

# Willoughby City Council 20 Year Asset Management Plans

2013/2014







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# 1. Executive Summary

This Asset Management Plan is to be read in conjunction with Council's Asset Management Policy & Strategy.

# 1.1. What does council provide?

Council provides playgrounds within its Local Government Area for the enjoyment and benefit of both the residents and visitors to the area. Assets comprising play spaces include individual items of play equipment and under-surfacing. Exercise stations are also provided in Open Space areas and are included in this Plan. Other types of assets such as fencing and picnic tables enhance the enjoyment of these play spaces, but are covered by Council's Passive Recreation Asset Management Plan.

Willoughby City Council is responsible for the care and maintenance of 39 playgrounds and 5 sites with exercise equipment within open space with a total estimated replacement value of \$2,295,969 and an additional 11 playgrounds within building facilities.

### 1.2. What does it cost?

Projected maintenance and operational expenditure for assets within playgrounds per annum, starting from the 2013/14 financial year is \$127,608 + CPI (3%) + 5% of new and the new portion of upgrade expenditure (extra maintenance requirements of new assets).

Projected renewal expenditure ranges from a low of \$39,174 in 2014/15 to a high of \$368,151 in 2032/33 (average \$198,810/annum) in the base case, and from \$95,521 in 2016/17 to \$586,915 in 2031/32 (average \$265,692/annum) in the sustainable case. The average gap is \$66,881/annum. CPI of 3% has been added to renewal expenditure.

The total value of planned new and upgrade works over the 20 year planning period is \$1.3M in the base case and \$2.8M in the sustainable case. This equates to an average gap of \$76,836/annum. CPI of 3% has been added to new and upgrade works expenditure.

### 1.3. How do we measure performance?

Target levels of service have been adopted by Council for assets covered by this Plan and can be found in Section 3.3 "Target levels of service". The target intervention point for renewal of playground equipment is 15 years of age or as advised in safety inspection reports. Results from the community engagement programme which took place in 2013 showed satisfaction with the condition of playgrounds, however compliance with Australian Standards is the main measure used to determine appropriate playground condition.

Defects found or reported that are outside thresholds for acceptable condition will be repaired within the response times laid out in Council's customer service charter and as described in Section 3.3 and Table 10.4.

Measures for other levels of service criteria will be defined in future versions of this plan.

### 1.4. What are the risks?

The main risks associated with this asset class are falls or injuries from equipment. The main risk management strategies are to:

- Ensure equipment manufacture and design, playground and exercise station design and installation, under surface manufacture and installation comply with Australian Standards;
- Use appropriately accredited inspectors to inspect equipment and softfall to ensure condition complies with Australian Standards.

A general weekly site inspection for all playgrounds is carried out by an external contractor. Play equipment, under-surfacing and exercise stations are subject to quarterly inspections in order to meet safety standards, and a more detailed annual inspection of under-surfacing, fall zones and equipment is also undertaken. This inspection regime ensures that defects are prioritised and actioned within appropriate timeframes wherever possible.

Whenever possible, defects are addressed on site. Otherwise these are prioritised and attended to in a timely manner to ensure safety for members of the community. When defects cannot be repaired immediately, an interim "make safe" measure may be taken and works scheduled for a later date.

# 1.5. Community consultation

Community consultation specifically relating to asset management within playground facilities and other asset classes was completed in 2013 as part of Council's community engagement strategy. Council also has understanding of community expectations in the context of playground assets due to the regular targeted consultation that takes place before park upgrades and Masterplan development, and from general satisfaction surveys conducted by Council periodically.

Consultation results show that the community is generally satisfied with the number of playgrounds provided and the quality and maintenance of playgrounds assets. Most people think a small playground close to home is more important than a larger facility servicing a bigger area. According to the community, a well maintained playground is clean, tidy and safe with equipment in good working order.

The community's expectations about asset condition align with Council's for the majority of assets, and in some cases, the community's expectations are lower than Council's, particularly for smaller, less developed parks. Therefore target levels of service have been reduced for some assets in these parks as a result of the consultation.

#### 1.6. What does the future hold?

Timely maintenance and renewals of equipment is the ongoing priority for this asset class, and these projects will continue to be prioritised due to the associated risk management issues.

There is limited opportunity for construction of new playgrounds, however land developments may result in new playgrounds at Market Gardens Park and Gore Hill Park. Demand management will mainly consist of expansion of existing facilities identified in park Master plans.

