

Meeting Date: Tuesday 22 July 2014
Location: Council Chambers, Level 6, Civic Centre, 1 Devlin Street, Ryde
Time: 7.30pm

ATTACHMENTS FOR COUNCIL MEETING

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Report to Council

S.94 Development Contribution Plan 2007 – Interim Update (2014)

ATTACHMENT 1

City of Ryde Section 94 Development Contributions Plan 2007



City of Ryde

**City of Ryde
Section 94 Development
Contributions Plan 2007**

**Plan Adopted - 11 December 2007
Plan Effective - 19 December 2007**

Adopted 11 December 2007

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This plan was prepared by Connell Wagner Pty Ltd on behalf of the City Of Ryde

1. Part A – Summary schedules

These three summary schedules are included in this plan:

- Works program.
- Contributions by development type and location.
- Contributions by category and location.

These are provided as summary tables only and more details are contained in the individual strategy plans within the plan.

Table 1.1 Summary works program

Facility	Works schedule ^a	Cost summary	Timing/Thresholds
Community and cultural facilities	See appendix A	\$54,160,000	Timing will be subject to collections and funds accrued being of sufficient magnitude to permit provision of the works without external funding
Open space and recreation facilities	See appendix A	\$104,231,400	Timing will be subject to collections and funds accrued being of sufficient magnitude to permit provision of the works without external funding
Civic and urban improvements	See appendix A	\$44,189,920	Timing will be subject to collections and funds accrued being of sufficient magnitude to permit provision of the works without external funding
Roads and traffic management facilities	See appendix A	\$29,313,000	Timing will be subject to collections and funds accrued being of sufficient magnitude to permit provision of the works without external funding
Transport and accessibility	See appendix A	\$2,500,000	Timing will be subject to collections and funds accrued being of sufficient magnitude to permit provision of the works without external funding
Cycleways	See appendix A	\$4,696,000	Timing will be subject to collections and funds accrued being of sufficient magnitude to permit provision of the works without external funding
Stormwater management facilities	See appendix A	\$14,420,000	Timing will be subject to collections and funds accrued being of sufficient magnitude to permit provision of the works without external funding
Plan administration	See appendix A	\$1,200,000	
Total		\$254,710,320	

Notes:

- a. Refer to specific strategy plans for more detail on scheduled works.

Table 1.2 Summary schedule – contributions by development type and location

Development type	Occupancy rate / work space ratio ^a	Contributions – development outside Macquarie Park Corridor	Contributions – development within Macquarie Park Corridor
Residential			
Residential flats and other attached dwellings ^b			
Studios or 1 bedroom	1.5 persons / dwelling	\$8,632.64 / Dwelling	\$11,380.31/ Dwelling
2 bedroom	1.8 persons / dwelling	\$10,359.17/ Dwelling	\$13,656.38/ Dwelling
3 bedroom	2.3 persons / dwelling	\$13,236.72/ Dwelling	\$17,449.82/ Dwelling
>3 bedroom	2.9 persons / dwelling	\$16,689.77/ Dwelling	\$22,001.94/ Dwelling
Detached dwelling ^b	2.9 persons / dwelling	\$16,689.77/ Dwelling	\$22,001.94/ Dwelling
Subdivision	2.9 persons / lot	\$16,689.77 / lot	\$22,001.94 / lot
Seniors housing ^c	1.5 persons / dwelling	\$8,632.64 / Dwelling	\$11,380.31/ Dwelling
Commercial office / research and development	1 employee / 20m ² GFA	\$105.52 / M ²	\$105.74/ M ²
Retail	1 employee / 40m ² GFA	\$61.30/ M ²	\$71.28/ M ²
Industrial ^d	1 employee / 50m ² GFA	\$52.45/ M ²	\$64.39/ M ²

Notes:

- a. These occupancy rates / work space ratios will be applied unless the applicant can demonstrate to the satisfaction of council that an alternative rate should be applied to a specific development.
- b. A room in a dwelling capable of being used as a bedroom is counted as a bedroom.
- c. Seniors housing is as defined under clause 10 of State Environmental Planning Policy (Seniors Living) 2004. The occupancy rate and contribution applied relates to self-contained dwellings. The contribution for other forms of seniors housing such as hostels will be based on an assessment of the expected demand for public facilities that the development generates.
- d. Industrial includes light industry and heavy industry as defined in the Standard Instrument (Local Environmental Plans) Order 2006.
- e. The contribution for development that does not fall within the above development types will be based on an assessment of the expected demand for public facilities that the development generates.
- f. The contribution for development that comprises more than one development type will be based on the predominant development type.
- g. Traffic generation rates used to derive contributions are based on the RTA *Guide to Traffic Generating Development* (October 2002)
- h. Traffic generation associated with other uses not specified above will be derived from the RTA guide.

Table 1.3 Summary schedule – contribution by category and location

Strategy plan	Development outside Macquarie Park Corridor		Development within Macquarie Park Corridor	
	Contribution rate – residential development	Contribution rate – non-residential development	Contribution rate – residential development	Contribution rate – non-residential development
Community and Cultural Facilities	\$1,217 / Person	\$641/ Person	\$1,217/ Person	\$641/ Person
Open Space and Recreation Facilities	\$2,996/ Person	NA	\$4,882/ Person	NA
Civic and Urban Improvements	\$1,019/ Person	\$1,019/ Person	\$628/ Person	\$628/ Person
Roads and Traffic Management Facilities	\$139 / M ²	\$7.17/ M ²	\$674/ M ²	\$32.99/ M ²
Transport and Accessibility Facilities *	NA	NA	NA	NA
Cycleways	\$86.82/ Person	\$86.82/ Person	\$86.82/ Person	\$86.82/ Person
Stormwater Management Facilities	\$275.97/ M ²	\$9.91/ M ²	\$76.86/ M ²	\$3.84/ M ²
Plan administration	\$22.18/ Person	\$22.18/ Person	\$22.18/ Person	\$22.18/ Person

Notes:

- a. Contributions payable for transport and accessibility facilities are levied on a per car parking space basis where insufficient on-site parking is provided to meet demand generated.

2. Part B – Administration and operation of the plan

2.1 Name of the plan

This development contributions plan is called the City of Ryde Development Contributions Plan 2007.

2.2 Area to which the plan applies

This plan applies to all land within the Ryde local government area (LGA) as shown on the Area Plan Map.



2.3 What is the purpose of this plan?

The purpose of this plan is to:

- Provide an administrative framework under which specific public facilities strategies may be implemented and coordinated.
- Ensure that adequate public facilities are provided for as part of any new development.
- Authorise the council to impose conditions under section 94 of the *Environmental Planning and Assessment Act 1979* (EPA Act) when granting consent to development on land to which this plan applies.
- Provide a comprehensive strategy for the assessment, collection, expenditure accounting and review of development contributions on an equitable basis.
- Ensure that the existing community is not burdened by the provision of public amenities and public services required as a result of future development.
- Enable the council to be both publicly and financially accountable in its assessment and administration of the development contributions plan.

2.4 Commencement of the plan

This development contributions plan has been prepared pursuant to the provisions of section 94 of the EPA Act and Part 4 of the *Environmental Planning and Assessment Regulation 2000* (EPA Regulation). The plan takes effect from the date on which public notice was published (pursuant to clause 31(4) of the EPA Regulation).

2.5 Relationship with other plans and policies

This development contributions plan repeals:

- Section 94 Contributions Plan No 1 (2003 Amendments).
- Meadowbank Section 94 Contributions Plan (2005).

2.6 Definitions

Applicant	means the person, company or organisation submitting a development application.
CGIR	means Capital Gains Index Ryde – The capital gains index is a measure of the movement of property values over time and is supplied by Residex an independent organisation who will track the movement of property prices specifically for the Ryde area and provide an index value quarterly
Contribution	means the dedication of land, the making of a monetary contribution or the provision of a material public benefit, as referred to in section 94 of the EPA Act.
Contributions Plan or CP	means a contributions plan referred to in section 94B of the EPA Act.
Council	means the Council of the City of Ryde.
CPI	means the All Groups Consumer Price Index (Sydney) as published by the Australian Bureau of Statistics.
Embellishment	means the enhancement of any public facility provided by the council by the provision of services, facilities or works.
EPA Act	means the <i>Environmental Planning and Assessment Act 1979</i> as amended.
EPA Regulation	means the <i>Environmental Planning and Assessment Regulation 2000</i> as amended.
LEP	means a local environmental plan made by the Minister under section 70 of the EPA Act.
LGA	means the local government area of the City of Ryde.
Public facility	means any public amenity or public service, as referred to in section 94 of the EPA Act, the need for which has increased or been created by development.
Recoupment	means the payment of a monetary contribution to the council to offset the cost (plus any interest) that the council has already incurred in providing public facilities in anticipation of development.
Settlement	means the payment of a monetary contribution, the undertaking of a work in kind or the exchange of documents for the dedication of land required as a result of new development.
Works in kind	has the same meaning as a "material public benefit" as referred to in section 94(5)(b) of the EPA Act and means the undertaking of any work associated with the provision of a public facility.
Works program	means the schedule of the specific public facilities for which contributions may be required, and the likely timing of provision of

those public facilities based on projected rates of development, the collection of development contributions and the availability of funds from supplementary sources.

2.7 When is the contribution payable?

A contribution must be paid to the council at the time specified in the condition that imposes the contribution. If no such time is specified, the contribution must be paid prior to the issue of a Part 4A certificate.

2.8 Construction certificates and the obligation of accredited certifiers

In accordance with section 94EC of the EPA Act and clause 146 of the EPA Regulation, a certifying authority must not issue a construction certificate for building work or subdivision work under a development consent unless it has verified that each condition requiring the payment of monetary contributions has been satisfied.

In particular, the certifier must ensure that the applicant provides receipts confirming that contributions have been fully paid and copies of such receipts must be included with copies of the certified plans provided to the council in accordance with clause 142(2) of the EPA Regulation. Failure to follow this procedure may render such a certificate invalid.

The only exceptions to the requirement are where a works in kind, material public benefit, dedication of land, or deferred payment arrangement has been agreed by the council. In such cases, council will issue a letter confirming that an alternative payment method has been agreed with the applicant.

2.9 Deferred or periodic payments

All requests for deferred or periodic payments of contributions are required to be made to Council in writing. Deferred or periodic payments may be permitted in the following circumstances:

- Compliance with the provisions of clause 2.7 is unreasonable or unnecessary in the circumstances of the case.
- Deferred or periodic payment of the contribution will not prejudice the timing or the manner of the provision of public facilities included in the works program.
- Where the applicant intends to make a contribution by way of a planning agreement, works in kind or land dedication in lieu of a cash contribution, and council and the applicant have a legally binding agreement for the provision of the works or land dedication.
- There are circumstances justifying the deferred or periodic payment of the contribution.

If council does decide to accept deferred or periodic payment, council may require the applicant to provide a bank guarantee by a bank for the full amount of the contribution or the outstanding balance on condition that:

- The bank guarantee be by an Australian bank for the amount of the total contribution, or the amount of the outstanding contribution, plus an amount equal to thirteen (13) months interest plus any charges associated with establishing or operating the bank security.
- The bank unconditionally pays the guaranteed sum to the council if the council so demands in writing not earlier than 12 months from the provision of the guarantee or completion of the work.
- The bank must pay the guaranteed sum without reference to the applicant or landowner or other person who provided the guarantee, and without regard to any dispute, controversy, issue or other matter relating to the development consent or the carrying out of development.

- The bank's obligations are discharged when payment to the council is made in accordance with this guarantee or when council notifies the bank in writing that the guarantee is no longer required.
- Where a bank guarantee has been deposited with council, the guarantee shall not be cancelled until such time as the original contribution and accrued interest are paid.

2.10 Can the contribution be settled in kind or by a material public benefit

The council may accept an offer by the applicant to provide an in-kind contribution (ie the applicant completes part or all of work/s identified in the plan) or through provision of another material public benefit in lieu of the applicant satisfying its obligations under this plan.

Council may accept such alternatives where all of the following circumstances are applicable:

- The value of the works to be undertaken is at least equal to the value of the contribution that would otherwise be required under this plan.
- The standard of the works is to council's full satisfaction.
- The provision of the material public benefit will not prejudice the timing or the manner of the provision of public facilities included in the works program.

The value of the works to be substituted must be provided by the applicant at the time of the request and must be independently certified by a Quantity Surveyor who is registered with the Australian Institute of Quantity Surveyors or a person who can demonstrate equivalent qualifications.

Council will require the applicant to enter into a written agreement for the provision of the works.

Acceptance of any such alternative is at the sole discretion of the council. Council may review the valuation of works or land to be dedicated, and may seek the services of an independent person to verify their value. In these cases, the applicant will pay for all costs and expenses borne by the council in determining the value of the works or land.

2.11 Exemptions

Council may exempt developments, or components of developments, from the requirement for a contribution that include:

- Alterations and additions to a dwelling with a total value less than \$100 000.

Council will consider each application and determine if the application merits full or partial exemption.

2.12 Review of contribution rates

The council will review the contribution rates to ensure that the value of contributions are not eroded over time by movements in the CPI land value increases, the capital costs of administration of the plan, or through changes in the costs of studies used to support the plan.

The contribution rates will be reviewed by reference to the following specific indices:

- Construction costs by the CPI.
- Land acquisition costs by reference to the Capital Gain Index for the suburb of Ryde (CGIR) as published by Residex for Ryde City Council.

In accordance with clause 32(3)(b) of the EPA Regulation, the following sets out the means that the council will make changes to the rates set out in this plan.

For changes to the CPI, the contribution rates within the plan will be reviewed on a quarterly basis in accordance with the following formula:

$$\$C_A + \frac{\$C_A \times ((\text{Current Index} - \text{Base Index}))}{[\text{Base Index}]}$$

Where:

- $\$C_A$ is the contribution at the time of adoption of the plan expressed in dollars
- Current Index is the CPI as published by the Australian Bureau of Statistics available at the time of review of the contribution rate
- Base Index is the CPI as published by the Australian Bureau of Statistics at the date of adoption of this plan, which is **+0.4**.

Note: In the event that the current CPI is less than the previous CPI, the current CPI shall be taken as not less than the previous CPI.

For changes to land values, the council will publish at least on a quarterly basis the revised property index values that are to be used to change the base land values contained in the plan which will be determined in accordance with the following formula:

$$\$C_{LV} + \frac{\$C_{LV} \times ((\text{Current LV} - \text{Base LV Index}))}{[\text{Base Index}]}$$

Where:

- $\$C_{LV}$ is the land values within the plan at the time of adoption of the plan expressed in dollars
- Current LV Index is the land value index (CGIR) as published by the council available at the time of review of the contribution rate
- Base LV Index is the land value index (CGIR) as published by the council at the date of adoption of this plan, which is **3.3935**.

Note: In the event that the current CGIR is less than the previous CGIR, the current CGIR shall be taken as not less than the previous CGIR.

For changes in salary costs and changes in the costs for studies and other activities associated with the plan, council will publish at least on an annual basis the revised indices that are to be used to change the base costs of salaries and the costs of studies and associated activities in administering the plan.

Note: This clause does not cover the adjustment of a contribution between the time of consent and the time payment is made. This is covered by clause 2.13.

2.13 How are contributions adjusted at the time of payment?

The contributions stated in a consent are calculated on the basis of the section 94 contribution rates determined in accordance with this plan. If the contributions are not paid within the quarter in which consent is granted, the contributions payable will be adjusted and the amount payable will be calculated on the basis of the contribution rates that are applicable at time of payment in the following manner:

$$\$C_P = \frac{\$C_{DC} + [\$C_{DC} \times (\$C_Q - \$C_C)]}{\$C_C}$$

Where:

- \$ C_P** is the amount of the contribution calculated at the time of payment
- \$ C_{DC}** is the amount of the original contribution as set out in the development consent
- \$ C_Q** is the contribution rate applicable at the time of payment
- \$ C_C** is the contribution rate applicable at the time of the original consent

The current contributions are published by council and are available from council offices. Should the council not validly publish the applicable contribution rates, the rate applicable will be calculated in accordance with the rate prevailing in the previous quarter.

2.14 Are there allowances for existing development?

Contributions will be levied according to the estimated increase in demand. An amount equivalent to the contribution attributable to any existing (or approved) development on the site of a proposed new development will be allowed for in the calculation of contributions. In assessing the contribution of existing development the following occupancy rates / work space ratios will be used:

Development type	Rate
Residential	
Seniors housing	1.5 persons per dwelling
Studios or 1 bedroom	1.5 persons per dwelling
2 bedroom	1.8 persons per dwelling
3 bedroom	2.3 persons per dwelling
>3 bedroom	2.9 persons per dwelling
Detached dwelling	2.9 persons per dwelling
Subdivision	2.9 persons per lot
Non Residential	
Commercial office / research and development	1 employee per 20m ² GFA
Retail	1 employee per 40m ² GFA
Industrial	1 employee per 50m ² GFA
Tourist and visitor accommodation	1 person per bed

Where a development does not fall within any of the items noted above, the council would determine the credit on the basis of the likely demand that the existing development would create.

2.15 Pooling of contributions

This plan expressly authorises monetary section 94 contributions paid for different purposes to be pooled and applied (progressively or otherwise) for those purposes. The priorities for the expenditure of the levies are shown in the works schedule.

2.16 Savings and transitional arrangements

A development application that has been submitted prior to the adoption of this plan but not determined shall be determined in accordance with the provisions of the plan which applied at the date of determination of the application.

