growing) community participation in walking, dog-walking, cycling, jogging and skating.

In fact, the provision of safe and convenient pathways for pedestrian and cyclist use is an important method for both improving access to open space generally and increasing the range of open space opportunities (without having to provide large quantities of space).

Where linkages are vegetated, they may also have biodiversity benefits – in facilitating fauna and flora movement and preservation.

Any remnant vegetation (or creek lines) within or near the residential growth areas should be protected and incorporated into a linear reserves system. Such resources (apart from their biological values) could (if wide enough) provide attractive settings for picnics and outdoor gatherings (and nature interpretation opportunities) in addition to the walking and cycling activities discussed above.

6.6. Future Needs - Sportsgrounds and Facilities

The forecast additional population will also increase the demands for sports grounds and facilities – at both suburban and elite levels.

Sports fields and courts are required for both structured (formal) and unstructured sports activities. Primarily, they are required by sports clubs and associations for competitions and training, particularly during 'peak use' times (weekends and midweek evenings) and by schools for weekly school sport and exercise and inter-school competitions (mainly, but not always, during school hours).

There is also demand for informal use of sports grounds by local residents for a range of activities (jogging, walking, dog exercise and casual play).

6.6.1. Quantity

As summarised in Section 6.2, the City currently has around 80 hectares of sports ground open space – or 1.22ha/1,000 people. This space accommodates 68 sports fields, 34 netball courts and 18 tennis courts.

As with 'passive' open space, it could be argued that the existing supply benchmark is a reasonable guide for the future populations 'active' open space needs.



Specifically, an application of the existing City-wide supply benchmark to the forecast additional 2031 population (of 22,000) results in a need for the following additional facilities:

- 6 senior and 5 junior soccer fields;
- 3 rugby fields (Union and League);
- 6 cricket fields;
- 2 baseball diamonds;
- 10 netball courts; and
- 6 tennis courts

However, the existing benchmarks, unmodified, are not a good indicator of future needs – due to current supply/demand imbalances (with a shortfall in winter and an apparent surplus in summer) and the substantial ageing of the population in future years (and its accompanying changes in sport participation rates).

A better forecasting alternative is to apply the current average age-related sports participation levels in NSW to the Department of Planning's population projections to 2031. This approach – together with its key findings – is detailed below.

6.6.2. Sports Participation Forecasts

Table 6.11 illustrates the forecast demand to 2031 – in terms of numbers of participants - for a range of the more popular sporting activities and facilities.¹⁵

The table indicates that the additional population are likely to generate demands for a wide range of sports facilities. Based on typical age-based participation rates, it is forecast, for example, to generate around 500 senior soccer players, 150 Rugby Union players and 40 athletes¹⁶.

The participant numbers for some of the activities may appear relatively small, but 200 additional cricket players, for example, translates to 13 or 14 teams (including reserves) and the need for at least 3-4 cricket fields (if the fields are of average quality with a capacity to accommodate only 2 matches per week each plus training) or 2 fields (if high quality with a capacity to accommodate 3 matches over Saturdays and Sundays).

The forecasts also demonstrate the variable participation rates of different age groups – including the ‘depressive’ impact of the older age profile on overall levels of participation. Thus the 55+ years age cohort is expected to contribute 55% of the additional population – but only 22% of the demand for sports facilities.

Table 6.11: Estimated demand for Sports Facilities – City of Canada Bay

Activity	Facility Unit	Age Related Participation (No.)							Facility Requirements	
		5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55+ yrs	Total	Facility capacity	Facilities required
Soccer	Senior field	33	194	121	134	54	36	515	216	2.4
Soccer (mod/minи)	Mod/mini field	52	n/a	n/a	n/a	n/a	n/a	47	108	0.4
R Union	Rugby field	29	65	22	16	14	24	154	250	0.6
R League	Senior field (equivalent)	64	86	34	26	6	0	194	180	1.1

¹⁵ The forecasts are based on the ABS survey, *Children's Participation in Cultural and Leisure Activities* (April 2006) and the most recent (2005) Australian Sports Commission, *Exercise, Recreation & Sports Survey (ERASS)*. They are average rates for NSW and may be higher or lower than those that actually occur in the future within the Breakfast Point and Rhodes Peninsula development areas.