### 2. Introduction

This Asset Management Plan (henceforth referred to as the *Plan*) forms part of Council's Resourcing Strategy under the NSW Integrated Planning and Reporting Framework. It is to be read in conjunction with Council's Asset Management Policy and Improvement Strategy (AMIS), to which frequent reference is made to avoid repetition within the Plan. The AMIS should be consulted for relationships between this Plan and other documents in the Integrated Planning & Reporting Framework.

### 2.1. Background

The purpose of this Plan is to demonstrate the sustainable provision and maintenance of all of the assets covered in the Plan and the services that rely on those assets. This Plan is a working document that spells out in detail the current state of assets, future plans for their management, associated costs and performance targets. It is designed so that it may be consulted by Council staff and members of the community alike.

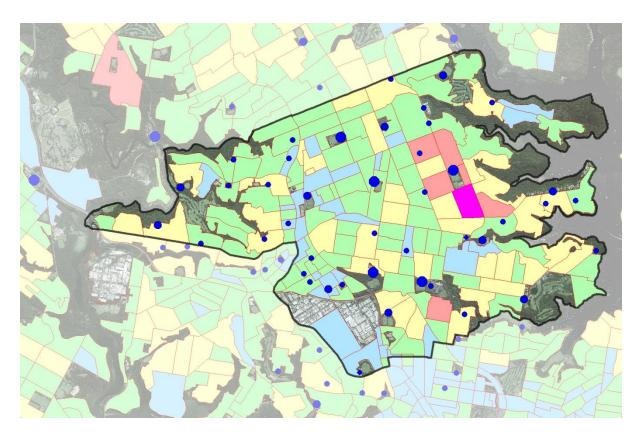
Willoughby City Council is responsible for the provision and maintenance of 39 playgrounds and 5 sites with exercise equipment within open space with a total estimated replacement value of \$2,295,969 and an additional 10 playgrounds within building facilities.

The assets covered by this Plan are summarised in Table 2.1.

Table 2.1 Assets covered by this plan

Asset category	Dimensions/quantity	Replacement value (\$millions)
Play equipment	210 items	\$1,267,216
Softfall	10,491m²	\$619,286
Edging	4,530m	\$194,914
Exercise stations	5 sites	\$168,581
TOTAL		\$2,295,969

There are 49 playgrounds located on Willoughby City Council managed land. Of these, 39 are located within Open Space, and these are covered in this Plan. The remaining ten playgrounds are located within, and managed as part of, Council's various building facilities (Children's and Community Centres) and are thus covered by the Buildings Asset Management Plan. The locations of playgrounds accessible to the public in the city of Willoughby and its immediate surrounds are shown in Figure 2.1.



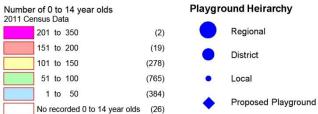


Figure 2.1 Playground locations and no. of children aged 0-14

This map shows the playgrounds as classified according to the Playgrounds Development Plan (1997) hierarchy. These hierarchy categories will be reviewed to align with the Recreation and Open Space Planning Guidelines for Local Government (NSW Dept Planning Dec 2010) classifications and the parks in which they are located. The map also shows the number of children living in each census collection zone according to the 2011 census.

Some overlap exists between asset classes and planning and budgeting responsibility within Council. For example, playgrounds that fall within parks and reserves are the sole responsibility of the Open Space branch, whereas playgrounds associated within building facilities are funded and maintained by the Community Services division. A number of other asset types, such as pathways and bench seats, may be present within playgrounds; however these will be treated in the Passive Recreation (Parks) Asset Management Plan, grouped with other assets of the same type within parks, since distinctions cannot always be drawn easily between parks and playgrounds where these asset types are concerned. Table 2.2 lays out responsibilities for those assets not covered by this Plan.

Table 2.2 Assets NOT covered by this plan.

Asset category	Plan covering asset category	Division/branch responsible
Play equipment associated with Council-owned and run childcare facilities (i.e. not within Parks or Reserves)	Buildings Asset Management Plan	Community Services
Footpaths and fencing associated with Council-owned and run childcare facilities	Buildings Asset Management Plan	Property Construction and Maintenance
Fencing	Passive Recreation (Parks) Asset Management Plan	Open Space (Passive recreation)
Playground furniture, signs, artworks and garden features	Passive Recreation (Parks) Asset Management Plan	Open Space (Passive recreation)

Other planning documents that apply to some or all of the assets covered in this Plan are listed in Figure 2.2 and their relationship to this Plan described.