3. Part C – Strategy plans

3.1 Introduction

This section sets out the strategies that council intends to follow to cater to the needs of future population growth and development in the Ryde LGA. It sets out to identify the resulting demand for public services and public facilities and the costs and timing of provision of the works that the council intends to provide to cater to that demand.

To arrive at contributions for different types of development and for different types of facilities the methodology adopted in the plan is generally as follows:

- Population and employment growth is assessed and an evaluation made of the expected types of new development.
- Existing public amenities and public services in the LGA are identified to provide a benchmark for future provision and to determine if they are adequate for the future population.
- Existing planning standards are examined where these are relevant to the identification of the future services and facilities that are to be provided.
- An assessment is made of the demand for public amenities and public services that will be generated by each expected type of new development.
- The additional public amenities and public services to cater to demand are identified.
- An assessment is made of whether there needs to be any apportionment between existing and new development and between local and regional demands.

Section 3.2 below provides an assessment of the existing demographic characteristics of the LGA and the anticipated future growth and development in the LGA that will create demand for a range of public amenities and public services. The remainder of Section 3 presents specific strategy plans that outline the demand and proposed provision for the public amenities and public services set out below:

- Community and cultural facilities.
- Open space and recreational facilities.
- Civic and urban improvements.
- Roads and traffic management facilities.
- Transport and accessibility facilities.
- Cycleways.
- Stormwater management facilities.
- Plan administration.

3.2 Demographic characteristics and anticipated future growth

3.2.1 Current population and housing characteristics and recent trends

A summary of the current demographics and recent demographic trends is presented below. This information has been sourced from Australian Bureau of Statistics Census of Population and Housing data for the Ryde LGA. Note that 2006 Census data has been used where available otherwise 2001 census data is used as the latest available data.

Population growth

Population growth in Ryde has been typical of the middle ring suburbs of Sydney. The area grew rapidly post World War 2 (WW2) as migration to Australia soared. This stabilised in the 1960s with some decline in the 1970s as population growth in Sydney moved westward to the new greenfield areas.

Ryde avoided the trend of decline, however growth slowed in the 1970s and early 1980s. Growth advanced again after the mid-1980s. This growth occurred on the back of redevelopment of lower density residential lands and under utilised industrial lands and as the rapid growth of specialist business zones such as Macquarie Park Corridor occurred.

Table 3.1 Population growth 1971-2006

Census year	Total population	Census period change
1971	88,806	-
1976	89,137	0.4%
1981	88,948	-0.2%
1986	89,252	0.3%
1991	90,249	1.1%
1996	92,107	2.1%
2001	94,483	2.6%
2006	96,948	2.6%

Source: Australian Bureau of Statistics

The Ryde LGA has accommodated growth over the past 20 years and a consistent rate of growth over the past 10 years. This is likely to continue with further expansion and development in Macquarie Park.

Dwelling approvals

The number of dwelling approvals has been increasing in line with population growth within the LGA. However the rate of increase has exceeded the population growth rate (over 1% per annum for the last 10 years compared with a population growth rate of 0.6%). The higher growth in dwelling approvals underlines the gradual decline in dwelling occupancy rates over time.

Table 3.2 Dwelling approvals 1991-2001

Dwelling type	1991	2001	Total change	Average annual change
Total dwellings	35,087	38,833	+10.7%	+1.07%
Detached houses	22,081	20,818	-6.0%	-0.6%
Villas etc	3,387	4,792	+41.0%	+4.1%
Residential flats	9,748	10,844	+11.0%	+1.1%

Source: Australian Bureau of Statistics

The residential housing market has been buoyant in NSW over this period. The popularity of Ryde as a location has also increased with land becoming available along the Parramatta River for development and the location and character of the area increasingly being viewed as desirable.

The increased employment opportunities through the development of the Macquarie Park Corridor and the growth of Macquarie University combined with improvements to the transport network have all led to a resurgence in dwelling construction.

Age structure

The age profile of Ryde has been ageing. This is a trend being experienced in most middle ring suburbs. In 2006 the highest proportion of the population was in the primary working age groups between 25 and 54 years (44.6%). This highlights that population growth in the last decade has resulted from increased employment opportunities in the area as well as the increased popularity of the area for families.

The proportion of those in the under 20 years age groups has been decreasing in line with wider trends of smaller families and gradual ageing of the population. This group has declined from around 34% of the total population in 1971 to around 22.4 per cent in 2006 although during the 1980-90s period the absolute numbers of this group remained relatively constant at about 22,000.

The major change to the age profile has been an increase in the older age categories and particularly those in the over 70 year age groups. This has been due to a combination of the gradual ageing of the overall population and slight increase in life expectancy.

Household composition

In 2001 the majority of people in Ryde lived in a couple family with children household (49%). 28% of these were couple families with children under 15 years. These figures are slightly lower than the same figures for the Sydney region (51% and 31% respectively). In 2001 around 18% of people in Ryde lived in a couple family with no children household and 9% lived in a single parent household. These figures are slightly higher than the same figures for the Sydney region (17% and 10% respectively). It is not anticipated that these figures have altered significantly since the 2001 census.

Dwelling types

Separate houses is the most common dwelling type in Ryde (56% in 2001) compared to 63% for the Sydney region. The other most common dwelling types in Ryde in 2001 were walk up flats/units (21%) and townhouses or semis (13%). Units in 4 or more storey buildings comprised 8%.

In the 10 years between 1991 and 2001 the number of detached dwellings continued to decrease while the number of other types of housing continued to increase. In 1991 detached housing constituted 63% of all dwellings while in 2001 they constituted 54%. Villas were highly popular and replaced around 6% of the occupied dwelling stock over the 10 year period.

The dwelling types for the ward areas of Ryde vary considerably. Separate houses form a far greater proportion of the housing stock in the East Ward than for Ryde as a whole (71%). Separate houses comprise 43% and 58% of the housing stock in the Central Ward and West Ward respectively. Other notable variations from the Ryde figures are a larger number of townhouses and semis in West Ward (21%) and a larger number of walk up flats/units and units in 4 or more storey buildings in the Central Ward area (34% and 13% respectively).

It is reasonable to assume that trends shown in the 2001 census have continued and may in fact be more pronounced in future.

Occupancy rates

In line with wider demographic trends occupancy levels in Ryde have been on the decline for 30 years. In 1971 the average occupancy rate was around 3.36 persons per dwelling. This declined to 2.5 persons per dwelling in 2001. This trend reflects lower fertility rates, changes in household formation, and the ageing of the population, as well as the shift in dwelling mix between detached housing and units/townhouses.

Ryde had the following occupancy rates for different dwelling types in 2001:

- Separate house: 2.91 persons per dwelling.
- Semi-detached/townhouse/terrace house: 2.31 persons per dwelling.
- Flat/unit/apartment: 1.81 persons per dwelling.

There is likely to be additional downward changes in overall occupancy rates however the significant rate of change that occurred in occupancy rates due to changes in the population and dwelling mix during the 1970s to 1990s are expected to slow.

This plan adopts a range of contribution rates that vary with the occupancy rate of the dwelling type. There is adequate flexibility in these rates to accommodate minor fluctuations of occupancy rate over the life of this plan.

3.2.2 Future growth and development

Background to population projections

Population and employment projections are a critical aspect of a development contributions plan. These projections provide a clear link (or nexus) between growth and the demand for various services and facilities that the council will provide.

However projections are an estimate of the growth that could occur. Many intervening factors will influence the incoming population. These include economic conditions and the zoning controls in the area. Projections are therefore an anticipated measure of demand that needs to be assessed against various sources. Projections also must be reviewed regularly during the life of the plan.

Two alternative projections of growth are used in this plan:

- Department of Planning population and demographic projections.
- Projections based on a **development capacity** approach.

Each approach is useful for a development contributions plan. Population projections are based on past growth trends, fertility and mortality rates, occupancy rate changes, and potential migration. These can provide a sound basis for population growth that may occur in an area (ie the magnitude of growth and demographic structure). This is important in setting policy in relation to the type of services to be provided and their staging.

The second approach provides a measure of the absolute capacity of zoned areas for various forms of development. This is particularly useful for understanding the growth in the future workforce. In this measure it is assumed that ultimately there will be 100% take-up of land according to the zoning. This approach is also useful in identifying where population and worker growth is more likely to occur over time. Projections only provide an indication of the magnitude of population growth and not the distribution of such growth.

Using approaches that are based on population dynamics as well as development potential also provides two independent measures of the quantum and timing of population growth. When

undertaken at each major review of the plan, this verification process gives confidence that the works program adopted in the plan remains valid. It also allows council to tailor the works program over time where past assumptions do not fully eventuate or if demand changes.

The results of these two methods of projection are described below.

Projected population growth and characteristics

The *New South Wales Statistical Local Area Population Projections 2001-2031 – Ryde SLA Summary* were prepared by the (former) NSW Department of Infrastructure Planning and Natural Resources in 2005 and present population and age profile projections for the LGA. Table 3.3 below summarises the projections.

Table 3.3 Population projections 2001-2031

Age	2001	2006	2011	2016	2021	2026	2031	Population change
0-4	5,880	5,740	5,560	5,410	5,420	5,460	5,470	-410
5-9	5,560	5,520	5,450	5,210	5,100	5,120	5,180	-380
10-14	5,270	5,330	5,330	5,180	4,970	4,880	4,920	-350
15-19	5,900	5,890	6,020	5,920	5,760	5,540	5,480	-420
20-24	7,580	7,890	8,130	8,100	7,970	7,750	7,620	40
25-29	8,250	7,630	7,960	7,980	8,000	7,900	7,810	-440
30-34	8,500	8,650	8,350	8,420	8,470	8,500	8,480	-20
35-39	8,600	8,430	8,720	8,330	8,420	8,470	8,570	-30
40-44	7,660	7,990	8,070	8,210	7,880	7,980	8,080	420
45-49	6,750	7,090	7,430	7,480	7,580	7,310	7,450	700
50-54	6,280	6,270	6,650	6,910	6,970	7,060	6,850	570
55-59	4,710	5,730	5,780	6,110	6,340	6,400	6,500	1,790
60-64	3,940	4,230	5,140	5,190	5,490	5,710	5,790	1,850
65-69	3,550	3,590	3,910	4,720	4,780	5,090	5,300	1,750
70-74	3,670	3,110	3,240	3,580	4,330	4,430	4,750	1,080
75-79	3,160	3,040	2,670	2,820	3,180	3,890	4,030	870
80-84	2,100	2,430	2,410	2,180	2,390	2,740	3,400	1,300
85+	1,800	1,980	2,350	2,610	2,650	2,900	3,400	1,600
Total	99,150	100,510	103,160	104,360	105,700	107,120	109,070	9,920

Source: *New South Wales Statistical Local Area Population Projections 2001-2031 – Ryde SLA Summary* (Department of Infrastructure Planning and Natural Resources 2004).

The projections predict a total population in 2031 of almost 110 000 persons. This is an increase of around 10% or 9 900 persons from 2001. This equates to an annual growth of around 0.2% or around 300 additional persons per annum. This growth rate is very low and is expected to be exceeded in the next decade. Monitoring of population growth over the life of this plan is therefore essential to assess actual growth against these projections.

The demographic projections indicate a gradual ageing of the overall population, with the following trends evident:

- Most growth will occur in the older age categories and particularly the over 55 age group.
- The population for all age groups below 39 years of age is expected to decrease.

The population dynamics of an established area such as Ryde is complex. The substantial post WW2 growth in both population and dwellings has now reached a point where significant change is likely over the next 30 or more years. The older dwelling stock is likely to go through a long stage of renewal as the baby boomer generation from post WW2 families move into retirement years and these older empty nester residents move into more appropriate accommodation. This will provide sites that can be amalgamated and redeveloped into more dense housing. Industrial sites along the Parramatta River are being redeveloped to provide a new style of housing. The growth of specialist business zones such as the Macquarie Park Corridor will continue. The village centres will also evolve through a stage of revitalisation.

The incoming population arising from future development is likely to have a different age profile to the overall age profile for the LGA since this population is expected to comprise families with children moving into more dense housing as redevelopment opportunities occur. However these families are expected to have fewer children than those they are replacing. There is also expected to be growth in retirement living as the current working age generation moves into retirement housing and as populations from such areas as the upper North Shore move closer to the city. There will also be changes in ethnic patterns as trends from the past continue (eg the growing Asian influence in Eastwood) and this will bring with it quite specific demands for public facilities and services.

These dynamics will present challenges to the council, as the traditional suite of services that have been developed over the last 20 years must evolve to cater to different demands. The focus of this contributions plan is on meeting the demands of this incoming population.

Projected development capacity

Development capacity is an assessment of the optimum yield from land based on the existing planning controls. An assessment is made of the total floorspace yield that could be achieved from residential, commercial and industrial development and this is translated into either a **resident** or **worker** population. This then provides the direct nexus for the provision of public services and facilities by the council.

The benefit of an assessment of development capacity is that it provides an estimate of the **ultimate** resident and worker capacity in an area. This enables council to plan for the provision of facilities with greater certainty. Population projections do not consider important factors such as location change nor change in worker numbers.

The council provides estimates of potential dwelling growth to the Department of Planning as input into the Metropolitan Development Program (MDP). This indicates the expected timing and number of dwelling approvals for major residential development sites and infill sites. The council also provides estimates to the Department of Planning as input into the Employment Land Development Program (ELDP) for employment lands. These estimates are discussed below.

Residential development capacity

Residential development within the Ryde LGA is spread across 15 neighbourhoods of similar character. The character of some of these neighbourhoods is changing as higher density forms of development are gradually replacing traditional detached housing. This trend is particularly evident in accessible locations such as close to transit nodes and commercial areas.

There is the potential for continued incremental infill development within the established residential neighbourhoods across the LGA and more significant growth through redevelopment within the commercial centres and specific development areas such as Meadowbank and Macquarie Park. This growth will lead to increased demand for various public amenities and facilities across the LGA.

Recent estimates of residential development capacity within the LGA have been sourced from council. These estimates were provided to the Department of Planning for compilation of MDP forecasts. MDP forecasts have been provided for short term and long term periods. Short term is defined as the next 5 years (2005/2006 to 2009/2010) and medium term is defined as a 6-10 year timeframe (2010/11 to 2014/2015).

Short-term forecasts are based on:

- developments under construction
- DAs approved
- potential DA approvals
- forecasts for major sites
- development trends from approval and completions data

Long term forecasts are based on:

- major sites forecast
- development trends from approval and completions data
- zone capacity
- strategic housing directions

Forecast estimates for residential development have been divided between **transit nodes** and **infill areas**. A transit node is defined as a walkable catchment of 400m from a light rail station or major bus node and 800m from a rail station. An infill area is defined as any other residential development within an established urban area and outside of a transit node.

Tables 3.4 and 3.5 present the MDP forecasts for the LGA. The MDP data in Table 3.4 provides details of forecast residential development that is anticipated to take place within identified **major development sites**. This provides an indication of where demand for certain facilities is anticipated to arise. Major development sites are defined as proposed development sites with potential for 50 or more dwellings. The table also indicates whether the site is within a transit node or other infill area. Table 3.5 shows the development potential across the entire LGA including major development sites and other infill development.

Table 3.4 Metropolitan Development Program forecasts – major development sites

Major development sites	Transit node / Infill area	Short term: 0-5yrs (dwellings)	Long term: 6-10 yrs (dwellings)	Total (dwellings)	Population capacity ^a
Eastwood shopping centre	Eastwood	80	70	150	356
West Ryde shopping centre	West Ryde	100	50	150	356
Faraday Park	Meadowbank	480	0	480	1,140
Bowden Street	Meadowbank	40	0	40	95
Hoover sites	Meadowbank	107	0	107	254
Belmore Street	Meadowbank	313	0	313	743
Midway shopping centre	Infill area	20	0	20	48
Ryde Town Centre	Ryde	250	350	600	1,425
Royal Rehabilitation Hospital	Infill area	100	400	500	1,188
Macquarie University student housing	Macquarie Park	115	100	215	387

Major development sites	Transit node / Infill area	Short term: 0-5yrs (dwellings)	Long term: 6-10 yrs (dwellings)	Total (dwellings)	Population capacity ^a
Macquarie University other housing	Macquarie Park	90	102	192	432
Primrose Hill	Infill area	100	100	200	475
Total		1,795	1,172	2,967	6,899

Source: Ryde City Council

Notes:

- The population capacity forecasts are based on an occupancy rate of 2.75 persons per dwelling for detached dwellings and 2.25 persons per dwelling for flats and other attached dwellings. A 25%: 75% split between detached dwellings and flats and other attached dwellings has been assumed.
- The population capacity forecasts for Macquarie University student housing is based on an occupancy rate of 1.8 persons per dwelling
- The population capacity forecasts for Macquarie University other housing is based on an occupancy rate of 2.25 persons per dwelling.

Table 3.5 Metropolitan Development Program forecasts – entire LGA

	Short term: next 0-5 yrs (dwellings)	Long term: 6-10 yrs (dwellings)	Total (dwellings)	Population capacity ^a
Major development sites	1,795	1,172	2,967	6,899
Other infill	500	700	1,200	2,700
Total	2,295	1,872	4,167	9,599

Source: Ryde City Council

Notes:

- The population capacity forecasts are based on an occupancy rate of 2.75 persons per dwelling for detached dwellings and 2.25 persons per dwelling for flats and other attached dwellings. A 25%: 75% split between detached dwellings and flats and other attached dwellings has been assumed.

Table 3.4 indicates that a significant proportion of future residential development is expected to take place within the Meadowbank area. Development in this area is expected to result in 2 600 additional residents over the next 10 years. However there is also substantial potential for residential growth in or close to the existing village centres such as the Ryde Town Centre and major redevelopment sites such as the Royal Rehabilitation Hospital site.