¹⁶ Includes both regular and occasional participants

Activity	Facility Unit	Age Related Participation (No.)							Facility Requirements	
		5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55+ yrs	Total	Facility capacity	Facilities required
Australian Football	AFL field	11	21	10	8	6	0	51	160	0.3
Netball	Netball court	65	98	70	46	37	24	306	162	1.9
Cricket	Cricket wicket	35	56	49	41	37	12	207	99	2.1
Softball	S'ball diamond	11	12	8	8	11	0	46	162	0.3
Baseball/T ball	B'ball diamond	6	9	3	11	3	0	29	203	0.1
Athletics	Athletics field	20	19	2	0	0	0	37	500	0.1
Tennis	Tennis court	73	112	161	202	283	637	1,322	130	10.2

In winter, fields are required for a range of sports – particularly for soccer and rugby league, but also for softball, rugby union, touch rugby and AFL. The combined requirement of these sports – as illustrated in Table 6.4 – is for 5-6 fields.

Based on these numbers, it would be reasonable to provide 2 multi-use sports units. One would comprise one cricket field with two superimposed multi-purpose fields (for rugby, soccer, touch etc) and 4 multi-purpose courts (for tennis and netball). The other would be similar, but also include an additional full size multi-purpose ground

The smaller unit would require 4.0 ha each – comprising 3.0 ha for the sports fields, 0.25ha for the multi-purpose courts and 0.75ha for ‘run-off’ zones around the fields, circulation, curtilage, a small amenities block and some off-street parking. If additional space was available, it would also be desirable to provide a small play area (with seating) for use by the younger siblings of children playing sport on the adjacent fields or courts. The larger unit would require around 6ha – to accommodate the additional field and ‘run-off’ areas).

The total likely space requirement, therefore, is around 10ha – assuming current average participation patterns continue into the future.

6.7. Options for meeting anticipated Demands

The previous sections identified the City's existing open space resources, the current adequacy of these resources, forecast population growth to 2031 and the likely open space demands of these future populations. This Section discusses the key options for meeting the additional future needs and demands.

These options include the following:

- More intensive use of existing space and facilities (where ‘spare capacity’ exists),
- The embellishment or expansion of existing spaces (to increase their carrying capacity),
- Synthetic conversions of sports field open space, and/or
- The acquisition of new open space and recreation facilities.

The costs of those components of the embellishment, synthetic conversion and acquisition options that meet the demands of populations generated by the new development can be fully met from S94 contributions.

The options are briefly discussed in the following sub-sections.

6.7.1. Absorption in Existing Open Space and Facilities

The City's existing open space will be able to absorb at least some of the additional population's open space demands. The rationale for this is that most of the future population growth is forecast to occur in the Concord area (particularly in Breakfast Point and the Rhodes Peninsula) and, as identified in Section 5.3, the Concord SLA has well above average supply of open space (currently 3.60ha/1,000 population compared to 2.72ha in the City overall and the traditional standard of 2.83ha).

However, in the absence of any acquisitions, the forecast population growth will, by 2031, reduce the per capita open space provision in the Concord SLA to 2.34ha/1,000 population and this (particularly with respect to sports space, is unlikely to be sufficient).

Accordingly, other options for increasing the quantity and/or capacity of open space will have to be addressed – as identified in the following sub-sections.

6.7.2. Embellishment/extension of Existing Facilities

Where existing spaces and facilities cannot absorb additional demands, it may be possible to extend or reconfigure them - to increase their capacity.

The carrying capacity and usability of open space can be enhanced in various ways – including the following:

- Improved physical and visual access to parks (including 'access for all');
- Upgrades to existing recreation facilities (playgrounds, picnic areas etc);
- Additional recreation facilities (picnic areas, walking and cycle tracks, playgrounds); and
- Sports facility upgrades and/or reconfigurations

The works should focus on increasing the durability and/or capacity of existing open spaces and facilities to accommodate use through a range of relevant improvements (including multipurpose site layouts, new/extended equipment and enhanced accessibility).



In this way, the works can reduce the need for additional open space by getting existing spaces and facilities to 'work harder' to meet the recreation needs and demands of the additional population generated by new residential development.

Desirably, the upgrading projects should respond to needs identified in previous studies (e.g. improved amenities and more shade in parks, skate park facilities, year-round, heated swimming pools and more walking opportunities.