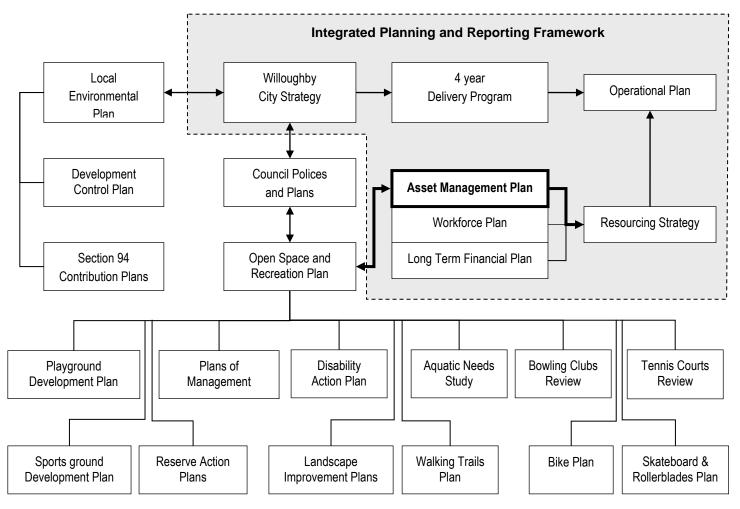


Figure 2.2 Context of Asset Management Planning within Open Space and Recreation Planning

Key stakeholders in the preparation and implementation of this plan and their respective roles are listed in Table 2.3.

Table 2.3 Key stakeholders and roles relating to asset management planning

Stakeholder	Role
Asset Management Controller	Coordinates preparation of plan, ensures links are retained between relevant asset management planning documents, assists with information flows into and from this Plan.
Infrastructure Services Director	Approval of capital programs, maintenance and inspection schedules and risk management.
Open Space Branch	Preparation of Plan, data collection & maintenance, long term planning, maintenance and construction of assets.
Financial Services Branch	Receipt of fair value valuations at end of financial year, provision of budgets from the long term financial plan, receipt of projections relating to expenditure gaps.
Progress associations, community	Determination of service level targets, feedback about new/upgraded assets
Councillors	Financial and planning decisions, community representation
Insurers and risk management staff	Risk management

# 2.2. Goals and objectives of asset management

The overarching principle, goals and objectives of asset management are those described in the AMIS and are not repeated here. Council's community strategic plan – the Willoughby City Strategy – identifies a number of outcomes in order to achieve the overall vision for the community, and any of the strategies for achieving these outcomes rely on asset management strategies. The outcomes as they relate to the assets covered in this Plan are listed in **Error! Reference source not found.** along with the strategies for achieving hose outcomes.

Table 2.4 Council Goals and how these are addressed in this Plan

Subtheme	Outcome	Relevance to asset management plan
Efficient Asset Management Goal: To provide financially sustainable physical infrastructure that meets the needs of the community without burdening future generations.	4.1.1 Planning, maintenance and operation of infrastructure	The Plan ensures that Asset Management objectives are met eg whole of life cycle costs, sustainability and risk management principles, demand management, funding methods and service levels are considered for all infrastructure.
Health & Wellbeing Goal: To be a healthy, educated, safe and interactive regional community, with open space, sport and recreation facilities and programs which promote healthy lifestyles and	1.3.1 Accessible open space and recreational facilities for the community are provided.	Monitoring of performance against levels of service and acceptable condition ratings, and assessment of asset management practices help to provide attractive public spaces.  Analysis of demand factors such as demographics & inventory of current assets is used to identify requirements for playspaces for an appropriate range of ages and abilities, access improvements and opportunities for asset development in partnership with other agencies.  Financial planning will maximise opportunities to meet the demand for a wide range of recreational activities.