The MDP forecasts do not include potential residential development within the Macquarie Park Corridor other than within Macquarie University. There are large development sites within the western portion of this area around Herring Road and the new railway station that are zoned to permit mixed use development and these are expected to accommodate medium to high density residential development. There is potential for a number of these sites to be developed within the next 5-10 years. An estimate of the development potential of these sites is outlined below.

Site	Potential dwellings	Potential population
Moreley College Site – Herring Road	900	2,070
Aged Care facility- Epping Road	900	1,350
TICD sites - various	1,800	5,220
Delhi Road	300	870
Department of Housing – various sites	1,300	3,770
Total	5,200	13,280

Source: Ryde City Council

These figures increase the total population capacity forecast derived from the MDP data to 22,879 new residents. This includes 13 280 within Macquarie Park and 9 599 for the remainder of the LGA.

Employment development capacity

The Ryde LGA contains a number of established and emerging employment areas. These include commercial centres and industrial areas/business parks and comprise:

- Macquarie Park Corridor. This is a significant high-tech industrial area. The corridor comprises about 177 hectares of zoned and around 800 000m² of existing industrial and commercial floorspace. The low current floor space yields will increase as the area transforms into a business park serviced by high-frequency public transport. The development of the corridor requires significant investment in infrastructure to be developed in accordance with the master plan for the area. The ongoing transformation of the area from more traditional industrial uses to commercial uses will also result in a shift in the demand for various public facilities.
- Meadowbank Employment Area. Meadowbank is the second largest employment area and past rezoning will create a high quality mixed employment and residential area developed in accordance with the master plan for the area. Residential and employment growth in this area is anticipated to be substantial.
- Gladesville industrial area. A traditional industrial area that will see a reduction in floor space over time as a result of past rezoning.
- Ryde Town Centre. This contains the Top Ryde shopping centre and the administrative centre and functions for the LGA. The centre is about to go through a major redevelopment based on a master plan developed for the centre. The civic and retail functions of the centre will be maintained and the range of uses expanded to include residential and commercial uses.
- West Ryde commercial centre. West Ryde is a local convenience retail centre divided by Victoria Road. There has been modest development in this centre over the last decade and a master plan has been developed to guide future growth. The master plan provides for mixed-use development with increased retail and commercial floorspace and public domain improvements.
- Eastwood commercial centre. Eastwood also plays a local convenience retail role for the local catchment but also contains some limited commercial development on the upper eastern end of Rowe Street. The master plan developed for this centre also proposes mixed-use development over the next 20 years with some incremental retail and commercial floorspace expansion.
- Gladesville commercial centre. Gladesville also provides a local convenience retail and business role for the surrounding area. Victoria Road divides the centre physically as well as being an administrative boundary with Hunters Hill Council. The master plan for the centre proposes mixed-use development with increased retail and commercial floorspace.
- Macquarie Centre. The Macquarie Centre is a stand-alone shopping mall located in the north of the LGA and performs a regional retail function. No further expansion of the centre is expected.

These employment areas contain substantial spare capacity for employment growth. The employment development figures identified in the ELDP indicate that there is an additional 545 000 square metres of floor space that could be created over the next 30 years to 2034 as highlighted in Table 3.6 below.

Table 3.6 Floor space growth (Gross Floor Area)

Location	2004 (m ²)	2014 (m ²)	2024 (m ²)	2034 (m ²)
Macquarie Park Corridor	800,000	950,000	1,100,000	1,250,000
Ryde Town Centre	23,000	35,000	105,000	115,000
Eastwood village	83,000	90,000	97,000	97,000
West Ryde village	12,000	19,000	22,000	24,000
Gladesville village	21,000	23,000	31,000	40,000
Meadowbank Employment Area	151,000	176,000	200,000	200,000
Gladesville industrial area	240,000	239,000	239,000	239,000
Total	1,390,000	1,592,000	1,854,000	2,025,000

Source: Ryde City Council

The significant employment floor space growth will occur in the Macquarie Park Corridor with an additional 450 000m². There will be some floor space growth in the Meadowbank Employment Area and within the redeveloped Ryde Town Centre and some additional incremental floor space growth in the other commercial centres as master plans for these centres are finalised and implemented over time. The total projected floor space increase outside of Macquarie park is 185 000 m².

The estimated increase in worker population within the employment lands across the LGA over the next 30 years to 2034 is presented in Table 3.7 below. These figures are derived from the floor space growth estimates above.

Table 3.7 Worker population growth

Location	2004	2014	2024	2034	2004-2034 increase	2004-2034 % increase
Macquarie Park Corridor	40,000	47,500	55,000	62,500	22,500	41%
Ryde Town Centre	690	1,050	3,150	3,450	2,760	80%
Eastwood village	2,921	3,157	3,395	3,395	474	14%
West Ryde village	357	580	670	730	373	51%
Gladesville village	774	849	1,174	1,500	726	48%
Meadowbank Employment Area	2,302	3,235	4,168	4,168	1,866	45%
Gladesville industrial area	2 400	2,390	2,390	2,390	-10	-0.42%
Total	41,444	49,861	61,047	69,233	28,689	69.2%

These estimates show that the number of workers in Ryde LGA is expected to almost double from the 2004 base to 2034 with a 69% increase over the 30 year period. This equates to an average annual growth rate of around 2.3%. This expected floor space growth will result in 28 689 additional people working in the Ryde LGA. This is a substantial increase in workers and will place demands on council facilities and services.

Most of the forecast employment growth (78%) is anticipated to occur within the Macquarie Park Corridor with some additional modest growth in the town centres and the Meadowbank Employment Area. Much of the additional worker population generated within the Macquarie Park Corridor and Meadowbank Employment Area in particular is expected to comprise workers that reside outside the Ryde LGA.

This increased worker population will create demand for additional facilities and infrastructure within each centre or employment area and across the LGA. This demand will not necessarily be for the same types of facilities as required for the resident population. For example the worker population will generate demand for some types of community facilities (such as child care) and not others (such as aged care and youth facilities).

The ongoing transformation of the Macquarie Park Corridor in particular requires significant investment in public infrastructure and amenities based on the master plan developed for the area. Much of this infrastructure will not provide significant benefit to residents or workers outside the Macquarie Park Corridor (such as roads and public domain). Development within this area will therefore be expected to provide or fund this infrastructure to a large extent.

Inner North Subregion housing and employment targets

The Department of Planning has recently released housing and employment targets for the Inner North Subregion. In its Draft Inner North Subregional Planning Strategy. This includes the Ryde LGA and has set a target for Ryde of 12,000 new dwellings by 2031. At an average occupancy rates of 2.37 this would result in a population increase exceeding 28,000.

To achieve this target a sustained development of 500 dwellings per annum on average needs to be achieved over the next 24 years. The Ryde LGA has averaged 220 dwellings per annum over the past five years. Additional major sites for residential development have been identified, however sustaining this level of development activity over a long period is optimistic.

The employment target for the Ryde LGA is 21,000 new positions or workers by 2031. This is less than the projected yield that can be achieved through the development of Macquarie Park alone.

Population growth adopted for this plan

Resident population growth

The growth outlined in the MDP figures would equate to an additional 9,599 residents over the next 10 years or an annual growth rate of 0.9%. This is greater than recent growth but may be achievable in view of the potential development in Macquarie Park.

The Department of Planning population projections indicate a similar growth would occur over a 30 year period. This is considered an overly conservative view of potential growth in the Ryde area particularly given the major development sites indicated in the MDP and the growth that has occurred over the past decade.

The Department of Planning population projections with the inclusion of the residential development proposed within the Macquarie Park Corridor are considered a reasonable estimate of the ultimate residential development potential within the LGA. In other words the future resident population of the Ryde LGA adopted for this plan is:

Resident population	= DOP 2031 population projection
	+ Macquarie Park potential population
	= 109,070 + 13,280
	= 122,350 persons

For the purposes of this plan it is therefore considered reasonable for this plan to provide for an additional resident population of 25,402 persons from the base date of 2006. The growth in resident population will be divided between Macquarie Park and the rest of the LGA, with 13 280 new residents in Macquarie Park and 12,122 new residents outside of Macquarie Park.

The Inner North Subregional Planning Strategy has set a target for the Ryde LGA. Ryde City Council will be considering how that target may be achieved. Any expansion of dwelling capacity above that set out in the MDP will require specific planning controls to be put in place by council. This will be considered in any review of the plan and the resident population growth figure adopted for the plan will be reassessed in line with any measures taken by council to accommodate the Department of Planning target.

Worker population growth

The ELDP forecasts are considered to provide a reasonable estimate of the ultimate employment development potential within the LGA. **It is therefore considered reasonable for this plan to provide for an additional worker population of 28,689 for the entire LGA, with an additional worker population of 22,500 within the Macquarie Park Corridor.**

3.3 Community and Cultural Facilities Strategy Plan

3.3.1 Introduction

In an established area such as Ryde there are existing community and cultural facilities in place to serve the current population. The likely demand generated by an incoming population in such areas can be expected to mirror to a large extent those of the existing population particularly when the composition of the incoming population is unlikely to vary significantly. In addition human services and facilities are generally only provided to meet the needs of an identified population size and are rarely built with spare capacity for future unspecified population growth.

Table 3.8 details typical human service requirements for any urban population. This includes services provided by the public and private sector. The traditional response to the provision of community and cultural facilities has been to provide a range of facilities suited to individual needs. However fewer but larger community facilities are now being built as larger facilities have been found to be more versatile. Facilities need to be provided in a resource-efficient manner that encourages shared or multiple use of resources.

In some instances council will need to reassess its role in the provision of certain facilities. Child care facilities are a case in point where the planning of childcare services has become more complex in recent years with the increasing role of the private sector.

Table 3.8 Typical human service requirements

CHILDRENS SERVICES	YOUTH SERVICES	MIGRANT SERVICES
Long Day Care	Youth worker	Migrant worker
Preschool	Youth centre	Multicultural information and services
Occasional Care	Targeted programs	Translator service
Family Day Care	AGED/DISABLED SERVICES	HEALTH
GENERAL COMMUNITY	Specific worker and programs	Early Childhood service
Neighbourhood centres	Accommodation eg aged units	Community Health Centre
Civic auditorium	Meals on Wheels	Doctor
Meeting rooms/offices for community groups	Home Care	Community nurse
Special facilities eg youth	Special transport	Medical specialists eg dentists
Arts and crafts centre	EDUCATION	Day care centre for aged etc.
Arts programs/workers	Primary – private and public	Hospital – public and private
Theatre	Secondary – private and public	Medical centre – private
Cinema	TAFE	WELFARE SERVICES
Club – licensed and unlicensed	Adult education	Refuges
Library	University outreach	Youth
Information services	Special eg migrant	Family support-community aid
Community workers	RELIGIOUS	agencies & counselling
Community development programs	Churches	Legal aid services
	Associated services	

3.3.2 Previous works program

The works program for community facilities from the previous section 94 plans is summarised in Table 3.9 below. It is the intention of this plan to combine the works programs of these previous plans and to continue funding for the multi-use facility and libraries. Additional works are also proposed as outlined in later sections.

Table 3.9 Previous section 94 program and funds – community and cultural facilities

Works	Plan amount (\$)	% Section 94	Contributions received
Multi-use facility	385,000	25% ^a	
Libraries	663,000	13% ^a	
Total	1,048,000		1,041,787^b

Source: Ryde City Council 2006

Notes:

- i. Facility contained in Meadowbank CP and only apportioned to Meadowbank population.
- j. Funds collections are not disaggregated by facility type.

3.3.3 Existing facilities and current provision level

In 2005 council prepared a Community Facilities Plan for the LGA (City of Ryde 2005). This document provides a review of community facilities and highlights gaps in provision. The information on existing community facilities presented below has been sourced from the Community Facilities Plan. This document is currently being revised.

Community halls and multi-purpose community facilities

The existing provision of community halls and multi-purpose community facilities is presented in Table 3.10 below. Ryde City Council provides a wide range of community facilities these are open to hire and can accommodate a range of public uses.

Table 3.10 Existing community facilities within Ryde LGA

Community facilities for public use / hire	
Community halls	Address
Ryde Civic Hall	1 Devlin St, Ryde
North Ryde School of Arts Community Centre	201 Cox's Rd, North Ryde
Trafalgar Place Community Centre	1A Trafalgar Place, Marsfield
West Ryde Hall	1A Station St, West Ryde
Argyle Centre Hall	33 Blaxland Rd, Ryde
Lions Park Hall	2 Shaftsbury Rd, West Ryde
Shepherd's Bay Community Centre	3A Bowden Street, Meadowbank
Eastwood Senior Citizens Centre*	161 Shaftsbury Rd, Eastwood
Ryde Aquatic Leisure Centre Hall	504 Victoria Road, Ryde
Meeting rooms	Address
North Ryde School of Arts Community Centre	201 Cox's Rd, North Ryde
Gladesville Library Meeting Room	6 Pittwater Road, Gladesville
Eastwood Womens Rest Centre	West Pde, Eastwood
Eastwood Park - Croquet Club	West Parade & Wingate Ave, Eastwood
Historic buildings	Address

Community facilities for public use / hire	
Addington	813 Victoria Road, Ryde
Brush Farm House	19 Lawson Street, Eastwood
Rockend Cottage	40 Punt Road, Gladesville
Westward Cottage	8 Turner Street, Ryde
The Parsonage	12 Turner Street Ryde
Willandra	770 Victoria Road, Ryde
Eastwood Town Hall	74 Agincourt Rd, Marsfield

The utility of each facility varies and some historic sites in particular have a very limited scope. The current level of provision is close to the established planning standard of one centre per 10 000 persons (discussed in section 3.3.4).

Library resources

Five community libraries are currently located in the Ryde LGA. The council has identified the need to expand resources to meet the needs of the existing and incoming population and is working towards a substantial improvement in current services. The current provision rate for community library facilities is approximately 1 facility for every 20 000 residents. This provision is met in the existing five facilities in table 3.11. The total number of items held as at 30 June 2006 was 196 526. This exceeds accepted provision standards.

Table 3.11 Provision of library facilities

Branch	Current floorspace	Proposed improvements
Ryde	832m ²	Incorporation of the library into the redevelopment of the Ryde Shopping Centre.
Eastwood	538m ²	Recently refurbished and exploration of further works.
Gladesville	500m ²	Recently refurbished and not recommended for further works.
West Ryde	1,300m ²	Redevelopment of the existing library on the corner of Graf Street and Market Street has been completed. This has increased the floorspace from 265m ² to 1300m ² . This includes a specialist youth area and two 25m ² study group rooms.
North Ryde	520m ²	Recently refurbished and not recommended for further works.

Source: Community Facilities Plan (City of Ryde 2005).

Current trends show that use of public libraries is increasing. Users are accessing libraries to source information, access activities, use equipment such as computers and photocopiers, access the Internet, and as a place to study and read. Research also suggests that people living in apartment buildings are increasingly using study and reading space away from their place of residence.

While there is no quantitative research on the level of use of libraries by workers there is doubtless demand generated by workers for library resources. Library standards are typically predicated on a total population usage that includes workers.

The current level of provision is considered sufficient for current demand and the expansion of current facilities will cater to future needs. Council will therefore recoup investment made on this upgrading in line with standard apportionment methods.

Facilities for children and families

The City of Ryde does not directly manage any children services but does provide land and buildings for early childhood health services, child care and pre-school services. Table 3.12 provides a summary of existing children and family facilities provided in the LGA by both the public and private sector.

Table 3.12 Children and family facilities

Facility	Supply	Comments
Early childhood centres	5 early childhood centres are located within Ryde LGA, and are all owned by Council: <ul style="list-style-type: none"> • Eastwood • Marsfield • North Ryde • Ryde • West Ryde. 	Generally the facilities are in fair condition however many are not designed for current service requirements.
Long day care services	26 long day care services providing 1 143 places for children from 0-5 years. One of these is owned by council. This includes: <ul style="list-style-type: none"> • 4 community based centres (173 places) • 16 private centres (620 places) • 6 work-based centres (350 places) 	Shortfall of 818 full time places based on population analysis. Shortfall of 1 066 places when taking into account the workforce population. Shortfall of approximately 23 centres. Greater demand for places for children aged 0-2. Employment and residential growth within the Macquarie Park Corridor will place pressure on child care facilities within surrounding suburbs.
Pre-school services	12 pre-schools with 452 places. Four of these operate from council owned premises. Pre-schools: <ul style="list-style-type: none"> • 1 facility in East Ryde • 4 in Eastwood • 2 in Gladesville • 2 in North Ryde • 3 in Ryde 	The overall provision of pre-school services is currently considered to be adequate.
Occasional care services	Eastwood Gladesville Ryde	City of Ryde runs the Eastwood service only.

Source: Community Facilities Plan (City of Ryde 2005).

Facilities for young people

Facilities specifically provided for young people in the Ryde LGA are generally limited to clubs and halls. Table 3.13 provides details and locations of existing facilities available to young people. No youth centres are located in the Ryde LGA. The closest youth centre is located in Epping.

The Community Facilities Plan identifies gaps in provision of facilities and services for young people. The lack of youth entertainment and transport are identified as two major issues. Possible facilities identified to meet this demand include skate parks, a youth centre, and a multi-purpose arts centre.