The projects should also be consistent with the expected changing demographics of the City. That is, they should address the needs of a population with the following characteristics:

- Declining proportion of children and young people (0-14) but with a modestly increasing number of 0-14 year olds in the Concord area;
- A rapidly growing population aged 40 and over;
- A significant proportion of older people 55 years+ (some of who may be moving from larger family homes in the City to the new medium density housing);
- A possible influx of new families taking the place of these people in larger family homes; and
- An increase - with the development of multi unit housing around transport hubs in the Concord area - of young adults aged 20-34 years.

In particular, upgrading projects should extend the 'carrying capacities' of parks within the residential development areas or within a reasonable travel distance¹⁷ of them.

The 'carrying capacities' will be enhanced through extending the number of usable hours (floodlighting and turf improvements), the 'hardening' of facilities (more constructed walking and cycle tracks), the expansion of facilities (larger play grounds, additional toilets, more shelters) and/or the provision of new facilities (picnic areas and recreation facilities – new play areas, exercise stations, cricket nets and similar facilities).

The improvement in 'carrying capacities' is a critical requirement in meeting the needs of new population in the context of the unavoidable decline in the quantum of per capita open space with the implementation of Council's future residential development strategies.

6.7.3. Synthetic surface conversion

The conversion of some outdoor sports fields to synthetic surfaces provides the major opportunity to extend the carrying capacity of sports grounds – thereby reducing the need to acquire open space for new fields.

A best practice review was recently completed of synthetic surfaces in conjunction with the SSROC Sports Ground Study. This clearly demonstrated the benefits of synthetic surfaces in terms of playability (not affected by wet weather), availability (up to 80 hours a week compared to 20-30 for turf), reduced maintenance (no mowing, fertilizing), flexibility (multiple uses), water efficiency and cost-effectiveness.

Melbourne City Council has recently completed a feasibility study on synthetic conversions¹⁸. This demonstrated a strong case for conversions of selected sites based on two compelling benefits - lower life cycle costs and water harvesting opportunities.

The business-case for conversions (in terms of whole-of-life comparative costs) is summarized in Table 6.12.

¹⁷ 'Reasonable travel distance' is normally defined as up to 500 metres walking/cycling distance for small parks and a 5-10 minute drive for larger 'district scale' parks (ie those with picnic facilities, vantage points, high quality play facilities an/or specialist facilities such as children's bike tracks and dog exercise areas)

¹⁸ Undertaken by a Melbourne-based consulting company (Smart Connection Company)

Table 6.12 clearly shows that, over a ten-year period and with one surface replacement, synthetic surfaces are far more economic – as long as their use is significantly above that achievable for a grass-based field (of around 20 hours a week).

The table demonstrates this for two scenarios – one where the synthetic surface field is used for 60 hours a week (over 50 weeks of the year) and the other where the field is used for 80 hours (also over 50 weeks).

Table 6.12: Economic Cost Comparison – Grass and Synthetic Sports Fields¹⁹

Cost/revenue elements	Surface Options		
	Natural Turf	Synthetic Turf	
Construction cost	\$295,000	\$450,000	
Annual maintenance cost	\$50,000	\$26,000	
Surface replacement costs	N/A	\$315,000	
Est. cost over 10 years	\$795,000	\$1,025,000	
Average hrs of use	20 hrs/week	60 hrs/week	80 hrs/week
Use over 10 years (median)	9,750	30,000	40,000
Cost per hour of use	\$81.54	\$34.16	\$25.63
Hire fee (per hour)	\$15	\$40	\$40
Potential annual income	\$15,000	\$120,000	\$160,000
Est. revenue over 10 years	\$150,000	\$1,200,000	\$1,600,000
Management costs (25% of t/o)	-	\$300,000	\$400,000
Est. net cost	-\$645,000	-\$125,000	+\$175,000

Based on the assumptions identified in Table 6.12, a traditional grass field would cost around \$645,000 over a ten year period. On a synthetic pitch, used at three times the level²⁰, the deficit reduces substantially, to \$125,000. A further 20 hours use a week would move the facility to a modest surplus over the ten year (\$175,000 or \$17,000 per annum).

The benefits of synthetics are even more compelling when ‘cost per use’ is considered (above \$2 per use for grass and around 10c for a synthetic field used 60 hours a week).