Subtheme	Outcome	Relevance to asset management plan
contribute to the social, spiritual, emotional and physical wellbeing of the community.	1.3.2 Healthy living and wellbeing are encouraged.	Levels of service (e.g. frequency of playground safety inspections) and condition ratings of equipment are determined that result in acceptable safety and service provision levels. Management of risks associated with asset failures is a key element of asset management. Financial planning to budget for annual repairs is undertaken. Analysis of sport and recreation facilities provision requirements to facilitate healthy living is included in the asset management plans.
Open Government Goal: To ensure transparency and ethical practices in everything that we do.	6.1.1 A Council that is open, accountable and represents its constituents.	The plan exhibits to users and constituents the costs associated with varying levels of service, the current service provision considered acceptable and resource allocation decision making methods.  The 2013 community consultation programme used a variety of media, and helped inform constituents and establish acceptable levels of service.
Community Engagement Goal: To have a participatory informed community.	6.2.1 A community that is informed of key Council policies, services and activities and can participate in the decision making process.	Refer 6.1.1 & 6.3.2
Business Efficiency and Service Delivery Goal: To provide strong financial management and a high quality of service delivery.	6.3.1 Council maintains a strong sustainable financial position.	Effective asset management means maximising the service provided to the community by all Council assets over the asset's life, given the funding available. The Plan ensures that a life-cycle costs approach is taken in asset management planning, and that the service potential of all assets is maximised
	6.3.2 Council services are delivered to a quality standard, are sustainable and responsive to community needs.	Monitoring of performance against levels of service and acceptable condition ratings, and assessment of asset management practices help deliver services to an appropriate quality standard.  Service standards are being set with input from the community through a year long consultation process. Site specific consultation is also undertaken as part of the development of a Masterplan or Landscape Improvement Plan.

This Plan contains the works programs, maintenance and inspection regimes and actions for improvement that should be followed to ensure the outcomes in the Willoughby City Strategy, as they relate specifically to the assets covered by the Plan, are achieved.

### 2.3. Plan framework

This Plan contains the following information that will enable Council to achieve sound strategic management of its vast asset stock:

- Current and target levels of service provision and strategies to address gaps (Section 3 Levels of Service)
- The impacts of current and future demand on the delivery of services and strategies to address them (Section 4 Future demand)
- Activities associated with managing Council's assets throughout their life cycles (Section 5 Lifecycle management plan)
- A summary of the funds required to provide services and meet targets (Section 6 Financial summary)
- A summary of current business processes and asset management practices (Section 7 Asset Management Practices)
- Actions to ensure improved management of the assets covered by this Plan (Section 8 Plan Improvement and Monitoring)

# 2.4. Core and advanced asset management

The difference between core and advanced asset management is explained in the AMIS.

This Plan has been prepared using an advanced, or bottom-up, approach. Data is available concerning the dimensions, condition and value of all assets covered by this Plan, and this data has formed the basis for all planning and financial projections. Data concerning the performance of Council's assets will improve assumptions relating to financial projections, but these data are not currently available. This Plan will therefore become more advanced each time it is revised.

# 3. Levels of Service

The level to which services are provided by Council, shortened to *levels of service*, is an important factor in asset management planning. Council needs to know the type of assets required to deliver certain services, how many of them are needed, where they should be located, the quality that is expected from them, the level of maintenance required and the level of risk that might be considered acceptable. There are financial implications for all of these decisions.

The AMIS provides all necessary detail about Council's approach to determining target levels of service. Only information relating specifically to the assets covered by this Plan can be found in this Section.

# 3.1. Legislative requirements

While most levels of service are set in consultation with the community, the provision of certain services and assets must take place according to existing legislation. The legislative requirements that relate to this Plan are listed in Table 3.1. There are also several non-legislated Australian Standards that apply to playground assets, and these are listed in Table 5.6.

Table 3.1 Legislative requirements impacting on management of assets covered by this Plan