Table 3.13 Existing facilities provided specifically for young people

Facility	Location
Eastwood RSL Youth Club	Eastwood
North Ryde RSL Youth Club	North Ryde
Gladesville RSL Youth Club	Gladesville
1 st Brush Park Scout Hall	Eastwood
YAFA Youth Group	Eastwood (St Annes Church)
Lambert Park Guide hall ^a	West Ryde
Pryor Park Scout Hall ^a	East Ryde
Santa Rosa Park Scout Hall ^a	North Ryde
Tyrell Park Scout Hall ^a	Ryde
Westminster Park Scout Hall ^a	Gladesville
Cleves Park Scout hall ^a	Putney
St Chad's Anglican Youth Group	Putney
Ryde Uniting Youth Group	Ryde
St Andrews Youth Group	Gladesville
Young Life Christian Outreach	West Ryde

Source: Ryde City Council 2006

^a Council owned facilities but are operated under a single user licence

Facilities for seniors

Two facilities for seniors are located within the Ryde LGA. The Eastwood Senior Citizens Centre comprises a large hall, smaller meeting room, an office and kitchen. Use of the facility is declining and the recommendation of the Community Facilities Plan is to investigate alternative uses such as a multi-purpose hall.

The Eastwood Woman's Rest Centre is leased by the Country Woman's Association who operate tea rooms. Membership of the association is also in decline however the facility provides an important space for informal gathering of older people who are often socially isolated. The recommendation of the Community Facilities Plan for the long term is to reconsider the current use.

A number of programs for seniors are offered through community libraries and the Ryde Aquatic and Leisure Centre. In addition a number of seniors groups such as clubs, ethnic groups and church groups operate within a range of Ryde's Community facilities. Home and community care (HACC) services are available to seniors through Eastwood Christian Community Aid and North Ryde Community Aid. The council provides the space for this HACC facility.

Facilities for arts

Arts facilities refer to those facilities in the city that support community cultural development through the arts and which the City of Ryde has some role in providing.

The City of Ryde provides two venues currently identified as arts facilities:

- Willandra House / Gallery – a historic residence located on Victoria Road, Ryde. It provides hanging space in a number of rooms and a small workshop space for art classes.
- Argyle Theatre – A theatre located on Blaxland Road in Ryde.

3.3.4 Additional facilities required

To provide for the needs of any incoming population, council must decide what physical facilities will be required or which existing facilities will need to be embellished or expanded. Reference to accepted standards as well as reference to the existing standard of provision for the facilities in the area provide a benchmark for assessment of the likely future required facilities.

Table 3.14 details standards currently being used across the Sydney region and NSW for a range of facilities to place the assessment of the existing level of provision of facilities in context. Table 3.14 also summarises the current level of provision within the Ryde area.

Table 3.14 Council facilities – standards for provision ^a

Facility	Standard	Floorspace requirements ^b
Long day care	1 place per 11 children 0-4 years ^c	3000m ² site with building of 300-400m ² for 60 place facility
Youth centre	1 per 20 000 persons or 1 per 3 000 13-19 year olds	300-400m ²
Community centre	1 per 7 000-10 000 persons ^d	600-800m ²
Library ^e	District: 1 per 30 000 persons Branch: 1 per 5 000 persons Resources: 1 item per 2.5 persons ^f	1000m ² 600-700m ²
Seniors centre	1 per 30 000 persons	1000-2000m ²

Notes:

- Standards derived from Blacktown Council / Baulkham Hills Council / Campbelltown Council / Department of Planning / various other statutory authorities.
- Floorspace requirements based on modest facility only.
- Where private facilities are provided this may be relaxed to 1:20. 60 place centre required for population of 7 000.
- Current Department of Community Service standard.
- Library standards typically predicated on persons including workers.
- State Library current standard

Anticipated resident and worker population growth resulting from future development within the LGA will generate additional demand for community and cultural facilities. The incoming resident population is likely to generate demand for differing types of facilities as compared to the incoming worker population. Demand specific to particular types of community facilities is discussed below.

Multi-purpose community facilities

Demand for community halls and centres will be generated predominantly by the resident population. The worker population will generate a small demand for these types of facilities. The NSW Department of Community Services advocates the provision of one community centre for every 10 000 residents (City of Ryde 2005). This equates to approximately one new facility to meet demand generated by future development. A new multi-purpose community facility is therefore proposed to cater for future demand. It is considered reasonable to apportion 100% of the cost of the facility to future residential development across the LGA as this facility will provide a service to the entire population.

Library facilities

Council is working towards a gradual improvement in overall library services to serve existing and future needs. One library has already been significantly expanded and two new library facilities are proposed – one of which is within the Macquarie Park Corridor.

At the current rate of provision, the incoming resident population and worker population will notionally generate demand for 1.25 libraries. Although there is likely to be some future workers that are also

residents, this is expected to be relatively small in the overall demand generation as employment growth will predominantly include non-Ryde residents. Appropriate apportionment would also address any dual use of such facilities by Ryde resident workers.

To cater to this demand the council considers the following facilities can be expanded or provided:

- **Ryde Library.** A new library facility is proposed for Ryde. This facility will be incorporated into the redevelopment of Ryde shopping centre. It is estimated that the fit-out of this new facility will cost approximately \$2 600 000.
- **Macquarie Park Learning – Leisure and Library Facility.** There is to be substantial growth in the Macquarie Park Corridor from the on-going development of this significant area. The Macquarie Park Corridor requires a facility with a floorspace of, 800m² and will require fit-out and establishment of resources. A site will need to be acquired and the facility constructed. It is estimated that the capital costs of this facility will be \$11,580,000.

The existing workforce has had the benefit of existing council libraries however there is no capacity for future residents and workers in the library system. The incoming resident and worker population will create notional demand for 1.25 libraries. It is considered reasonable that the costs of the Macquarie Park Corridor Library and the expansion of the Ryde library should be fully funded by the incoming population.

Children and family facilities

Relatively low growth in numbers of children under 4 years of age is projected over the next 25 years. While the population projections indicate a decline in this age group, this may not occur to the extent indicated by the Department of Planning figures given the potential increase in medium density housing (which tends to be occupied by younger families).

Employment development in designated employment areas within the LGA will generate additional demands on existing child care services in surrounding suburbs. This demand will reduce the current standard for workers and local residents who access child care facilities.

Significant employment growth is anticipated within the Macquarie Park Corridor and Meadowbank Employment Area. This will create demand for the provision of child care facilities within these areas.

Based on the analysis undertaken by council on the demand generated by the incoming population, there will be:

- A shortfall of 818 full time places based on population analysis.
- A shortfall of 1,066 places when taking into account the workforce population.
- A shortfall of approximately 23 centres.
- Only two vacancies across the LGA and nil capacity to increase spaces.
- The greatest demand for places for children aged 0-2 years.

The private sector will play a significant role in meeting these demands and addressing current deficiencies however council predicts that there will still be a shortfall of around 350 places (or around 20% of the future demand). This would equate to approximately 6 centres. Council however will pursue the construction of two new centres on the basis that a number of alternative centres can be provided within Macquarie Park where the majority of new workers will be located. These two centres will provide the basis of a not for profit or community based alternative being present.

It is considered reasonable that all future workers across the LGA make a contribution for 100% of these facilities as they will be available across the area and reasonable access to such centres will be available.

Youth facilities

Population projections suggest that the number of young people within the LGA aged between 10 and 19 will decrease over the next 25 years. The incoming population is not expected to comprise large numbers of young people and it is considered that any demand that may arise can be catered for through the provision of multi-use community facilities.

Seniors facilities

The population projections for Ryde LGA suggest that the majority of population growth over the next 25 years is expected to be in the over 55 age groups. The increase in the number of older residents within the LGA will generate demand for a range of aged care services. The expected increase in worker numbers will not result in increased demand for aged care facilities.

The provision of multi-purposes community facilities will provide for the majority of the needs of seniors in the incoming population. Council also envisages that these facilities could provide for HACC and community care services and programs to meet future needs of the incoming population and especially for those in the over 70 year age category.

The current provision of such facilities is provided at the rate of 1 per 10,957. The future population in these categories is projected to be approximately 15,580. This is an increase of 45%. The development of one additional centre is proposed to meet demands for additional facilities and services for the additional seniors. This will be 45% funded under this plan.

Facilities for arts

The provision of arts facilities by councils recognises the needs for celebrating community diversity, creative expression and contributing to a sense of cultural identity.

While the City of Ryde locates two arts facilities, Willandra House / Gallery and The Argyle Theatre, there is no surplus capacity for these facilities to cater for the likely future demand. This has been further verified by community consultation undertaken as part of the Ryde Arts Review (2006). In particular the demand for passive recreation activities like painting and other arts activities is likely to increase in line with population growth projected for the next 25 years.

Additional demand by new residents for increased use will need to be accommodated by improving existing conditions and creating additional facilities. The need for arts facilities has been identified in the City of Ryde Draft Arts Development Framework (2007) and more generally in the City of Ryde Social Plan 2005. These include:

- Gallery
- Performing Space

Multi-purpose facilities may partly meet needs by providing specially designed workshop / activity space. This could involve specialised floorings, art / craft benches and workshop spaces, drama / music studio space and the modification of halls to allow small-scale performances and other functions.

Ryde City Council is presently reviewing strategies and policies that will assist council in delivering a number of community development outcomes through the expansion of arts facilities and programs across the city. In order to facilitate these objectives a new purpose built Arts and Cultural facility is proposed. The cost of the facility is estimated at \$3.7 million. This facility will benefit all present and future residents of the Ryde LGA and will allow Council to pursue the stated objectives of the draft framework.

A new Civic Centre

Ryde City Council has also identified the need to provide a new civic space to accommodate all functions of councils administrative operations. Ryde Council presently has staff located in three buildings and needs to update the civic chambers and administration space to accommodate the growing needs of the LGA. A proposal is being pursued that will serve the needs of the Council, and all future ratepayers of Ryde. The proposed cost of the new facility is \$52 million.

Provision of new facilities by Private enterprise

It is envisaged that two facilities will be provided through the development of Council land in the Ryde Town Centre. The project will take as a Council contribution a large area of valuable land and provide Council a fixed built floor space for the provision of a new Civic Centre and an Arts and Cultural Centre. The existing residents of Ryde LGA will effectively contribute to the project by providing the land component, which is a very significant input. As such the \$3.7 million cost is to fit out the new Arts and Cultural space and the \$12.5 Million contribution to a new Civic and Administration centre will be apportioned 100% to new residents.

3.3.5 Works program

Table 3.15 below shows a summary of the works program for additional community facilities required to meet demand expected to be generated by future development across the LGA. This also shows the costs to be funded by section 94 development contributions collected under this plan. Appendix A contains the full works program

Table 3.15 Works program summary

Proposed works	Cost of works	% section 94	Cost to be funded by future development	Cost apportioned to future resident population	Cost apportioned to future worker population
Multi-purpose community centre	\$9,680,000	100%	\$9,680,000	\$9,680,000	\$0
Ryde library	\$2,600,000	100%	\$650,000	\$292,500	\$357,500
Macquarie Park – Library, Leisure & Learning Centre	\$11,580,000	100%	\$11,580,000	\$5,211,000	\$6,369,000
Childcare, Family and children facility	\$7,240,000	100%	\$7,240,000	\$3,258,000	\$3,982,000
HACC facility	\$6,660,000	45%	\$2,997,000	\$2,997,000	\$0
New recreation facility (investigation)	\$200,000	20%	\$40,000	\$40,000	\$0
New cultural facility, design build & fitout	\$3,700,000	100%	\$3,700,000	\$3,700,000	\$0
Civic Centre	\$12,500,000	100.0%	\$12,500,000	\$5,625,000	\$6,875,000
Total	\$54,160,000		\$50,337,000	\$31,681,000	\$18,656,000
Funds collected			\$1,041,787	\$770,922	\$270,865
Total less funds collected			\$49,295,213	\$30,910,078	\$18,385,135

3.3.6 Contribution rates

Residential development

The following contribution rate applies to residential development across the Ryde LGA.

$$\text{\$CR}_{\text{CCF-RD}} = \frac{\text{TC}_{\text{CCF-RD}}}{\text{FP}_{\text{RD}}}$$

Where:

- $\text{\$CR}_{\text{CCF-RD}}$ = Contribution rate per person for residential development
- $\text{TC}_{\text{CCF-RD}}$ = Cost of works to be apportioned to residential development
- FP_{RD} = Population growth resulting from residential development across the LGA

$$\text{\$CR}_{\text{CCF-RD}} = \frac{\$30,910,078}{25,402}$$

$$\text{\$CR}_{\text{CCF-RD}} = \text{\$1,216.84 per person}$$

Non-residential development

The following contribution rate applies to non-residential development across the Ryde LGA that generates additional workers.

$$\text{\$CR}_{\text{CCF-NRD}} = \frac{\text{TC}_{\text{CCF-NRD}}}{\text{FP}_{\text{NRD}}}$$

Where:

- $\text{\$CR}_{\text{CCF-NRD}}$ = Contribution rate per person for non-residential development
- $\text{TC}_{\text{CCF-NRD}}$ = Cost of works to be apportioned to non-residential development
- FP_{NRD} = Growth resulting from non-residential development across the LGA

$$\text{\$CR}_{\text{CCF-NRD}} = \frac{\$18,385,135}{28,689}$$

$$\text{\$CR}_{\text{CCF-NRD}} = \text{\$640.84 per worker}$$

The following employee yields are used to convert the non-residential development contribution to a floorspace basis:

Commercial office / research and development	1 employee per 20m ² GFA
Retail	1 employee per 40m ² GFA
Industrial	1 employee per 50m ² GFA

The resultant contribution rates for community and cultural facilities are set out in Table 3.16 below.

Table 3.16 Contributions – community and cultural facilities

Contribution rate – residential development (per person)	Contribution rate – non-residential development (per m ²)	
\$1,216.84	Commercial office / research and development	\$32.04
	Retail	\$16.02
	Industrial	\$12.82

3.4 Open Space and Recreation Facilities Strategy Plan

3.4.1 Introduction

The Section 94 Contributions Plan No 1 adopted a planning standard of 2.83 hectares of open space per 1000 population for open space purposes. The standard has historically been used in Australia to determine open space demand as it is easy to apply. However use of this standard gives no consideration to the condition of the land provided for open space or its physical suitability for use as open space. Nor does it consider whether the facilities currently developed are useful to the community or what state these facilities are in. It also gives little consideration for differing community expectations of open space provision or the settings that may be required.

In 1992 the former Department of Urban Affairs and Planning prepared guidelines to assist local councils in establishing strategies for open space and outdoor recreation planning (DUAP 1992). The department recommended that the philosophy of the recreation opportunity spectrum (ROS) be applied through the settings approach in open space and recreation planning in NSW. This approach remains valid and is used as the basis for open space planning across a wide variety of local government areas.

The department notes that the prime objective of recreation and open space planning at the local government level is to provide for local and district facilities. The difficulty of developing and maintaining regional recreational facilities (ie used by a wider population than the local government area) argues against the provision of such facilities solely through section 94.

3.4.2 Previous works program

The works program for open space and recreation facilities from the previous section 94 plans is summarised in Table 3.17 below. It is the intention of this plan to combine the works programs of these previous plans.

A range of works is to be deleted from the existing plans as priorities have changed since the original plans were prepared. Where any work is to be continued in the revised works program, only the funds remaining to be collected will be included in the future works program. The funds that remain to be collected are highlighted in the revised works program in section 3.4.7.

Table 3.17 Previous section 94 program and funds

Works	Plan amount (\$)	% section 94	Contributions received
Ryde Contributions Plan			
Sub-total	\$42 447 500		\$8 151 468 ^b
Meadowbank Contributions Plan ^a			
Sub-total	\$3 627 600		\$691 590 ^b
Total	\$46 075 100		\$8 843 058

Notes:

- a. Facility contained in Meadowbank CP and only apportioned to Meadowbank population.
- b. Funds collections are not disaggregated by facility type.

3.4.3 Existing facilities and current provision level

The City of Ryde has recently prepared a Parks and Open Space Improvement Plan (Michelle Read and HM Leisure Planning Pty Ltd 2006). The plan includes details of the current provision of open space and recreation facilities and works required to meet future demand. The information presented in this strategy plan has been sourced from the Parks and Open Space Improvement Plan.

There are currently 367.48ha of parkland within the Ryde LGA. The rate of provision of open space is 3.83ha of open space per 1000 people however this does include bushland areas.

The Parks and Open Space Improvement Plan identifies the following characteristics of existing open space which limit its use capacity:

- large number of small sites
- large amounts of bushland
- a number of protected wetlands and drainage easements
- steeply sloping land

While Ryde has a number of high quality open space and recreation facilities, overall the open space within the LGA can be described as adequately catering to needs. Below are details of the types of open space and recreation facilities available within the LGA and an analysis of current provision rates.

Sports facilities

A range of sportsground facilities is provided within the LGA. Table 3.18 summarises these facilities and shows their existing provision rate. Significant increase in participation in soccer over recent years has resulted in demand for additional soccer facilities. Local netball associations have also requested additional facilities. This is supported by local participation rates.

Table 3.18 Existing sports facilities and provision rates

Type of facility	Existing number of facilities	Existing provision rate
Rugby fields	4	1:24 788 people
Junior soccer fields	10	1:9 915 people
Senior soccer fields	28	1:3 541 people
AFL field	1	1:99 150 people
Grass hockey fields	4	1:24 788 people
Synthetic cricket wickets	24	1:4 131 people
Turf cricket wickets	4	1:24 788 people
Bitumen netball courts	26	1:3 813 people
Grass netball courts	19	1:5 218 people
Basketball courts	3	1:33 050 people
Baseball diamonds	15	1:6 610 people
Croquet lawn	1	1:99 150 people
Volleyball courts	3	1:33 050 people
Total sports facilities	142	1:698 people

Unstructured open space

It is estimated that approximately 25% of the open space system in the Ryde LGA is unstructured open space (approximately 90ha). Users access unstructured open space such as picnic and barbecue facilities and walking and cycling trails at significantly higher rates compared to formal sports facilities.