The water harvesting potential of synthetic surface fields is an added bonus. The Melbourne City feasibility study found that approximately 3.9 ML of water a year could be collected from the surface area of one synthetic pitch (in an average rainfall year). This is sufficient to provide the total irrigation needs

¹⁹ The figures are based on the feasibility study undertaken by the Smart Connection Company – but with some changes to reflect some calculation errors made in that analysis

²⁰ This is realistic. The three synthetic pitches at the Darebin International Sports Centre in Victoria (see Case Study, Section 7) are programmed for use between 9am and 10pm and are used at an average of 60 hours a week all year. See M Sheppard, *Synthetics Come of Age*, Australian Leisure Management, Sept-Oct 2007, page 28.

of one neighbouring grass field (with cool-season turf) and nearly enough for 2 fields (with warm-season turf)²¹.

At least one neighbouring Council (Leichhardt) is planning such a conversion. It has recently given in-principle support for a multi-purpose synthetic pitch (primarily for hockey) at Leichhardt Oval No. 1 (although progression of the project depends on finding alternate grounds for existing user groups).

6.7.4. Access to currently unavailable facilities

In most communities, school outdoor sports facilities (playing fields and various types of courts - netball, basketball and/or multi-purpose) are often available for community use outside school hours – particularly those located within government schools.

However, the current community use of school sports facilities in the City appears to be quite limited. In fact, only one of the 12 (Canada Bay) schools that responded to the Schools Survey component of the recent SSROC Sports Grounds Study currently makes its facilities available for community use outside school hours.



This school, St Marks, hires its netball court to Five Dock All Saints Netball. Currently, no schools in the City hire sports fields or ovals to community sports organisations.

However, at least three schools in the City (Strathfield North, Five Dock and Mortlake Public Schools) have sports facilities (2 fields, 4 netball courts and cricket nets) with the potential for community use but this depends upon various upgrading and/or management initiatives (such as formal use agreements).

After-hours school requirements (at some schools) can also be a constraint to greater community use of school facilities – but such facilities can provide an important back-up resource to Council facilities, particularly for junior sport.

There are likely to be several opportunities to negotiate the use of school sports facilities outside of school hours. These should be fully explored by Council prior to committing resources to the development of new Council facilities.

Such negotiations will need to address shared responsibilities for facility upgrading, maintenance and security and formal community access agreements (to confirm joint responsibilities and ensure security of access tenure).

6.7.5. Acquisitions of new facilities

It is likely that no amount of absorption, embellishment, reconfiguring, hardening and extending will meet all the open space needs of the City's additional 22,000 people to 2031. So some open space acquisition may be required.

²¹ Assuming that the annual irrigation requirements are 3.8 ML/ha and 2.0 ML/ha for cool and warm season turf-grasses, respectively, and that irrigation is required from September to April for cool season turf and from November to March for warm season turf.

The aim of any acquisition strategy should be to build on the embellishment and other initiatives - to ensure that the City's open space can meet the needs of the new population without diminishing the existing population's enjoyment of open space resources.

It is not possible to be definitive about the quantity of open space required. This will depend on the potential to expand the 'carrying capacity' of existing open space (and this requires quantification via a more detailed study), residential development densities (because the per capita amount of 'passive' open space required varies with different densities), and land acquisition and embellishment affordability (in the context of Council's other priorities and changes in these priorities over the next 20-25 years).

As noted above (in regard, respectively, to 'park' and 'sports' specific open space), it could be argued that the existing City-wide per capita provision of open space is a reasonable (future supply) starting point.

In this scenario, the additional open space requirement for the projected 2031 population increase of 22,000 persons would be 59.8 hectares (or 27m² per capita) less the reduced need for sports space (as detailed in Section 6.5).

However, given the high land values in Canada Bay and the difficulty of acquiring suitable parcels of land, it could also be argued that such a requirement would be an unreasonable burden on development.

As well, as detailed above, there is considerable scope to absorb future demands in the City's existing open space resources – particularly if the capacity of those resources is expanded according to the options identified.

6.7.6. Open Space within major development projects

Developers may dedicate open space – for local parks and lineal connections through developments - to Councils in lieu of S94 contributions. This can be an attractive and sensible option where high land costs may inhibit the acquisition of sufficient open space to meet the open space needs generated by the development.