Legislation	Impact on management of assets		
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan and Resourcing Strategy in conjunction with asset management plans for sustainable service delivery.		
Disability Discrimination Act 1992	The DDA requires all employers, educators and providers of services in the public and private sectors to make whatever adjustments are necessary and reasonable to allow people with disabilities to use those services to the same extent as other people.		
Crown Lands Act 1989 & Crown Land Regulation 2006 Environmental protection principles must be observed, natural resources conserved, public enjoyment, and multiple use encouraged, land and its resources should be sustained in producing land should be occupied, used, sold, leased, licensed or otherwise dealt with in the best in State consistent with these principles.			
Environmental Planning and Assessment Act 1979	Provides the basis for preparing landuse planning instruments, and sets out processes for development and building approvals. Section 94A enables Councils to levy developers for a contribution towards the costs of providing community infrastructure.		
Australian Accounting Standards.	Sets out the financial reporting standards relating to infrastructure assets. Standards of particular relevance to Infrastructure Assets include:  AASB13 Fair Value Measurement – defines fair value of assets and sets out a framework for measuring fair value and required disclosures  AASB 116 Property, Plant & Equipment – prescribes requirements for recognition and depreciation of		
	property, plant and equipment assets  AASB 136 Impairment of Assets – aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts  AASB 1021 Depreciation of Non-Current Assets – specifies how depreciation is to be calculated  AAS 1001 Accounting Policies – specifies the policies that Council is to have for recognition of assets		
	and depreciation  AASB 1041 Accounting for the reduction of Non-Current Assets – specifies the frequency and basis of calculating depreciation and revaluation basis used for assets  AASB 1015 Accounting for acquisition of assets – method of allocating the value to new assets on acquisition		

### 3.2. Customer research and expectations

Council has undertaken a comprehensive community engagement program to determine the community's level of satisfaction with, and expectations for, Council's assets. The results of a detailed survey in 2013 indicated that levels of satisfaction with each major asset class were overwhelmingly high. These are summarised in Figure 3.1.

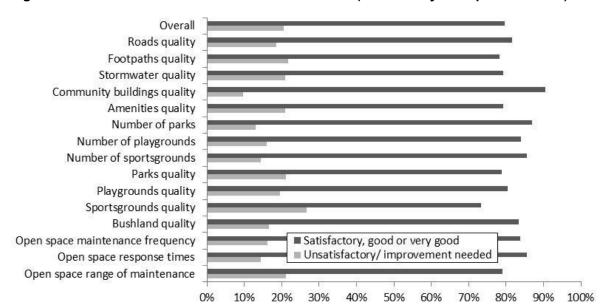


Figure 3.1 Levels of satisfaction with Council's assets (100+ surveys completed in 2013)

Expectations for assets were determined through comments from the same detailed survey as well as an online forum with high participation and consultation with a panel of 40 community members who had to opportunity to become very informed about Council's assets and asset management processes. Consultation with attendees of a public meeting to discuss the updated Open Space and Recreation Plan, and a related online survey were further sources of information regarding Open Space assets.

The community's levels of service expectations specifically relating to playgrounds are also determined from feedback during Reserve Action Plan or Masterplan consultation. Before a facility is upgraded or a Masterplan produced, the local community is asked to comment. Results of the consultation are then used to formulate the plan. Comments generally relate to development levels of service such as requests for more furniture, particular items of play equipment, pathways, fencing, lighting and exercise stations and maintenance levels of service of assets such as trees and grass.

### **Community Levels of Service**

The following results are a summary of the community engagement programme feedback. More detailed results are included in Appendix C – Levels of service.

Characteristics of a well maintained playground:

- Clean and tidy
- Safe equipment in good working order

Clean and functioning toilets and washbasins (included in Buildings Asset Management Plan) were also listed as requirements for a well maintained playground.

Playgrounds are considered an essential facility in large, busy, well developed parks, and optional in medium and small parks. The three asset types of most importance in a playground are:

- "Traditional" play equipment such as swings, slides, spinners, climbers
- Open grass area for crawling, running, informal ball games
- Fencing

The majority of people (93%) believe that a small playground within walking distance of home is more important than a larger site with a greater range of facilities that services a wider area.

Most people are satisfied with the number of playgrounds in Willoughby City.

46% of respondents think that playgrounds provide an adequate range of experiences for children of all abilities, but 46% also believe that there are not enough for higher skill levels eg for children over 10 years old.

46% of respondents think that playgrounds should always be fenced, regardless of size and location, and 46% think fencing is only needed if hazards are nearby.

Results relating to condition and maintenance response times are included in section 3.3 Target levels of service

# 3.3. Target levels of service

Target levels of service have been adopted by Council for assets covered by this Plan. These targets relate to the physical condition of assets, and drive renewal or rehabilitation programs

Several questions relating to playground quality were included in surveys of the Citizens Panel and community in general. Most people are satisfied with the quality and maintenance of playgrounds and exercise stations.

The condition of playground assets was not included in photo grids for assessment by the community, as Australian Standards are used to determine appropriate playground condition. External specialists carry out safety inspections and report on required condition improvements.