There are around 210 local parks located in the Ryde LGA. 98 of these currently provide play equipment. This represents a rate of one park with play equipment for every 117 children under 10 years of age at 2001. Many of these facilities are considered to be well maintained.

Further demand for access to these types of facilities is expected to increase as the population continues to age. There is considerable opportunity to redevelop existing open space to provide additional high quality unstructured open space.

3.4.4 Additional facilities required

Table 3.19 shows open space planning standards that have been used by government organisations in NSW in the past. These are not meant to be prescriptive however they are based on a substantial base of research into optimum levels of provision to permit a reasonable level of access to open space facilities by a new population. It is therefore considered reasonable to consider them in assessing the future needs for the incoming population.

Table 3.19 Comparison of normative provision of structured recreation facilities

Facility	AWDC	NCDC	DOP
Football (all codes)	1:2 500-3 000	1:1 000	1:1 000
Soccer	Combined football	Combined football	Combined football 1:2 500
Hockey	1:3 500	1:3 000	Combined football
Cricket	1:2 200-3 000	1:2 200	1:4 000
Tennis courts	1:1 000	1:1 500	1:1 000
Netball courts	1:1 000	1:1 000	1:2 000
Golf course	1:25 000	NA	1:25 000
Swimming pool	1:20 000	NA	1:50 000

Source: Albury Wodonga Development Corporation / National Capital Development Corporation / Department of Planning

The current trend in the level of provision (an approach also adopted in the North West Growth Centre) is to use a hierarchy approach to ensure provision of a range of opportunities for recreation and sport. This hierarchy is essentially divided between open space that provides a local role (often termed unstructured or passive open space) and open space that plays a role at a higher level (often termed structured or active open space).

The indicative standards set out below are used to guide provision (Elton Consulting 2003):

- **Local unstructured open space.** Local parks and playgrounds planned on the basis of 1 per 200-250 children aged 0-9 years. These have an average size of 0.3-0.6ha with a maximum distance between them of 400-450m.
- **Neighbourhood unstructured open space.** Neighbourhood parks planned on the basis of 1 per 4 500 people with an average size of 0.8-1.5ha. These are often co-located with double playing fields / sports ovals.
- **Structured open space.** District level parks incorporating major playing fields / netball facilities and aquatic facilities at various standards noted above.

The total open space provision suggested for new release areas is around 3 hectares of open space per thousand persons split as follows:

- Unstructured open space: 1.4 hectares (47%)
- Structured open space: 1.6 hectares (53%)

These provide a benchmark against which open space can be planned and managed in the Ryde LGA.

The anticipated resident population growth within the LGA will generate additional demand for open space and recreation facilities. There will also be demand created by future workers for certain open space facilities (such as within centres). Demand specific to particular types of open space and recreation facilities is discussed below.

Recreational preferences and activities are affected by a range of factors including age, sex, marital status, ethnicity and family composition. Age is considered to be the most important influence on recreational patterns and this, in turn, dictates the recreation experiences and settings the individual requires.

The major target groups for recreational and leisure facilities include children, youth, adults, seniors, and other special groups. Table 3.20 summarises the major baseline needs of these groups. This has been developed through reference to accepted recreation planning guidelines

In order to address the issues associated with open space planning and to meet the nexus requirements of the section 94 legislation this plan will take a strategic approach to the levying and apportionment of section 94 contributions for recreation and open space facilities. This approach is based on the following:

- Reflecting anticipated demand and preferences.
- Considering quality of open space as well as quantity.
- Matching existing levels of provision where possible or otherwise increasing carrying capacity to cater to demand.
- Being compatible with the corporate and strategic aims of council.
- Being compatible with current trends in open space planning.
- Meeting accepted accessibility criteria.

A demand and quality orientated approach to open space provision still allows for the level and extent of open space and recreational provision (meeting the expressed demands of a relevant population) to be tested against standards.

The major issues associated with the current provision of open space and recreation facilities within the LGA are:

- The cost of purchasing vacant land and developed properties to provide additional open space is generally prohibitive although strategic acquisition to achieve a particular outcome could be considered.
- There is a need to improve the quality and range of recreational opportunities.
- There is a need to provide more high quality unstructured open space to cater to an older population.
- There is demand for additional soccer and netball facilities.

In general the amount of open space within the LGA is adequate for the existing population. Future works associated with open space will focus on improving the quality and useability of the existing open space. Some expansion of the existing open space network will also be considered.

Table 3.20 Major needs of target groups

Group	Major needs	Typical facilities	Leisure activities
Children (0-12 years)	Small parks within walking distance of home with play equipment Formal playing fields Areas for informal sporting activities Corridors linking open spaces Large natural and parkland areas	Parks/playgrounds Cricket/football ground Tennis Bicycle paths Swimming facilities	Walking for pleasure Visiting friends Going to movies Going to beach
Youth (13-19 years)	Formal playing fields Areas for informal sporting and leisure activities Large natural and parkland areas	Cricket/football Tennis Swimming facilities Skateboard park Indoor facilities	Walking for pleasure Jogging Visiting friends Going to beach Going to clubs/movies
Adults (20-60 years)	Formal playing fields Areas for informal sporting activities Large natural and parkland areas	Cricket/football Tennis Swimming facilities Indoor facilities Golf facilities	Walking for pleasure Playing active sports Jogging Going to gym
Seniors (60+)	Walking paths Areas for informal sporting activities Large natural and parkland areas	Tennis Swimming facilities Bowling greens Golf facilities	Walking for pleasure Playing tennis/golf
Other groups	Walking paths Areas for informal sporting activities Large natural and parkland areas	Range of facilities	Range of activities

Source: Connell Wagner 2006

Based on the incoming population and the current levels of provision of structured and unstructured open space of 2.8 hectares per thousand the notional demand for open space would be 71 hectares. Based on the split discussed earlier (47% unstructured and 53% structured) this would equate to:

- Unstructured local open space: 33.4 hectares
- Structured open space: 37.6 hectares

This open space is also required to be embellished. At a notional acquisition rate of \$1000 per square metre and average embellishment rate of \$100 per square metre (ie total cost of \$1100 per square metre) this open space would have a capital cost of around \$11 million per hectare.

The high costs of such a program is due to the potential need to acquire land at residential land values. A program of the magnitude suggested by this analysis would impose an unreasonable burden on future residents as past land acquisition has been at much more modest land values.

The incoming population would reduce the standard of open space provision of the existing population by 10% (based on a 10% population increase). The council has determined that an approach focussed largely on increasing the carrying capacity of the existing open space network (as opposed to large-scale acquisition) is the preferred approach to satisfying future open space and recreation demand. There will be some need for land acquisition since this will be the only method to increase carrying capacity on some open space areas.

The sections below provide details on the proposed open space and recreation strategy for unstructured open space and structured open space and recreation facilities.

Unstructured open space

Population growth in Ryde LGA is expected to generate demand for high quality unstructured open space. This is supported by the age distribution projections. Almost all projected population growth within the Ryde LGA over the next 25 years is expected to be within the 40 plus age group. The majority of this growth is expected to take place within the 55 plus age group.

Older people are generally considered to be most likely to access unstructured open space areas for passive recreation activities such as walking. The existing and future worker population is not likely to access unstructured open space within the LGA at a significant rate except for open space near village centres and within the Macquarie Park Corridor. This open space is therefore included in the civic and urban improvements strategy plan. It is considered that local residents will generate demand for the majority of the unstructured open space within all other areas across the LGA. There will be no apportionment for these works and therefore future workers will have no responsibility for funding the works.

The Parks and Open Space Improvement Plan includes a 20 year program for the development of local parks and play areas. This program is aimed at gradually enhancing the carrying capacity of these parks through improved facilities as well as catering to future needs such as the aged. Such works include improvements to bushland walking tracks or bushland rehabilitation to allow for increased recreational use.

Table 3.21 below sets out reserves that council has indicated could be embellished to provide for future demand. These would be subject to further discussions with the community to ensure consideration is given to the potential impact of any such development on local residential areas.

Table 3.21 Open space reserves with potential for increasing carrying capacity

Location	Facility	Possible works
ELS Hall Reserve	Netball courts	Purchase land. Construct netball courts. Provide walking/fitness trail. Earthworks. Combine individual fields into a larger, more versatile space.
General	Playing fields	Improve lighting at Ryde Park; North Ryde Park; Marsfield Park; Eastwood Ovals; Tuckwell Park.
North Ryde	North Ryde Park	Increase playing field area into senior and junior fields.
North Ryde	Santa Rosa Park	Develop junior cricket facilities and amenities.
Eastwood	Forrester Park	Develop cricket/football facilities and amenities.
Ryde	Pidding Park	Minor earthworks to combine individual fields into a larger, more versatile space.
Eastwood	Dunbar Park	Improve grass athletics track to synthetic.

Structured sports facilities

A range of sports grounds and associated facilities are provided within the LGA. The incoming resident population will generate additional demand for these types of facilities and decrease the existing standard of provision as well access to these facilities. It is therefore reasonable that this growth make provision for additional facilities. These works will meet demand generated by future development and it considered reasonable to collect development contributions under this section 94 development contributions plan toward funding proposed works. No apportionment for the works is therefore proposed.

The range of structured sports facilities in the Ryde area is extensive and provided at rates comparable with planning standards. The method of increasing carrying capacity may include additions and improvements to facilities that requires additional land. However significant additional land acquisition is not viable given the high price of land. The focus of the structured open space improvements will

therefore be on various improvements to allow use beyond current limits and to provide enhanced facilities such as change rooms and amenities that can accommodate greater numbers.

It is considered that local residents will generate demand for the majority of the structured open space. There will be therefore no apportionment for these works and future workers will have no responsibility for funding the works.

3.4.5 Works program

Table 3.22 shows the summary works program for open space and recreation facilities required to meet demand expected to be generated by future development across the LGA. This shows the costs to be funded by section 94 development contributions collected under this plan. Appendix A contains the detailed works program.

Table 3.22 Works program summary: open space

Proposed works	Capital costs	Apportionment	Cost to be funded by future development
Macquarie Park			
Macquarie Park - new parks acquisition	\$44,810,400	100%	\$44,810,400
Macquarie Park - new parks & linear parks construction	\$20,016,000	100%	\$20,016,000
Total Macquarie Park	\$64,826,400		\$64,826,400
Other areas			
Structured recreation facilities	\$774,000	100%	\$774,000
Improvements to sportsgrounds	\$2,100,000	100%	\$2,100,000
Unstructured open space	\$10,150,000	100%	\$10,150,000
Major Park Upgrades	\$4,181,000	100%	\$4,181,000
Trails	\$3,000,000	100%	\$3,000,000
Acquisitions	\$19,200,000	100%	\$19,200,000
Total	\$39,405,000		\$39,405,000
Funds collected			\$3,093,391
Total less funds collected			\$36,311,609

Contribution rates

The following open space and recreation facility contribution rates apply to residential development across the Ryde LGA either inside Macquarie Park or other areas.

$$\$CR_{OS-RD} = \frac{TC_{OS-RD}}{FP_{RD}}$$

Where:

- $\$CR_{OS-RD}$ = Open space contribution rate per person for residential development
- TC_{OS-RD} = Cost of apportioned open space works program to be funded by residential development
- FP_{RD} = Population growth resulting from residential development according to development location

Development within Macquarie Park:

$$\$CR_{OS-RD} = \frac{\$64,826,400.00}{13,280}$$

$$\$CR_{OS-RD} = \mathbf{\$4,881.51 \text{ per person}}$$

Residential development within other areas:

$$\$CR_{OS-RD} = \frac{\$36,311,608.90}{12,122}$$

$$\$CR_{OS-RD} = \mathbf{\$2,995.91 \text{ per person}}$$

3.5 Civic and Urban Improvements Strategy Plan

3.5.1 Introduction

The growth expected in all commercial centres and employment areas within the Ryde LGA will create demand for various civic and urban improvements and requires a coordinated approach. This approach is set out in various master plans, planning documents and supporting studies that have been prepared for each of the centres and employment areas. These master plans and planning documents have been prepared to guide future development and to assist in identifying civic and urban improvement works to be funded through section 94 contributions and include:

- Draft Gladesville Town Centre and Victoria Road Master Plan - 2005
- Meadowbank Employment Area Master Plan - 2001
- Ryde Town Centre Development Control Plan and Public Domain Plan - 2006
- West Ryde Centre Study and Development Control plan - 1998
- Eastwood Commercial Centre Planning Study and Masterplan and Development Control Plan - 2003
- Macquarie Park Corridor Master Plan - 2004

The civic and urban improvements recommended within these various master plans are included in this development contributions plan. Some of these works were identified in the previous section 94 plans and those still considered relevant have been transferred to this contributions plan. Additional works identified in more recent planning for some of the commercial centres and employment areas (eg Macquarie Park Corridor) are also included within this plan.

3.5.2 Previous works program

The works program for civic and urban improvements from the previous section 94 plans is summarised in Table 3.24 below. It is the intention of this plan to combine the works programs of these previous plans. Additional works are also proposed as outlined in later sections.

Table 3.24 Previous section 94 program and funds

Works	Plan amount (\$)	% section 94	Contributions received
Top Ryde Urban Village	\$4 720 000	100	
West Ryde Urban Village	\$7 777 600	100	
Eastwood Urban Village	\$5 000 000	100	
Streetscape embellishment	\$4 700 000	100	
Gladesville Urban Village	\$300 000	100	
Meadowbank Urban Village	\$4 539 000	100	
Total	\$23 036 600		\$4 770 998

Notes:

- a. Contributions received include funds identified in Contributions Plan No 1 under the open space fund as part of the works program within the open space strategy. Council will now segregate the funds for their intended purpose.

A range of works is to be deleted from the existing plans as priorities have changed since the original plans were prepared. Where any work is to be continued in the revised works program only the funds remaining to be collected will be included in the future works programs. The funds that remain to be collected are highlighted in the revised works program.

3.5.3 Existing facilities and current provision level

Civic and urban improvements cover a range of facilities that are provided within urban areas to support the population. This includes:

- Walkways and footpaths
- Landscaping and urban design improvements
- Street furniture (including seating / rubbish bins / bike racks / notice boards / signage)
- Fencing and public safety facilities
- Street lighting
- Public toilets

The council has continually delivered a range of urban and civic improvements to all centres in the Ryde area. These include:

- Ryde Town Centre (formerly Top Ryde)
- West Ryde urban village
- Meadowbank Employment Area
- Fiveways shopping centre
- Meadowbank shopping centre
- Coxs Road shopping centre
- Quarry Road shopping centre
- East Ryde shopping centre
- Watts Road shopping centre
- Hancott shopping centre
- Eastwood urban village
- Gladesville urban village
- Putney shopping centre
- Midway shopping centre
- Eden Park shopping centre
- Pittwater Road shopping centre
- Boronia Park shopping centre
- Callaghan Street shopping centre
- Blaxland Road shopping centre
- Flinders shopping centre

These centres provide a range of public services and amenities including those outlined earlier. The council has provided these facilities over many years and considers these facilities to be adequate for the current population. There is however a need to provide for increased population and employment growth in the centres.

3.5.4 Additional facilities required

The master plans for the main commercial centres have included recommendations for a range of civic and urban improvements. Significant investment is also required for civic and urban improvements within the Meadowbank Employment Area and Macquarie Park Corridor as identified within the master plans for these important growth areas. The nexus and apportionment in relation to these improvements is discussed below.

Growth in resident and worker populations within the LGA in each of the commercial centres and employment areas will generate significant demand for civic and urban improvements. The numbers of additional workers expected to be employed within each of the centres and employment areas by 2034 was highlighted earlier in Table 3.7 in section 3.2.2.

Increased resident population across the LGA will generate demand for civic and urban improvements within the major centres as well as the other smaller centres spread across the LGA. However the council will only levy for facilities in the four major commercial centres and the key employment areas in Meadowbank and Macquarie Park. The council will also continue the improvement of other centres however these will not be funded through section 94 contributions under this plan even though growth will increase demand in these centres.

For this reason the council will seek to recover 100% of the majority of the works in the major centres rather than a smaller proportion across all centres. This approach is considered reasonable given that the major centres and employment areas will be the focus of most growth and are likely to be used

most often. Works such as the undergrounding of electricity may be undertaken in the centres but will not be funded under this plan.

The contributions for civic and urban improvement works across the LGA will be levied equally between residential and non-residential development. The exception to this is within the Macquarie Park Corridor where significant investment in the public domain is required to facilitate and service future development. These civic and urban improvements will not provide significant benefit to residents or workers outside the Macquarie Park Corridor. Future employment development within this area will therefore be expected to provide or fund proposed civic and urban improvements within this special growth area.