With respect to this, the City's major development projects incorporate the following open space allocations:

Table 6.13: Major Developments Comprising Open Space

Location	Area (Ha)	Configuration
Rhodes Peninsula	6.15	Not determined
Breakfast Point	8.25	Village Green (2.2ha) Open space around club house (3.5ha) Spring Park Circuit (0.1ha) Silkstone Park (0.45ha) Foreshore walk (2.0ha)

The 14.4ha of dedicated space will increase the total open space in the Concord SLA to 126.13Ha and the per capita provision in 2031 (in the absence of other acquisitions and/or disposals) to 2.64ha/1,000 population. This is just a little below the current overall City provision of 2.72ha/1,000 population.

6.8. Principles and Performance Requirements

Key principles and performance requirements for meeting the City's additional open space requirements (to 2031) are summarized in Table 6.14.

Table 6.14: Principles and Performance Requirements for Open Space

Performance requirement	Principle
Adequate, well distributed open space	Adds to the diversity of open space types in the area (eg: heritage, conservation and balanced/diverse range of recreation opportunities) Creates/adds to open space in a residential block which has little or no open space
Space suitable for intended purposes	Sufficient size: Local – minimum 0.3 ha and preferably minimum 0.5ha with at least some parks 1.0ha+ District – 3.0ha+ Sports areas require at least 4ha of usable area
Cost-effective use of land/space	Contribute to the viability of an existing site Site would be difficult to use productively for alternate purposes
Accessibility	Has high accessibility/centrality to users: Local – at least one park within 300-500m of all residents District – one park within 2-3kms of all residents
Connectivity	Has a capacity to support linear linkage
Heritage	Has historic, cultural, environmental significance
Scenic value	Has high landscape/visual/scenic values (and contributes to the identity/legibility of the area)
Safety	Visitor safety – facilitated by casual surveillance from residences and/or streets
Sustainability	Has suitable topography/drainage etc to enable ease of long term maintenance

All open space capacity proposals – whether upgrades, extensions, embellishments, changes of use or acquisitions – should meet as many of the above performance requirements as possible.

Notional Open Space Requirements

Based on the forecast additional population (to 2031) of around 22,000 people, the likely settlement of most of this population (75%) in the Concord SLA and existing open space provision standards in the City, a notional requirement of around 29 hectares of additional open space will be required if current levels of service are to be maintained.

This notional requirement is based on the calculations illustrated in Table 6.15.

Table 6.15: Notional Open Space Requirements - City of Canada Bay to 2031

	Concord SLA	Drummoyne SLA	Canada Bay City
Current provision of open space	111.73ha	67.39ha	179.12ha
Existing population	31,163	34,582	65,745
Current per capita provision of open space	3.60ha	1.95ha	2.72ha
Forecast additional population to 2031	16,569	5,455	22,024
Additional open space required to 2031 to maintain existing City-wide supply level (i.e. 2.72ha/1,000) in Concord SLA and existing SLA supply levels (i.e. 1.95ha) in Drummoyne SLA	18.10ha	10.68ha	28.78ha

This overall forecast open space demand (29ha) can be sub-divided into specific requirements for park ('passive') and sports ('active') space according to existing levels of provision and the needs and opportunities identified in the current study – as summarized in Table 6.16.

Table 6.16: Additional Open Space Requirements to 2031 x Open Space Type

Open space type	Concord SLA	Drummoyne SLA	Canada Bay City
Sports (active) open space requirement to 2031	8.13	4.80	12.93
Less space dedicated (in current plans)	-	-	-
Net 'active' space required	8.13	4.80	12.93
Adjustment for age-related sports participation forecasts (Section 6)	6.30	3.70	10.00
Park (passive) open space requirement to 2031	9.97	5.88	15.85
Less space dedicated (in current plans)	14.4	-	12.2
Net 'passive' space required	nil	5.88	5.88

As illustrated in Table 6.16, there is a net City-wide notional requirement for around 10 hectares of sports open space and 6 hectares of park open space – after allowing for the currently planned open space dedications in the proposed major developments at Rhodes Peninsula and Breakfast Point.

This does not imply that this amount of open space needs to be acquired as there are several 'non-acquisition' options for meeting open space needs, as discussed in detail in Section 6.7.

6.9. Summary and Conclusions

Based on the current age-related population forecasts and the assumption that current service levels should generally be maintained into the future²², the following conclusions are made, with respect to 'passive' and 'active' space, respectively.