In addition to the 2013 specific community engagement programme, Council also conducts general community satisfaction survey every few years. The results of the 2012 survey conducted by IRIS Research Ltd support the results of the 2013 programme. The mean score out of 5 for "satisfaction – Infrastructure Assets" was 3.8 for condition of playgrounds and play equipment. These results are all classified as "high satisfaction" scores. When compared to data on the performance of Councils which are comparable (Metropolitan Councils) to Willoughby City Council, provision of playgrounds is performing on par with comparable measure, and maintenance of parks and playgrounds is performing significantly better than comparable measure.

Figure 3.2 Target levels of service for assets covered by this Plan.

Asset type, category or hierarchy	Target level of service
Playgrounds	15 years old or as advised in safety inspection reports
Exercise equipment	4 or as advised in safety inspection reports

Replacement of equipment takes place on the basis of these inspections. In general, the average expected life for an item of playground equipment is 15 years. Equipment older than 15 years may require more intensive and consequently more expensive safety inspections to be conducted, such as structural integrity

testing of posts. Exercise equipment is subject to the same inspection regime as play equipment for risk management purposes.

Maintenance response times considered appropriate by the community according to the consultation results align with those defined by Council staff for make safe time (24 hours), however one week for a permanent fix is often not possible if parts are unavailable, and target levels are therefore dependent on parts availability.

More detailed information regarding these results is provided in Appendix C – Levels of service and response times set by Council for specific reactive maintenance tasks is provided in Appendix A – Maintenance and inspection program. Levels of service also need to be identified for factors other than physical condition and appearance. For the assets covered by this Plan, measures of service delivery that have not yet been developed but which are relevant include:

- Quantity & location
- Capacity
- Functionality
- Legislative compliance

These factors are already taken into account informally in everyday management, but have not been formally documented or measured at this time.

### 3.4. Current levels of service

The Level of Service targets listed in Table 3.2 are currently being met for the majority of playgrounds assets, however there are 16 pieces of equipment that are older than 15 years. Some of these pieces have been restored as part of playground upgrades, and the remaining equipment is programmed for renewal within the next two years.

Consultation results indicate that the community is satisfied with the number of playgrounds.

Deficiencies in service provision identified are listed in Error! Reference source not found.".

The level of service provision deemed appropriate for most criteria are defined for each asset class, whilst some criteria are still under development. These are summarised in Table 3.2.

**Table 3.2 Performance targets for Playgrounds Assets** 

Service criteria	Technical Indicator	Measurement Scale	Technical Performance Target	Current Performance
Quality	Physical condition based on quarterly safety audits, indicated by priority rating (1-5)	Percentage of priority actions completed within recommended time frame	90%	80%
Quantity	Number of services	*	*	*
Capacity	Appropriate to demand	*	*	*
Functionality	Fitness for purpose	*	*	*
Responsiveness	Inspect, make-safe or repair	Make safe/initial inspection within 24hrs. Repair time dependent on parts availability.	Initial inspection falls within defined time period for at least 90% of issues	Unknown
Compliance with standards	Compliant or not	Percentage of compliant sites	Minimum 80% compliance	80%

### 4. Future demand

This section assesses current and likely future demand, and presents demand management strategies to ensure that the needs of the community continue to be met.

### 4.1. Demand forecast

The target demographic group for playground assets is children between the ages of 0 and 11 years, or possibly as old as 14 years for some types of playgrounds. Provision of services should also target other specific demographic groups, including:

- "tweens" aged 12-17 years
- parents and primary carers aged 29-45 years
- grandparents and secondary carers aged 70+ years

The current distribution of children aged 0-14 within the city of Willoughby is shown in Figure 2.1 alongside the current location of all playgrounds within the City.

The following statistics are provided by .id (informed decisions) forecast, 2013:

- The suburb with the highest number of children aged 0-14 in 2013 is Artarmon, followed by Northbridge and North Willoughby-Willoughby East. In 2031 Willoughby is forecast to have the highest number, ahead of Northbridge and North Willoughby-Willoughby East.
- The increase in number between 2013 and 2031 will be highest in the Chatswood CBD (an increase of 465 children).
- There are forecast to be less children in Artarmon (-283), Castlecrag (-113), Chatswood West (-29), Naremburn (-7) and North Willoughby Willoughby East (-6) in 2031 than in 2013, while there will be more children in all other suburbs.