3.5.5 Works program

Table 3.25 shows the summary works program for civic and urban improvements required to meet demand expected to be generated by future development across the LGA (Appendix A contains the detailed works program). The cost of the works has been based on a standard lineal upgrading rate of \$600 per metre unless otherwise stated and includes these facilities:

- Footpaths upgrading and turf (where relevant)
- Street furniture
- Public art
- Tree planting
- Signage
- Kerb and gutter improvements

Table 3.25 Works program summary: civic and urban improvements

Proposed works	Cost of works	% section 94	Cost funded by future development
Macquarie Park Corridor			
Public domain design and construction	\$5,100,000	100%	\$5,100,000
Public domain land acquisition	\$17,379,920	100%	\$17,379,920
Total Macquarie Park Corridor	\$22,479,920	100%	\$22,479,920
Ryde Town Centre	\$10,000,000	100%	\$7,000,000
West Ryde	\$2,200,000	100%	\$2,200,000
Putney Village centre	\$260,000	100%	\$260,000
Midway Village Centre	\$200,000	100%	\$200,000
Eastwood Town Centre	\$3,500,000	100%	\$3,500,000
Gladesville Town Centre	\$3,500,000	100%	\$3,500,000
Fiveways	\$550,000	100%	\$550,000
Meadowbank	\$1,500,000	100%	\$1,500,000
Total – other areas	\$21,710,000		\$21,710,000
Funds collected			\$3,052,611
Total less funds collected			\$18,657,389

Contribution rates

Residential and non-residential development in the LGA (except within the Macquarie Park Corridor) will be levied equally for civic and urban improvements within areas outside the Macquarie Park Corridor. The following contribution rate therefore applies to all development:

$$\$C_{CUI} = \frac{TC_{CUI}}{FP_{AD}}$$

Where:

- $\$C_{CUI}$ = Civic and urban improvements contribution rate per person for all development outside the Macquarie Park Corridor
- TC_{CUI} = Cost of civic and urban improvements works program to be funded by future development
- FP_{AD} = Population and employment growth resulting across the LGA (excluding Macquarie Park Corridor)

$$\$C_{CUI} = \frac{\$18,657,389}{18,311}$$

$$\$C_{CUI} = \$1,018.92 \text{ per person or worker}$$

Residential and non-residential development in the Macquarie Park Corridor will be levied for civic and urban improvements within the Macquarie Park Corridor. The following contribution rate therefore applies to all development within the Macquarie Park Corridor.

$$\$C_{CUI-MP} = \frac{TC_{CUI-MP}}{FP_{AD}}$$

Where:

- $\$C_{CUI-MP}$ = Contribution rate per person for all development in Macquarie Park
- TC_{CUI-MP} = Cost of works program to be funded by future development
- FP_{AD} = Employment growth within Macquarie Park

$$\$C_{CUI-MP} = \frac{\$22,479,920}{35,780}$$

$$\$C_{CUI-MP} = \$628.28 \text{ per worker}$$

The following employee yields are used to convert the development contribution to a floorspace basis for non-residential development:

Commercial office / research and development	1 employee per 20m ² GFA
Retail	1 employee per 40m ² GFA
Industrial	1 employee per 50m ² GFA

The resultant contribution rates for civic and urban improvements are set out in Table 3.38 below.

Table 3.38 Contributions – civic and urban improvements

Other areas across the LGA			Macquarie Park		
Contribution rate – residential development (per person)	Contribution rate – non-residential development (per m ²)		Contribution rate – residential development (per person)	Contribution rate – non-residential development (per m ²)	
\$1,018.92	Commercial office / research and development	\$50.95	\$628.28	Commercial office / research and development	\$31.41
	Retail	\$25.47		Retail	\$15.71
	Industrial	\$20.38		Industrial	\$12.57

3.6 Roads and Traffic Management Facilities Strategy Plan

3.6.1 Introduction

Population and employment growth is a clear indicator of vehicular traffic growth as additional residential and non-residential development will result in greater traffic volumes on council roads. This growth creates the need for various new or improved road and traffic management facilities.

The population and employment growth projections for the LGA indicate that there will be around a 39% increase in the next 20-25 years. This growth will be spread spatially across the LGA and indicates that there will be an increased need for council to spend more on the local road system.

The volume and characteristics of traffic growth and demand is directly related to land use. Manuals such as the Roads and Traffic Authority *Guide to Traffic Generating Developments* (RTA 2002) clearly demonstrate the nexus between development and traffic increases. It also provides an indication of the magnitude of traffic generation by land use type. Commercial and industrial development in particular generates high traffic volumes.

The impact of additional traffic has a range of consequences. These include:

- Impacts on road efficiency.
- Impacts on amenity and safety.
- Reduction in the life of road pavements.
- Increased public expenditure.

Traffic impacts accumulate over time and may not be obvious for single developments. The benefit of a contributions plan is that it takes a holistic view of future traffic development and overcomes financing constraints imposed by incremental decision-making.

The most effective tool for assessing traffic impacts is to examine the impact of development on the road network and equitably assign the costs of development of the road network to development within the LGA. This is considered reasonable as the use of council road assets will be spread across the entire LGA.

The exception to this is within the Macquarie Park Corridor where significant investment in road infrastructure is required to facilitate and service future development. This infrastructure will not provide significant benefit to residents or workers outside the Macquarie Park Corridor. Future employment development within this area will therefore be expected to provide or fund proposed road infrastructure.

3.6.2 Previous works program

The works program for roads and traffic management facilities from the previous section 94 plans is summarised in Table 3.27 below.

Table 3.27 Previous section 94 program and funds

Works	Plan amount (\$)	Contributions received
Total – all plans	\$14 339 048	\$2 503 578

Source: Ryde City Council 2006

3.6.3 Existing facilities and current provision level

The council maintains the local road system in the LGA. The main arterial roads such as Victoria and Epping Roads are the responsibility of the RTA. No contribution is sought for these roads as the RTA funds them.

The local road network currently performs satisfactorily for the existing residential and non-residential traffic. The council undertakes improvements on a forward works basis to address maintenance issues and this is separately funded. No maintenance is provided for in this plan.

3.6.4 Additional facilities required

The increase in residential and non-residential development has been outlined in previous sections. There will be an additional 9,367 dwellings and 645,000 square metres of non-residential development within the Ryde LGA.

Based on standard traffic generation figures it is estimated that there would be over 44,702 additional traffic trips generated from this development outside the Macquarie Park Corridor as follows:

- Future residential development: 3,975 dwellings with an average daily trip generation rate of 6 trips per dwelling = 25,002 additional trips. (55.9%)
- Future non-residential development: 195,000 square metres of floor-space generating 19,700 additional trips daily. (44.1%)

Inside the Macquarie Park it is estimated that there would be over 72,150 additional traffic trips generated and divided as follows:

- Future residential development: 5,200 dwellings with an average daily trip generation based on development type = 27,150 additional trips. (37.6%)
- Future non-residential development: 450,000 square metres of floor-space generating 45,000 additional trips daily. (62.4%)

There would be a proportion of these trips shared between residential and non-residential development. However the magnitude of the additional traffic would be substantial. There will be a need to introduce traffic management measures and undertake road improvements across the LGA to address these traffic impacts.

Increased resident and worker populations will result in increased traffic movements across the existing road network within the LGA. Generally this growth will not result in demand for new roads or major road upgrades. However increased traffic movements will generate demand for traffic management facilities to ensure that safety of the existing network is not compromised. Development will also create the need for traffic studies to be prepared to consider the impact of increased traffic movements on the road network and to ensure that traffic continues to be managed appropriately.

A number of improvements listed on the traffic management works program prepared by council are not proposed to be funded under this section 94 plan. These include:

- Footpath construction in existing streets
- Road pavement improvements
- Footbridge reconstruction
- Kerb and gutter improvement
- Kerb ramp construction in existing streets

These works will predominantly maintain and improve the road network for existing residents rather than meet demand generated by future development.

Macquarie Park Corridor

Substantial employment growth is anticipated to occur within the Macquarie Park Corridor over the next 28 years. This growth will result in the generation of approximately 35 780 additional residents and workers in the corridor to 2034. Major upgrades to the road network will be required as part of the anticipated development within the corridor.

A street network hierarchy plan has been established in the Macquarie Park Corridor Master Plan (Scott Carver et al 2004). The proposed street hierarchy for the corridor will be based on a framework of existing arterial roads (Epping Road / Land Cove Road / Delhi Road), a central landscaped spine (Waterloo Road extending from Herring Road at Macquarie University through to the Delhi Road area), and a number of new and existing local roads. The central spine will be widened to allow for boulevard treatment.

Developers as part of individual site redevelopments will provide new local roads. However a number of road works and upgrades will need to be provided by council and funded through section 94 development contributions. These works include:

- Reconstruction of existing streets
- Traffic management facilities including roundabouts and intersection signals
- Integration with the regional road network

These works and upgrades are necessary to enable development to proceed within the corridor. It is considered appropriate that 100% of these works be funded through section 94 development contributions collected from development within the corridor.

Other areas

There will be substantial growth in traffic across the LGA and this will be the result of growth in residential and commercial areas. Development within the commercial centres and employment areas will create additional traffic.

The council has made an assessment of the works required to adequately manage traffic and maintain the current levels of access and service. Based on this assessment the council proposes to install additional roundabouts at the following intersections:

- Thomas Street and Monarch Road
- Melville Avenue and Goodwin Street
- Constitution Road and Railway Street
- Buffalo Road and Monash Road
- West Parade and Hillview Road
- Searle Street and Tennyson Road
- Adelaide Street and Moss Street
- Dickson Avenue and Bellevue Avenue
- Thomson Street and Westminster Road
-

3.6.5 Works program summary: roads and traffic management

Table 3.28 shows the works program for additional roads and traffic management facilities required to meet demand expected to be generated by future development across the LGA and specific works within the Macquarie Park Corridor. This also shows the costs to be funded by section 94 development contributions. Appendix A contains the detailed works program.

Table 3.28 Works program summary: roads and traffic management

Proposed works	Cost of works	% section 94	Cost funded by future development
Macquarie Park Corridor			
Road design – proposed streets	\$500,000	100%	\$500,000
Road construction - public domain improvements			
Upgrade of existing streets	\$1,900,000	100%	\$1,900,000
New streets and traffic management	\$1,800,000	100%	\$1,800,000
Land acquisition – proposed streets	\$800,000	100%	\$800,000
Traffic management			
Intersection signals (3 @ \$300 000 each)	\$900,000	100%	\$900,000
Roundabouts (6 @ \$100 000 each)	\$600,000	100%	\$600,000
Bus shelters	\$300,000	100%	\$300,000
Integration of Regional roads	\$17,000,000	100%	\$17,000,000
Total – Macquarie Park	\$23,800,000		\$23,800,000
Funds collected			\$0
Total less funds collected			\$23,800,000
Other areas			
Roundabouts	\$935,000	100%	\$935,000
Traffic management and road improvements	\$4,578,000	100%	\$4,578,000
Total – other areas	\$5,513,000		\$5,513,000
Funds collected			\$2,503,578
Total less funds collected			\$3,009,422

3.6.6 Contribution rates

Residential and non-residential development in all parts of the LGA will be levied for roads and traffic management facilities as a proportion of the total cost attributed to the development type as set out below.

Area of works	Total Cost	Proportion residential	Value of works	Proportion non-residential	Value of works
Macquarie Park	\$23,800,000.00	37.6%	\$8,955,925.16	62.4%	\$14,844,074.84
Other areas	\$3,009,422	54.8%	\$1,682,267	45.2%	\$1,327,155

The following contribution rates therefore apply to the respective development types and locations:

$$\$C_{RTM} = \frac{TC_{RTM}}{FP_{AD}}$$

Where:

- $\$C_{RTM}$ = Contribution rate per person or worker (as appropriate)
- TC_{RTM} = Cost of works program to be funded by future development
- FP = Number of residents applicable to the location for residential development OR the number of trips generated by non-residential development as applicable

Contribution rates:

Macquarie Park – residential

$$\text{\$C}_{\text{RTM}} = \frac{\text{\$8,955,925.16}}{13,280}$$

$$\text{\$C}_{\text{RTM}} = \text{\$674.39 per person}$$

Macquarie Park – non-residential

$$\text{\$C}_{\text{RTM}} = \frac{\text{\$14,844,074.84}}{45,0000}$$

$$\text{\$C}_{\text{RTM}} = \text{\$32.99 per square metre}$$

Other areas – residential

$$\text{\$C}_{\text{RTM}} = \frac{\text{\$1,682,267}}{12,122}$$

$$\text{\$C}_{\text{RTM}} = \text{\$138.85 per person}$$

Other areas – non-residential

$$\text{\$C}_{\text{RTM}} = \frac{\text{\$1,327,155}}{185,000}$$

$$\text{\$C}_{\text{RTM}} = \text{\$7.17 per square metre}$$

3.7 Transport and Accessibility Strategy Plan

3.7.1 Introduction

The council provides structured public car parking facilities in the following commercial centres:

- Eastwood – 576 off-street spaces
- West Ryde – 1,068 off-street spaces
- Top Ryde – 1,211 off-street spaces
- Gladesville – 340 off-street spaces
- Putney – 25 off-street spaces

Where development cannot provide all car parking on-site, a car parking contribution has been required in the past, as the demand for car parking spaces has needed to be satisfied by the council. It is estimated that council has invested over \$37 million in car parking facilities including land acquisition.

Council has in undertaking these works exhausted the opportunities for new parking spaces to be provided on Council-owned sites and by optimising on-street parking. Any further parking that is to be provided within these centres requires acquisition of land and construction of new facilities.

3.7.2 Previous works program

The works program for car parking facilities from the previous section 94 plans is summarised in Table 3.30 below.

Table 3.30 Previous section 94 program and funds

Works	Plan amount (\$)	% section 94	Contributions received
Eastwood 576 off street spaces On street optimisation	\$14,688,000	100	NA
West Ryde 1068 off street spaces On street optimisation	\$11,854,800	100	NA
Top Ryde 1211 off street spaces On street optimisation	\$11,286,520	100	NA
Gladesville 340 off street spaces On street optimisation	\$3,485,000	100	NA
Putney 25 off street spaces On street optimisation	\$75,000	100	NA

Note:

Contributions are levied on a per space basis and there is no need to account for contributions received in the normal way as the council is recouping past expenditure.

3.7.3 Existing facilities and current provision level

The existing car parking facilities provided within the LGA are outlined above.

3.7.4 Additional facilities required – future program

Demand for car parking is a function of new retail and commercial development within the commercial centres (for the purposes of this plan it is assumed that all residential and industrial development and out-of-centre commercial development will provide adequate car parking on-site).

Table 3.31 shows the projected retail and commercial development to 2024 anticipated in each commercial centre where council provides car parking.

Table 3.31 Car parking demand

Location	Additional commercial and retail floorspace ^a (m ²)	Car parking demand ^b
Eastwood	14,000	175
West Ryde	10,000	125
Ryde	82,000	1,025 ^c
Gladesville	10,000	125
Putney	NA	NA

Notes:

- Assumed that 75% of future floorspace is retail development.
- Based on 1 space per 50m² of commercial floorspace and 5 spaces per 100m² of retail floorspace.
- Assumes that 80% of spaces provided in redeveloped centre.

The construction of additional floor-space does not automatically create a demand for parking. Fundamentally the issue that needs to be addressed is how do people travel to this new floor-space. The automatic assumption of a demand for parking space is based on an in-built assumption of car dependence. The provision of parking as the sole solution to this transport need further reinforces car dependence.

In this contributions plan council is seeking to address the need for transport generated by new developments in a way that does not reinforce the dependence on private motor transport. However, the most direct and readily acceptable method of measuring the impact created by the development is trip generation and the required parking spaces. Council will continue to utilise these measures as the means of determining the contributions required. The funds collected will be expended on a works program devised to reduce car dependence as well as provide additional parking.

The majority of this car parking is expected to be provided on-site. However there will be instances where this cannot be achieved. The preference of the council is to have all car parking located on-site however where this is not possible then a contribution will be required for the shortfall in on-site parking provision. The funds will then be applied to a range of programs recently developed to accommodate the increased parking demand by reducing car dependence.

Council intends to proceed with a range of programs recently developed through the Integrated Transport and Land Use Strategy, (ITLUS). The objectives of the strategy are:

- To achieve a more sustainable, accessible, amenable, equitable, safe and integrated transport and land use system which balances social, environmental, health, economic and strategic objectives.
- To reduce car dependency, the growth in vehicle kilometres (VKT) travelled and greenhouse gas emissions.

- To increase the share of trips made by public transport, walking and cycling and reduce the number of trips made by private vehicles.
- To provide a long-term vision for the City of Ryde and a series of citywide and centre based actions which council can implement or lobby for in order to satisfy these objectives.

Council does not wish to have a funding strategy working at odds with the long-term vision of the LGA. To this end the use of section 94 to fund a car parking program whilst also pursuing a strategy to reduce car dependence is contradictory.

Council intends to ensure that adequate provision is made for car parking at each of the commercial centres listed above. But in view of the ITLUS the adequacy of parking provision can also be addressed by the provision of alternative transport and accessibility facilities.

Council will pursue the funding of a range of measures through this plan that will not only provide additional parking where required but can also be used to improve the use of public transport and accessibility of the centres without providing additional parking.

3.7.5 Works program

The works program set out below is based on a number of the ITLUS programs proposed and although not exhaustive provides a scope of the works proposed to improve transport accessibility.

Table 3.32: Indicative works program: Transport and accessibility facilities

Proposed works	Cost estimate	Impact
Footpath paving programs: An extensive footpath-paving program will be carried out in each of the identified town centres.	\$1,250,000	The program will improve the capacity of the centre to accommodate internal pedestrian activity and reduce the reliance on cars for shorter internal trips.
Pedestrian Access Mobility Plans: PAMPS have been used to successfully identify and improve specific works required to improve the use of the local area by all pedestrians.	\$300,000	The implementation of PAMPS has the ability to further reduce vehicle dependency by improving the functionality of the existing footpath network.
Traffic signal Modifications A range of modifications is possible to a number of traffic signals, to provide better pedestrian movement, and bus prioritisations. New signals can also be provided to improve accessibility.	\$950,000	A range of modification types, and locations have been identified that can have a significant impact on the effectiveness of public transport and pedestrian access to major centres.
Public transport initiatives Council will be negotiating with Transurban, RTA, City Rail, Sydney Ferries and the State Transit Authority.	\$0	Council's objective is to improve the ability of all public transport services to improve links between Ryde and external centres to reduce trip generation.