A key assumption behind these conclusions – for both types of open space – is the importance of ensuring that existing spaces and facilities are optimally used (via refurbishment, extension, improved

²² This assumption is arguable based on the current overall balance between the supply of and demand for open space in the City – as explained in Section 2 of this Report

access, user management) prior to the commitment of scarce capital resources to the acquisition and embellishment of additional open space. This is consistent with the principles of sound asset management.

6.9.1. Passive Open Space

1. There is currently 99 ha of 'passive' open space in the City – or 1.5 ha/1,000 population. This is comparative to the traditional standard of 1.62 ha/1,000 of 'passive' space.
2. Council's recent Recreation Needs Study found that there was sufficient passive space to meet needs in much of the City – with the exceptions including insufficient parks in the Drummoyne and Rodd Point precincts and many parks (across the City) too small to adequately meet recreation needs.
3. The uneven distribution is reflected in the per capita passive park supply figures for Concord SLA (with 1.97ha/1,000 population) and Drummoyne SLA (with 1.06ha/ 1,000 people)
4. The population is forecast to increase by 22,000 by 2031
5. This population growth will be accompanied by substantial change in the age structure of the population – with a much greater proportion of older people aged 55 years+
6. Despite this ageing, there will be absolute increases in all age groups overall in the City (although in the Drummoyne SLA, there is a forecast absolute decline in the 0-14 year age groups)
7. Parks will therefore need to address the needs of all age groups into the future but with an increasing emphasis on the specific needs of older people (i.e. walking trails and routes, rest areas, dog 'off leash' areas, 'access for all' design, picnic areas etc)
8. With 22,000 more people in the City, there will be a substantial increase in the demand for parks of all types (local and district parks, linear reserves, town parks etc)
9. The population growth will, in the absence of new additions, reduce the per capita supply of passive open space to 1.28 ha/1,000 in Concord and 0.92 ha/1,000 in Drummoyne
10. Based on existing supply levels and population forecasts, there will be a 'notional' need for nearly 16 ha of passive open space across the City – 10 ha in the Concord SLA and 6 ha in the Drummoyne SLA (see Table 6.15).
11. Proposed dedications (for the Breakfast Point and Rhodes Peninsula developments) reduce this requirement to nil in the Concord SLA.
12. But quantity is only one measure of need – and arguably not the most important. More important is the quality and accessibility of the space – and its suitability with respect to the specific needs of potential users (see Table 6.14).
13. Quantity is important, but only to the extent that the quality, suitability and access criteria are able to be met. For example, space should be sufficient to allow the provision of local parks of up to 0.5ha within 300-500 metres maximum distance from all households and (on a pro rata basis) one district park within 2-3 kilometres of all households.

14. Additionally and where opportunities exist, local and district parks should be complemented (and connected if possible) by linear reserves (including riparian reserves, creek lines and drainage corridors) and remnant bushland.

6.9.2. Sports (active) Open Space

1. There is currently 80 ha of active (sports ground) open space in the City – or 1.22 ha/1,000 population. This is comparative to the traditional standard of 1.21 ha/1,000 of ‘active space’.
2. Recent studies (Council’s Recreation Needs Study and SSROC’s Sports Ground Study) found that this sports ground space is mostly used at full capacity (in some cases, at over full capacity, in the winter season at least).
3. The sports ground open space is distributed unevenly in the City – with the per capita ‘active’ open space supply figures for the Concord SLA being a relatively generous 1.62ha/1,000 population compared to the Drummoyne SLA’s 1.06ha/ 1,000 people).
4. The forecast population increase and changing age structure will impact sports participation. While the per capita participation rates will decline, with population ‘ageing’, this will be more than offset by the population increases. Based on current average participation rates, the participation growth will be significant (with 500 additional soccer players, nearly 200 Rugby League players, 300 netballers etc – as detailed in Section 6.3).
5. The population growth will, in the absence of new additions, reduce the per capita supply of ‘active open space to 1.06 ha/1,000 in Concord and 0.75 ha/1,000 in Drummoyne.
6. Based on existing supply levels and population forecasts, there will be a ‘notional’ need for around 10 ha of ‘active open space across the City – around 6 ha in the Concord SLA and 4 ha in the Drummoyne SLA (see Table 6.15).
7. The proposed dedications for the Breakfast Point development area do not include any publicly accessible sports ground space. A ‘village green’ proposal of 2.2ha can only be used for informal activities. The Rhodes Peninsula development area is proposing around 6ha of open space (but it is assumed here that none of this will be developed for formal sports activities).
8. Therefore the net ‘notional’ needs for sports space remains at 10ha – although this could change if any of the dedicated spaces in the Breakfast Point, Rhodes Peninsula or other development areas were developed for formal sports