Changes in population for particular age ranges and the impact these changes have on services are shown in Table 4.1

Table 4.1 Demand Factors, Projections and Impact on Services

Age Range	2006	2031	change	Impact on services
0 to 4 years	4,542	5,053	511	Provision of quality equipment for toddlers & supplementary facilities such as furniture that can be used as change tables + shaded seating for carers will continue to be required. Maintain provision of equipment that toddlers can use by themselves or with some help. Role, theme and informal play are the main focus of 2-6yr olds. Provision of small parks with play equipment within walking distance of the home, or in centralised larger parks served by footpaths for stroller access will continue to be required.
5 to 11 years	5,172	6,173	1,001	Playground upgrades will need to include experiences to expand the physical capability and encourage children to play outside their comfort zone.
12 to 17 years	4,121	5,176	1,055	Outdoor play spaces where "tweens" can meet that are not too childish, and which include physically challenging play experiences for older children, should be provided in future playground upgrades.
18 to 24 years	6,646	7,911	1,265	-
25 to 34 years	11,559	12,889	1,330	Ancillary services in playgrounds for carers will continue to be required.
35 to 49 years	15,888	17,887	1,999	

Age Range	2006	2031	change	Impact on services	
50 to 59 years	8,134	10,024	1,890	-	
60 to 69 years	4,807	7,564	2,757	-	
70 to 84 years	4,738	7,605	2,867	The importance of incorporating accessibility & universal design principles into upgrades will be of greater significance to provide for grandparents and older	
85 and over years	1,284	1,750	466	carers, particularly given the largest population increase in the 70-84 years age group. Equipment suitable for seniors may be included in exercise stations.	
Total Population	66,891	82,032	15,141	An increasing population will result in increased use of existing playgrounds, and perhaps demand for additional playgrounds. Capacity of existing facilities and new opportunities will need to keep pace with population and employment growth. There is potential for overuse of facilities resulting in increased maintenance expenses.	

Further statistics are provided in Appendix E – Future Demand.

# 4.2. Demand management plan

Demand for new services will be managed through a combination of managing existing assets, upgrading existing assets and providing new assets to meet demand. Demand management practices include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in Table 4.2

**Table 4.2 Demand Management Plan Summary** 

Service Activity	Options For Meeting Demand Challenges (NSW Department of Planning, 2010)	Demand Management Actions (Open Space & Recreation Plan 2013):
Providing new playgrounds	Converting or adapting existing open space	Construct new playgrounds identified in Masterplans for Gore Hill Park and Market Gardens Park.
		Consider play facilities in parks which currently do not have playgrounds when new Masterplans/Landscape Improvement Plans are produced.
Upgrading and renewing existing	Converting or adapting existing open space	Include children's bike paths, physically challenging equipment and water play areas in upgrades.
playgrounds		Implement the playground renewal programme as listed in this AMP.
		Incorporate "Safer by Design" concepts in new planning
		Incorporate exercise stations in park upgrades where a need has been identified
Managing existing playgrounds	Maintenance actions should be directed to efficient resource use	Continue safety inspections and cleaning
Non-asset solutions	Using alternative, commercial facilities and venues for recreation on an opportunistic basis.	Support the establishment of private indoor children's play centres in the Chatswood CBD, retail, commercial and industrial areas.
	Seek agreements with educational or other Institutions for co-use of open space	Pursue partnerships and joint ventures with schools and other providers to allow public access to playgrounds on non public land.

# 4.3. Changes in technology

Technology and other changes forecast to affect the delivery of services covered by this plan are specified in Table 4.3 and

Table 4.4.

Table 4.3 Changes in Technology and Forecast effect on Service Delivery

Technology Change	Effect on Service Delivery		
Implementation of Council's AMS	Key areas of concern in service delivery will be identified and addressed as implementation progresses and more data becomes available on level of service criteria. Service provision is also expected to become more efficient, enabling increased service delivery.		
Play equipment for youth based on electronic gaming (eg Kompan's "Icon" range).	This range is new, and its popularity as yet unknown. Additional risk assessments and testing of electrical components would be required. Additional costs include installation costs, ongoing electricity costs, and games and software updates. Maintenance and repair costs are unknown.		
Changes to Australian Standards	Upgrading of equipment may be necessary to comply with a new or amended standard e.g. swing drops.		
More recent trends to wider range of recreational opportunities, e.g. water play, adventure play.	Integrate opportunities for water play in park and public domain upgrades and new developments.  Install water play at Willoughby Park and Gore Hill Park as per Master Plans. (Open Space and Recreation Action Plan 1.21)		
Increased need for sustainable development.	Sustainability considerations are integrated into Open Space design, planning, management and maintenance practices. A balance between cost and sustainable benefits must be negotiated.		
Improvement in "access for all" designed equipment.	A wider range of play equipment accessible to all can be provided.		