Many of the actual works that will be derived from these programs have not yet been estimated in terms of cost. And many will not be the responsibility of Ryde City Council to provide. A very significant program of footpath works and signal upgrades is proposed that will be funded by this plan. This program has an estimated of \$2.5 million.

3.7.6 Contribution rates

Contributions will be levied on a per space basis from each development application that does not provide adequate on-site parking.

A simple calculation of parking rates could be applied to each centre as set out below in Table 3.33.

Table 3.33 Contributions – car parking facilities

Location	Spaces	Contribution per space
Eastwood	576	\$25,500
West Ryde	1,068	\$11,100
Ryde	1,211	\$ 9,320
Gladesville	340	\$10,250
Putney	25	\$ 3,000

Note:

Includes incomplete works and land acquisition.

This however does not reflect future needs or directions of council with respect to transport and accessibility. The rates listed above are for the recoupment of works largely completed and reflect the priorities of past strategies. These priorities have delivered a total of 3,220 parking spaces at an average cost of \$12,854 each.

Any new parking will need to be provided as purpose built facilities on land acquired for the purpose as the past programs have already utilised all possible opportunities on existing council-owned land and optimised on-street parking. A cost estimate of a new parking space is set out below.

Table 3.34 Construction cost - new parking spaces

Cost of one parking space		
Land @ \$1000 / Sqm	20	\$20,000
Additional Circulation area	10%	\$2,000
Construction @ \$85/Sqm	22	\$1,870
Line marking		\$250
Subtotal		\$24,120
Design	8.0%	\$1,929.60
Supervision	12.0%	\$2,894.40
Contingency	7.5%	\$1,809.00
Subtotal		\$6,633.00
Total cost per space		\$30,753.00

The focus of the ITLUS is a more comprehensive approach across the LGA to improve alternatives to private vehicle use for all trips. The ITLUS program will provide better transport alternatives to all residents, workers and businesses across the LGA. In view of this strategy it is necessary to consider what is required to provide adequate parking and transport in future.

Rather than impose a contribution rate well in excess of any that are presently being used in the Ryde LGA, council will as an alternative adopt a flat rate per space of **\$15,000**. This will be applied to developments that have not provided sufficient on-site parking within the development. The funds collected will be applied to the works items set out in the indicative works program in Table 3.32.

3.8 Cycleways Strategy Plan

Introduction

The establishment of demand for cycleways requires consideration of the expected use of such facilities by the population. Cycleways often serve a dual role as pedestrian networks. Therefore demand for walkways and bikeways can be assessed on the potential demand for pedestrian access as well as use by those riding bicycles.

The population of the Ryde LGA is ageing in line with NSW and Australian trends and the need for walking trails is increasing as older people tend to walk as a means of recreation. In 1989 and 1991 the Commonwealth Department of Arts, Sport, the Environment, Tourism and Territories (DASETT) undertook a series of major Australia-wide surveys on participation in sport and leisure activities. Table 3.35 provides a summary of two of the more important measures of the relative significance of leisure activities. The results of the survey remain valid although the further ageing of the population is likely to have led to a decrease in structured sports activities.

Almost one third of the population stated they walked for pleasure. Only around 13% of people stated walking the dog was a primary activity but the frequency of walking was high. Riding bicycles is also a popular past time with around 9% of the population reporting this as a regular activity. Visiting parks is also another popular activity with over 9% of the survey reporting this as a regular activity.

Table 3.35 Australian participation in recreation and leisure activities

Activity	Persons participating ^a	Frequency ^b
Visiting friends/relatives	65.4	159.1
Dining/eating out	31.8	50.6
Walking for pleasure	30.5	62.3
Socialising at pubs/clubs	22.0	44.3
Driving for pleasure	19.7	33.3
Church activities	14.0	22.5
Walking the dog	13.2	110.9
Spectator at sport	9.6	NA
Dancing/going to disco	9.4	NA
Visiting parks	9.2	16.5
Bicycle riding	9.0	26.1

Source: DASETT 1989

Notes:

- a. Per 100 of population.
- b. Per 100 population – based on number of times participated x total number of respondents taken over past 7 days.

It is clear that demand will be created for additional bicycle paths and walkways from future residents. It is considered that the DASETT ratios are a minimum demand factor. There is also the increased demand from people walking and cycling to work.

3.8.1 Previous works program

The Meadowbank section 94 plan included cycleways to the value of \$327,600 - no contributions have been received.

3.8.2 Existing facilities and current provision level

The Parks and Open Space Improvement Plan (Michelle Reid and HM Leisure Planning Pty Ltd 2006) provides an analysis of existing cycleways in the Ryde LGA. There are some excellent cycleways and walking tracks within the LGA with major facilities being provided along the Parramatta River foreshore and along the Shrimptons Creek corridor through Ryde and North Ryde. Community consultation carried out by council has identified that pedestrian paths and cycleways are the most desired recreation facilities. There are opportunities to expand the existing network to provide additional links between major destinations and attractions across the LGA as demand increases.

3.8.3 Additional facilities required

Both additional resident and worker populations in Ryde will generate demand for cycleways. A range of cycleway facilities are already provided within the LGA however increased population generated by residential and employment development will result in increased pressure on the existing network. Development contributions will be used to expand the network to meet demand arising from development. It is considered reasonable for future development to fund required improvements given the extensive cycleway network already provided and the fact that growth will diminish the level of provision per capita.

3.8.4 Works program

Table 3.36 shows the works program for cycleway facilities required to meet demand expected to be generated by future development across the LGA. This also shows the costs to be funded by section 94 development contributions collected under this plan.

Table 3.36 Works program: Cycleways

Proposed works	Cost of works	Section 94 (%)	Cost funded by future development
New Cycleway Construction Local Routes - as contained in Ryde Bike Plan 2007	\$600,000	100%	\$600,000
New Cycleway Construction Sub-Regional Routes - as contained in Ryde Bike Plan 2007	\$2,000,000	100%	\$2,000,000
New Cycleway - Rothesay Ave	\$146,000	100%	\$146,000
New Cycleway - Waterloo Rd (Herring Rd – Shrimptons Creek)	\$150,000	100%	\$150,000
Parramatta Foreshore Improvements & Ryde Parramatta River Walk (New Cycleways / Shared Pathways between Gladesville to Melrose Park)	\$1,800,000	100%	\$1,800,000
Total	\$4,696,000		\$4,696,000

3.8.5 Contribution rates

Residential and non-residential development in the LGA will be levied equally for cycleways as demand will be spread across the entire area. The following contribution rate therefore applies to all development across the Ryde LGA.

$$\$C_c = \frac{TC_c}{FP_{AD}}$$

Where:

- $\$C_c$ = Cycleway contribution rate per person for all development
- TC_c = Cost of cycleways works program to be funded by future development
- FP_{AD} = Population and employment growth resulting across the LGA

$$\$C_c = \frac{\$4,696,000}{54,091}$$

$$\$C_c = \$86.82 \text{ per person or worker}$$

The following employee yields are used to convert the non-residential development contribution to a floorspace basis:

- Commercial office / research and development 1 employee per 20m² GFA
- Retail 1 employee per 40m² GFA
- Industrial 1 employee per 50m² GFA

The resultant contribution rates for cycleway facilities are set out in Table 3.37 below.

Table 3.37 Contributions – cycleway facilities

Contribution rate – residential development (per person)	Contribution rate – non-residential development (per m ²)	
\$86.82	Commercial office / research and development	\$4.34
	Retail	\$2.17
	Industrial	\$1.74

3.9 Stormwater Management Facilities Strategy Plan

3.9.1 Introduction

Community standards require that stormwater be conveyed through urban areas in a manner that is safe and cost effective. This requires drainage to be managed on a catchment-wide basis in a constructed stormwater system. The council has collected contributions for stormwater management for a considerable period to provide upgrading of the system as development occurs and priorities are identified. The council has apportioned contributions in consideration of existing demands.

3.9.2 Previous works program

The works program for stormwater management facilities from the previous section 94 plans is summarised in Table 3.38 and the core components associated with each drainage catchment are described below.

Denistone catchment

The Denistone Catchment Scheme has as its principal component the West Ryde Tunnel and associated works. It is a scheme that is primarily intended to address the stormwater flooding that occurs during major storm events in the Denistone Stormwater Catchment.

The updated cost of all works associated with the Denistone Catchment Scheme is estimated at \$15,000,000. The scheme will form the backbone and represent the major cost of the drainage infrastructure needed to serve the Denistone catchment. Additional tributary systems will be required ultimately to complete the overall scheme for the catchment. These minor systems are not included in the base cost because these are of a relatively minor magnitude compared to the tunnel and because they have not yet been determined and adopted as a part of the scheme. The base cost will be updated when these minor systems have been incorporated into the overall scheme.

Terrys Creek catchment

The Terrys Creek Catchment Scheme has as its principal component the Eastwood Tunnel and associated works. It is a scheme that is primarily intended to address the stormwater flooding that occurs during major storm events in the Terrys Creek Stormwater Catchment.

The updated cost of all works associated with the Terrys Creek Catchment Scheme is \$14,455,000. The scheme will form the backbone and represent the major cost of the drainage infrastructure needed to serve the Terrys Creek catchment. Additional tributary systems will be required ultimately to complete the overall scheme for the catchment. These minor systems are not included in the base cost because these are of a relatively minor magnitude compared to the tunnel and because they have not yet been determined and adopted as a part of the scheme. The base cost will be updated when these minor systems have been incorporated into the overall scheme.

Lower Terrys / Mars Creek Special Area

In that part of the LGA north of Epping Road and west of Macquarie University council had the opportunity to pre-plan development when it was released for urban use in the 1950s. In this area an overall drainage scheme was designed and constructed to facilitate the conversion of the land from rural to urban use. The adjusted cost of these works is estimated at \$35,430,000.

Any contributions received by council for development in the area north of Epping Road and west of Macquarie University will be used for the recoupment of the costs involved in the construction of the overall drainage system for that area.

Table 3.38 Previous section 94 program and funds

Works	Plan amount (\$)	% section 94	Contributions received
Denistone catchment	\$14,000,000	70	
Terrys Creek catchment	\$12,570,000	70	
Lower Terrys / Mars Creek Special Area	\$35,430,000	100	
Meadowbank s94 drainage	\$2,682,900	100	
Total	\$64,682,900		\$4,956,119

3.9.3 Additional facilities required

There is a need for additional and upgraded stormwater and flood management facilities throughout various catchments across the LGA to facilitate and cater for future development as set out in the works program in Table 3.39 below. The council has determined that there will be gradual upgrading of the stormwater system within each catchment as development proceeds.

The benefit arising from most of the proposed infrastructure is uniformly spread throughout each catchment as this infrastructure will be providing the backbone for adequately conveying stormwater runoff originating on all parts of the catchments through and out of each catchment. There will therefore be apportionment between the existing and future populations for works undertaken across the LGA. The apportionment for stormwater management facilities is:

Apportionment rate

$$\begin{aligned}
 &= \frac{\text{Future residents} + \text{Future workers}}{(\text{Existing residents} + \text{Existing workers}) + (\text{Future residents} + \text{Future workers})} \\
 &= \frac{12,122 + 28,689}{(96,948 + 41,444) + (12,122 + 28,689)} \\
 &= 11\%
 \end{aligned}$$

There are two exceptions to this apportionment rate.

The first is within the Macquarie Park Corridor where significant investment in stormwater infrastructure is required to facilitate and service future development. This infrastructure will not provide significant benefit to residents or workers outside the Macquarie Park Corridor. Future employment development within this area will therefore be expected to provide or fund proposed stormwater infrastructure. The calculation above has not accounted for development within Macquarie Park for this reason.

The second is the provision of flood mitigation measures. These works are proposed to allow further intensification within the town centres. This benefits both the further development directly and the surrounding residents.

There are six major creeks within the City of Ryde Local Government Area. They are Archers Creek, Buffalo Creek, Kitty's Creek, Shrimptons Creek, Mars Creek and Terry's Creek. There are also eight major trunk drainage systems in the Ryde LGA. They are Eastwood, Denistone, River, Charity, Porters Creek, Industrial, Gladesville and Lane Cove. All of the above creeks drain into either the Lane Cove or Parramatta Rivers.

For the purpose of this contributions plan there are three catchments to be considered outside of Macquarie Park. These three catchments incorporate all of the above creeks:

- Eastwood and Terrys Creek
- Kitty and Buffalo Creek
- Parramatta River Catchments

Development Control Plan 2006 incorporates stormwater management related development controls on all land within the City of Ryde. Specifically, section 8.2.8 of DCP 2006 constrains and restricts the development of land below the 1 in 100 year ARI flood. The stormwater management projects identified are intended to facilitate the sustainable development of the city.

The Ryde Planning Scheme Ordinance (RPSO) as part of amending Local Environmental Plan 110 and part 4.1 Development Control Plan 2006 incorporates stormwater management related controls within the Eastwood Town Centre. Specifically, clauses 51D and 51E of RPSO constrain and restrict development within identified areas of the town centre. The stormwater management projects identified are intended to facilitate the sustainable development of the Eastwood Town Centre area.

Specific planning controls have been adopted for the Eastwood centre to prevent further development until drainage works are carried out to support the developments. In other centres individual development applications have been refused on the same grounds.

The provision of stormwater control measures is adequate for the present level of development however further development will require further works. The flood mitigation measures covered by this plan will be apportioned 100% to future development but apportioned across the catchment boundaries as the benefit is to all residents and workers who use or visit any of the town centres.

3.9.4 Works program

Table 3.39 shows the works program summary for stormwater management facilities required to meet demand expected to be generated by future development across the LGA and specific works required within the Macquarie Park Corridor. This also shows the costs to be funded by section 94 development contributions collected under this plan.

Table 3.39 Works program summary: stormwater management

Proposed works	Cost of works	% section 94	Cost funded by future development
Macquarie Park Corridor			
Drainage risk management study and design	\$700,000	100%	\$700,000
North Ryde Golf Club Detention Pond	\$50,000	100%	\$50,000
Closed conduits and overland flow channels	\$2,000,000	100%	\$2,000,000
Total – Macquarie Park	\$2,750,000		\$2,750,000
Flood mitigation measures			
Eastwood and Terrys Creek	\$1,600,000	100%	\$1,600,000
Kitty and Buffalo Creek	\$900,000	100%	\$900,000
Parramatta River Catchments	\$2,170,000	100%	\$2,170,000
Stormwater quality improvement measures			
Parry Park stormwater quality improvement device	\$125,000	11%	\$26,250
Hughes Street/Dunmore Road/Moss Street stormwater quality improvement device	\$375,000	11%	\$78,750
Buffalo Creek stormwater quality improvement device	\$250,000	11%	\$52,500
Looking Glass Bay stormwater quality improvement device	\$125,000	11%	\$26,250
Cudal Reserve stormwater quality improvement device	\$125,000	11%	\$26,250
Morrisons Bay stormwater quality improvement device	\$500,000	11%	\$105,000

Proposed works	Cost of works	% section 94	Cost funded by future development
Buffalo Creek remediation/restoration	\$250,000	11%	\$52,500
Strangers Creek remediation/restoration	\$250,000	11%	\$52,500
Terrys Creek remediation/restoration	\$500,000	11%	\$105,000
Shrimptons Creek remediation/restoration	\$150,000	11%	\$31,500
Kittys Creek remediation/restoration	\$250,000	11%	\$52,500
Archers Creek remediation/restoration	\$585,000	11%	\$122,850
Total – other areas	\$11,670,000.00		\$5,053,350

3.9.5 Contribution rates

Contribution rates for residential and non-residential development will be determined based on a proportion of the whole population as set out below.

Area of works	Total Cost	Proportion residential	Value of works	Proportion non-residential	Value of works
Macquarie Park	\$2,750,000	37.1%	\$1,020,681.95	62.9%	\$ 1,729,318.05
Other areas	\$5,053,350	63.7%	\$3,220,211	36.3%	\$1,833,139

The following contribution rate therefore applies to residential development outside the Macquarie Park Corridor

$$\$C_{SM} = \frac{TC_{SM}}{FP_{AD}}$$

Where:

- $\$C_{SM}$ = Stormwater management contribution rate per person for all residential development outside the Macquarie Park Corridor
- TC_{SM} = Apportioned cost of stormwater management works program to be funded by future development
- FP_{RD} = Population growth resulting across the LGA (excluding Macquarie Park Corridor)

$$\$C_{SM} = \frac{\$3,220,211}{12,122}$$

$$\$C_{SM} = \$275.97 \text{ per person}$$

The following contribution rate therefore applies to non-residential development outside the Macquarie Park Corridor.

$$\$C_{SM} = \frac{TC_{SM}}{FP_{NRD}}$$

Where:

- $\$C_{SM}$ = Contribution rate per square metre for non-residential development outside of Macquarie Park

TC_{SM} = Cost of works program to be funded by future development
 FP_{NRD} = Total floor space growth projected outside of Macquarie Park

$$\$C_{SM} = \frac{\$1,833,139}{185,000}$$

$$\$C_{SM} = \mathbf{\$9.91 \text{ per square metre}}$$

The following contribution rate therefore applies to residential development within the Macquarie Park Corridor:

$$\$C_{SM} = \frac{TC_{SM}}{FP_{RD}}$$

Where:

$\$C_{SM}$ = Stormwater management contribution rate per person for residential development within the Macquarie Park Corridor
 TC_{SM} = Apportioned cost of stormwater management works program to be funded by future development
 FP_{RD} = Population growth resulting inside the Macquarie Park Corridor

$$\$C_{SM} = \frac{\$1,020,681.95}{13,280}$$

$$\$C_{SM} = \mathbf{\$76.86 \text{ per person}}$$

Non-residential development within the Macquarie Park Corridor will be levied for stormwater management facilities. The following contribution rate therefore applies to non-residential development within the Macquarie Park Corridor.

$$\$C_{SM} = \frac{TC_{SM}}{FP_{NRD}}$$

Where:

$\$C_{SM}$ = Contribution rate per square metre for non-residential development inside of Macquarie Park
 TC_{SM} = Cost of works program to be funded by future development
 FP_{NRD} = Total floor space growth projected for Macquarie Park

$$\$C_{SM} = \frac{\$1,729,318.05}{450,000}$$

$$\$C_{SM} = \mathbf{\$3.84 \text{ per Square Metre}}$$

The resultant contribution rates for stormwater management facilities are set out in Table 3.40 below.