6.9.3. Conclusion

This analysis has reviewed the need for, and options for meeting, the additional open space needs resulting from the requirement (under the State Government’s Metropolitan Strategy) to accommodate 10,000 additional dwellings in the City to 2031.

Specifically, the Study has identified the size and age structure of the forecast 2031 population, their likely sport and outdoor recreation needs (and how these are likely to change from present needs), the

current provision and adequacy of open space resources in the City and options and mechanisms for ensuring that there is sufficient open space in the future to meet the identified future needs.

The Study has concluded that there is a 'notional' requirement for around 16ha of passive space in the City (10 ha in the Concord SLA and 6 hectares in the Drummoyne SLA) and 10 ha of 'active space' (around 6ha in Concord and 4ha in Drummoyne).

The 'net' requirement, after allowing for current open space dedication proposals, is around 10ha of 'active' and 6ha of 'passive' open space.

However, there are alternative, 'non-acquisition' options for ensuring adequate access to and use of open space (as identified in Section 5.7) and these need to be addressed in detail prior to a final determination of open space quantities required. It is possible for these options (if deemed to be suitable and viable) to significantly reduce the total amount of open space required for the future additional populations.

This investigation is beyond the scope of the current Study.

It is recommended that the 'notional' requirements be reviewed and adjusted, as appropriate, according to a detailed review of both 'acquisition' and 'non-acquisition' options for increasing the capacity and suitability of Council's open space system.

Accordingly, it is recommended that Council prepare a City-wide open space acquisition strategy.

Subsequent to this further study, Council's relevant S94 Contributions plans can be adjusted to incorporate the identified acquisition and non-acquisition projects in the appropriate contribution schedules.

6.10. Objectives and Actions

The broad recreation and open space objectives are to:

Respond to Future Recreation Needs and identify opportunities for multi use of green space. As the population within Canada Bay increases, Council needs to respond to this growth by planning for active and passive recreation. This includes the preparation of an open space needs strategy and associated Section 94 Contributions plan.

To achieve these objectives, specific actions are recommended. These are discussed in the following text.

Objective R1 Respond to Future Recreation Needs and identify opportunities for multi use of green space.

Action R1 Prepare a city wide open space strategy

The strategy should address:

- Existing open space acquisition strategies
- Non-acquisition options for meeting future open space demands:
- Optimising access to open existing open space (including school open space);
- Options for improving the carrying capacity of existing space and facilities
- Options for sports field synthetic conversions

- Existing and possible future open space dedications (and options for adjusting these in the light of the findings in this Strategy)
- Acquisition priorities (based on access, travel distance, existing distribution of open space, type of space required, etc)
- Acquisition principles (access, visual quality, function, location, size etc)

Action R2 Amend Section 94 Contribution Plans to address open space and recreation needs of population growth

Incorporate the identified acquisition and non-acquisition projects in the appropriate contribution schedules.

Action R3 Provide additional civic space when developing plans for centres

Opportunities to provide additional civic space should be identified in planning for centres where increased commercial and residential development is proposed to be located.

Action R4 Seek grant funding to improve the quality of existing open space

Apply for funding to improve the quality of existing open space and improve connections and accessibility to the foreshore of the Parramatta River. Continue to apply for funding under the:

- Metropolitan Greenspace Program
- Sharing Sydney harbour Access Program

Action R5 Implement the City of Canada Bay Plans and Policies in relation to Open Space and Recreation

- City of Canada Bay Council Recreation Plan 2007
- City of Canada Bay Generic Plan of Management 2007
- City of Canada Bay "Lets Play Strategy" 2008

Action R6 Facilitate public access to the foreshore

- Identify and map foreshore linkage opportunities
- Development on the foreshore to include public access
- Ongoing implementation of Sydney Harbour Access Plan

This matter is further discussed in Part 8.1 Special Planning Areas, Parramatta River.