Table 3.40 Contributions – stormwater management facilities

LGA wide			Macquarie Park		
Contribution rate – residential development (per person)	Contribution rate – non-residential development (per m ³)		Contribution rate – residential development (per person)	Contribution rate – non-residential development (per m ²)	
\$275.97	Commercial office / research and development	\$9.91	\$76.86	Commercial office / research and development	\$3.84
	Retail	\$9.91		Retail	\$3.84
	Industrial	\$9.91		Industrial	\$3.84

3.10 Section 94 plan administration

3.10.1 Introduction

There are significant costs associated with administering section 94 funds. Council staff are involved in preparation of the contributions plan, its ongoing review and implementation. Staff administration costs that have been used to calculate the contribution are comprised of those expenses relative only to those personnel directly responsible for the formulation and/or administration of the plan. These costs have been capitalised over the life of the plan to arrive at a total capital cost to the council.

In addition to the capital costs associated with staff, it is necessary to provide office space and support facilities for council staff directly involved in administration of the plan. This not only relates to the space used for administration of the section 94 plan but also in providing for all the required services and facilities that the council provides to serve the incoming population.

The council is also required to manage, monitor and maintain the plan. The effective coordination and administration of the plan will require additional work by council officers that is outside the work required for normal day to day activities. The types of administrative roles which the council will have to undertake includes:

- Provide advice to applicant and the general public regarding the operation the plan.
- Administration of the plan and ensure that the contributions are used to provides the public facilities for which they were intended.
- Monitor the receipt and authorise the expenditure of cash contributions in respective trust accounts and the recoupment of costs already met.
- Assess the merit of land proposed for dedication.
- Assess any works in kind proposed in partial or full satisfaction of a contribution.
- Monitor the dedication and development of land contributions.
- Recommend to the council the appropriate interim use and ultimate development of dedicated land, the acquisition of appropriate land for the identified public purpose, the reuse of existing council facilities (including land) for an alternative public purpose, or the use of funds for the purposes of provision through joint venture or other arrangement.
- Monitor and program works identified in the works schedule.
- Regularly review the works program in accordance with the levels of contribution received and expended, and seek council adoption of these.
- Regularly review the rates for contribution in accordance with construction costs, land valuations, levels of demand, population and demographic changes and recommend to council amendments where necessary.
- Determine the appropriate time for provision of public facilities having regard to the works schedule, the availability of funds, demand generated by development, the time funds have been held, expected additional funds, alternative funding sources and maintenance implications.
- Monitor the implications arising from development including the demands created for additional facilities for which contributions are not currently sought, the needs of specific one off developments, the costs of development and land acquisition, the extent and type of development and the effect of this on the works program.
- Advise council of appropriate management, expenditure and policy implications regarding development contributions including those arising from legal decisions and State Government policy.
- Determine the extent of recurrent costs and assess the implications to council to provide these.
- Assess whether a credit or reassessment of the contribution may be appropriate and how that may be determined.

- Prepare and make available the necessary information required by the EPA Regulation including the Contributions Register, input to council annual financial reporting and the annual statement for the contributions plan in force.
- Seek legal advice, provide evidence and attend to Land and Environment Court hearings on appeals relating to the imposition of contributions.

The cost of assistance in plan preparation/review, studies to ascertain demand and to ensure fair and equitable apportionment, as well as the costs for obtaining independent valuation and legal documents associated with land acquisition are also additional costs to the council in the administration of the Section 94 contributions plan. While the land acquisition costs can be effectively included in the costs of individual facilities, the costs of professional fees are less predictable. Therefore the costs of these works have been capitalised over the life of the plan.

3.10.2 Previous works program

The works program for administration of previous plans is \$1.25 million. This was over the life of the plans and therefore was approximately \$125 000 per annum.

Table 3.41 Previous section 94 program and funds

Works	Plan amount (\$)	% section 94	Contributions received
Preparation of new contributions plans for centres	\$50 000	100	
Terry Creek Catchment Public Space Project Management	\$500 000	100	
Leisure Study	\$40 000	100	
Centres Study	\$60 000	100	
Meadowbank Plan administration	\$600 000		
Total	\$1 250 000		\$332 480

3.10.3 Administrative costs and apportionment

The future administration of the section 94 functions is solely for future development. The capital costs associated with the administrative centre have been apportioned and separated from other costs associated with the centre that house other council functions. There is no apportionment of the capital costs associated with salaries, administrative and professional costs. Incoming development will be responsible for these costs.

3.10.4 Works program

The administration of the section 94 is equivalent to a full time employee. The work on the plan is mainly undertaken by staff in the planning and financial services units. However, staffs from other units across council regularly contribute to the management and administration of the plan. The salary cost for this work over the life of the plan is estimated at \$250,000. The costs for review of the plan and associated investigations in the future will have a total cost over the life of the plan of \$950,000.

There is no need to reduce the above works program by the funds collected as such funds are collected on an annual basis based on direct salary and on-costs.

3.10.5 Contribution rates

Residential and non-residential development in the LGA will be levied equally for plan administration. The following contribution rate therefore applies to all development across the Ryde LGA.

$$\$C_{\text{ADMIN}} = \frac{TC_{\text{ADMIN}}}{FP_{\text{AD}}}$$

Where:

- $\$C_{\text{ADMIN}}$ = Administration contribution rate per person for all development
- TC_{ADMIN} = Cost of plan administration to be funded by future development
- FP_{AD} = Population and employment growth resulting across the LGA

$$\$C_{\text{ADMIN}} = \frac{\$1\,200\,000}{51\,260}$$

$$\$C_{\text{ADMIN}} = \mathbf{\$23.41 \text{ per person or per worker}}$$

The following employee yields are used to convert the non-residential development contribution to a floorspace basis:

- Commercial office / research and development 1 employee per 20m² GFA
- Retail 1 employee per 40m² GFA
- Industrial 1 employee per 50m² GFA

The resultant contribution rates for plan administration are set out in Table 3.42 below.

Table 3.42 Contributions – plan administration

Contribution rate – residential development (per person)	Contribution rate – non-residential development (per m ²)	
\$23.41	Commercial office / research and development	\$1.17
	Retail	\$0.59
	Industrial	\$0.47

4. Part D – References

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Appendix A

Detailed works programs

Detailed works program: Community and cultural facilities

Proposed works	Cost of works	% section 94	Cost to be funded by future development	Cost apportioned to future resident population	Cost apportioned to future worker population
Multi-purpose community centres	\$9,680,000	100%	\$9,680,000	\$9,680,000	\$0
Ryde library	\$2,600,000	100%	\$2,600,000	\$1,170,000	\$1,430,000
Macquarie Park library – Leisure and learning centre	\$11,580,000	100%	\$11,580,000	\$5,211,000	\$6,369,000
Childcare, family & children facility	\$7,240,000	100%	\$7,240,000	\$3,258,000	\$3,982,000
HACC facility	\$6,660,000	45%	\$2,997,000	\$2,997,000	\$0
New recreation facility investigation	\$200,000	20%	\$40,000	\$40,000	\$0
New cultural facility, design build & fitout	\$3,700,000	100%	\$3,700,000	\$3,700,000	\$0
Civic Centre	\$12,500,000	100.0%	\$12,500,000	\$5,625,000	\$6,875,000
Total	\$54,160,000		\$50,337,000	\$31,681,000	\$18,656,000
Funds collected	\$0		\$1,041,787	\$770,922	\$270,865
Total less funds collected	\$0		\$49,295,213	\$30,910,078	\$18,385,135

Detailed works program: Open space and recreation facilities

Proposed works	Capital costs	Apportionment	Cost to be funded by future development	Cost apportioned to future resident population	Outside Macquarie Park	Inside Macquarie park
Structured recreation facilities						
North Ryde Park:						
Improvements 1 playing field clubhouse and amenity buildings improvements	\$234,000	100%	\$234,000	\$234,000	\$234,000	
Santa Rosa Park:						
Improvements 3 playing field clubhouse and amenity buildings improvements	\$540,000	100%	\$540,000	\$540,000	\$540,000	
Improvements to sportsgrounds:						
Pidding Park – equivalent 2 full size fields	\$2,100,000	100%	\$2,100,000	\$2,100,000	\$2,100,000	
Unstructured open space						
Ann Thom Park: refurbishment including play equipment	\$60,000	100%	\$60,000	\$60,000	\$60,000	

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Proposed works	Capital costs	Apportionment	Cost to be funded by future development	Cost apportioned to future resident population	Outside Macquarie Park	Inside Macquarie park
Memorial Park: landscaping and refurbishment	\$60,000	100%	\$60,000	\$60,000	\$60,000	
Fontenoy Park: redevelopment of unstructured open space.	\$1,000,000	100%	\$1,000,000	\$1,000,000	\$1,000,000	
Ryde Park	\$4,600,000	100%	\$4,600,000	\$4,600,000	\$4,600,000	
Teenage / young adult playground	\$800,000	100%	\$800,000	\$800,000	\$800,000	
Boulevard tree planting	\$400,000	100%	\$400,000	\$400,000	\$400,000	
Foreshore Parks - Putney to Gladesville embellishment	\$500,000	100%	\$500,000	\$500,000	\$500,000	
Eastwood park	\$1,500,000	100%	\$1,500,000	\$1,500,000	\$1,500,000	
ELS Hall improvements	\$1,230,000	100%	\$1,230,000	\$1,230,000	\$1,230,000	
North Ryde Park refurbishment:						
Playground -	\$65,000	100%	\$65,000	\$65,000	\$65,000	
Santa Rosa Park refurbishment:						
Playground -	\$116,000	100%	\$116,000	\$116,000	\$116,000	

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Proposed works	Capital costs	Apportionment	Cost to be funded by future development	Cost apportioned to future resident population	Outside Macquarie Park	Inside Macquarie park
Shepherds Bay open space: land acquisition and improvements	\$1,000,000	100%	\$1,000,000	\$1,000,000	\$1,000,000	
Meadowbank Park improvements	\$3,000,000	100%	\$3,000,000	\$3,000,000	\$3,000,000	
Macquarie park - new parks acquisition	\$44,810,400	100%	\$44,810,400	\$44,810,400		\$44,810,400
Macquarie park - new parks & linear parks construction	\$20,016,000	100%	\$20,016,000	\$20,016,000		\$20,016,000
Kittys Creek Trail in Portius Park	\$500,000	100%	\$500,000	\$500,000	\$500,000	
Shrimptons Creek Trail	\$500,000	100%	\$500,000	\$500,000	\$500,000	
Buffalo Creek Trail	\$1,000,000	100%	\$1,000,000	\$1,000,000	\$1,000,000	
Terrys Creek Trail	\$1,000,000	100%	\$1,000,000	\$1,000,000	\$1,000,000	
Open Space - Land acquisition	\$19,200,000	100%	\$19,200,000	\$19,200,000	\$19,200,000	
Total	\$104,231,400		\$104,231,400.00	\$104,231,400.00	\$39,405,000.00	\$64,826,400.00
Funds collected				\$3,093,391	\$3,093,391	
Total less funds collected				\$101,138,008.90	\$36,311,608.90	\$64,826,400.00

Detailed works program: Civic and urban improvements

Proposed works	Cost of works	% section 94	Cost funded by future development
Macquarie Park Corridor			
Public domain design and Construction	\$5,100,000	100%	\$5,100,000
Public domain land acquisition	\$17,379,920	100%	\$17,379,920
Macquarie Park Corridor	\$22,479,920	100%	\$22,479,920
Ryde Town Centre	\$10,000,000	100%	\$10,000,000
West Ryde	\$2,200,000	100%	\$2,200,000
Putney Village centre	\$260,000	100%	\$260,000
Midway	\$200,000	100%	\$200,000
Eastwood Town Centre	\$3,500,000	100%	\$3,500,000
Gladesville Town Centre	\$3,500,000	100%	\$3,500,000
Improve walkways and footpaths	\$550,000	100%	\$550,000
Meadowbank	\$1,500,000	100%	\$1,500,000
Total – other areas	\$21,710,000		\$21,710,000
Funds collected			\$3,052,611
Total less funds collected			\$18,657,389

Detailed works program: Roads and traffic management facilities

Proposed works	Cost of works	% section 94	Cost funded by future development
Macquarie Park Corridor			
Road design – proposed streets	\$500,000.00	100%	\$500,000.00
Road construction - public domain improvements			\$0.00
Upgrade of existing streets	\$1,900,000.00	100%	\$1,900,000.00
New Streets and traffic management	\$1,800,000.00	100%	\$1,800,000.00
Land acquisition – proposed streets	\$800,000.00	100%	\$800,000.00
Traffic management			\$0.00
- intersection signals (3 @ \$300 000 each)	\$900,000.00	100%	\$900,000.00
- roundabouts (6 @ \$100 000 each)	\$600,000.00	100%	\$600,000.00
Bus shelters	\$300,000.00	100%	\$300,000.00
Integration of Regional roads			\$0.00
- grade separation, Intersection & signal improvements	\$17,000,000.00	100%	\$17,000,000.00
Total – Macquarie Park	\$23,800,000.00		\$23,800,000.00
Funds collected			\$0.00
Total less funds collected			\$23,800,000.00
Other areas			
Roundabouts	\$935,000.00	100%	\$935,000.00

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Proposed works	Cost of works	% section 94	Cost funded by future development
Traffic management and road improvements	\$4,578,000.00	100%	\$4,578,000.00
Total – other areas	\$5,513,000.00		\$5,513,000.00
Funds collected			\$2,503,578.00
Total less funds collected			\$3,009,422.00

Adopted 11 December 2007

Detailed works program: Cycleways

Cycleways and Shared Paths	Value of Works	Apportionment to Future Development	Cost apportioned to future development
New Cycleway Construction Local Routes - as contained in Ryde Bike Plan 2007	\$600,000	100%	\$600,000
New Cycleway Construction Sub-Regional Routes - as contained in Ryde Bike Plan 2007	\$2,000,000	100%	\$2,000,000
New Cycleway - Rothesay Ave	\$146,000	100%	\$146,000
New Cycleway - Waterloo Rd (Herring Rd – Shrimplons Ck)	\$150,000	100%	\$150,000
Parramatta Foreshore Improvements & Ryde Parramatta River Walk (New Cycleways / Shared Pathways between Gladesville to Melrose Park)	\$1,800,000	100%	\$1,800,000
Total	\$4,696,000		\$4,696,000

Detailed works program: Stormwater management facilities

Proposed works	Cost of works	% section 94	Cost funded by future development
Macquarie Park Corridor			
Drainage risk management study and design	\$700,000	100%	\$700,000
North Ryde Golf Club Detention Pond	\$50,000	100%	\$50,000
Closed conduits and overland flow channels	\$2,000,000	100%	\$2,000,000
Total – Macquarie Park	\$2,750,000		\$2,750,000
Flood Mitigation Measures			
Eastwood and Terrys Creek Floodplain Risk Management Study and Plan	\$1,600,000	100%	\$1,600,000
Kitty and Buffalo Creek Floodplain Risk Management Study and Plan	\$900,000	100%	\$900,000
Parramatta River Catchments Floodplain Risk Management Study and Plan	\$2,170,000	100%	\$2,170,000
Stormwater Quality Improvement Measures			
Parry Park stormwater quality improvement device	\$125,000	11%	\$26,250
Hughes Street/Dunmore Road/Moss Street stormwater quality improvement device	\$375,000	11%	\$78,750
Buffalo Creek stormwater quality improvement device	\$250,000	11%	\$52,500
Looking Glass Bay stormwater quality improvement device	\$125,000	11%	\$26,250
Cudal Reserve stormwater quality improvement device	\$125,000	11%	\$26,250
Morrison's Bay stormwater quality improvement device	\$500,000	11%	\$105,000
Buffalo Creek remediation/restoration	\$250,000	11%	\$52,500
Strangers Creek remediation/restoration	\$250,000	11%	\$52,500
Terrys Creek remediation/restoration	\$500,000	11%	\$105,000
Shrimpton's Creek remediation/restoration	\$150,000	11%	\$31,500
Kittys Creek remediation/restoration	\$250,000	11%	\$52,500
Archers Creek remediation/restoration	\$585,000	11%	\$122,850
Total – other areas	\$11,670,000		\$5,053,350
Funds collected			\$0
Total less funds collected			\$5,053,350