**Table 4.4 Other Changes Affecting Service Delivery** 

Change	Effect on Service Delivery	
Focus on sustainable planning, design and construction	Use of different materials, local suppliers.	
Materials price fluctuations	e.g. price of steel and concrete has significantly increased the cost of assets such as picnic shelters and pathways.	
Labour shortage	Availability of skilled staff affects the quality and timing of service delivery.	
Perceptions and incidences of crime	Design of recreation spaces, particularly through adopting Crime Prevention through Environmental Design principles, increased maintenance costs for repairs and graffiti removal.	

# 4.4. New assets from growth

The high cost of purchasing land in the City and its highly developed nature limit the opportunities for the creation of new playgrounds. Therefore the focus of managing demand will be on the expansion of existing playground facilities. There is however still some potential to develop play facilities in parks which currently do not have playgrounds. New playgrounds are included in the Gore Hill Park and Market Gardens Park Masterplans. Some parks without playgrounds are not considered suitable due to factors such as steep access (eg Hallstrom Point), small size and close proximity to other facilities (eg Hemsley Estate Reserves). Partnerships with private organisations and schools can also be considered.

The projected values of required new assets are summarised in. New assets include both entirely new playgrounds and expansion of existing playgrounds.

Acquiring these new assets will commit council to fund ongoing operations and maintenance costs for the period that the service provided from the assets is required. These whole-of-life costs are identified and considered in developing forecasts of future operating and maintenance costs included in Section 5..

Table 4.5 Cost estimates for new assets from growth

Playground	Cost estimate	Comments	
Gore Hill	\$365,000	New playground – dependent on development of Royal North Shore Hospital and developer contributions	
Market Gardens	\$150,000	New playground	
Muston Park	\$270,000	Expansion to existing playground	
Naremburn Park	\$200,000	Additional equipment	
The Bailey	\$30,000	Stage 2 of upgrade – new equipment	
Willoughby Park	\$250,000	New water playspace	

# 5. Lifecycle management plan

This section details how Council plans to manage and operate the assets covered by this Plan to achieve target levels of service (Section 3.3).

# 5.1. Background data

### 5.1.1. Physical parameters

Council is responsible for 49 playgrounds and five exercise station sites. Of the playgrounds, 39 are located within Open Space and are inspected and maintained by the Open Space branch, five are the responsibility of Community Services, four are the responsibility of Children's Services and one is of shared responsibility. In addition to public children's play facilities provided by Council, private child care centres and commercial indoor play centres (such as in Westfield) also provide for children's play.

For a summary of the dimensions and replacement cost of these assets refer to Table 2.1 and Figure 2.1 for a map of their locations.

Data collection for the assets covered by this Plan has been completed but confidence in the data varies depending on method of collection. The types of assets covered and the status of asset data are provided in Table 5.1.

Table 5.1 Data available for the assets covered by this Plan

Asset category Data Confidence		Status of data collection	
Play equipment	95%	Equipment itemised in quarterly inspection reports from specialist contractor	
Playground under- surfacing and borders	85%	Equipment itemised in inspection reports but some uncertainty regarding extent of softfall requirements at some sites. Confidence has improved since the contractor reviewed the data in 2013.	
Exercise stations	100%	Equipment itemised and condition rated in quarterly inspection reports + staff knowledge.	

Five playgrounds consist of only a single piece of equipment such as swings or a slide. Just under half of the playgrounds are either fully or partly fenced. Some playgrounds include children's bike tracks in addition to traditional play equipment; however these are not covered by this Plan at this stage.

# 5.1.2. Asset capacity and performance

Council's services are generally provided to meet design standards or guidelines where these are available. Locations where deficiencies in service provision or asset performance are known are detailed in Table 5.2.

Table 5.2 Known service performance deficiencies

Location	Service Deficiency	Strategy to address deficiency
Chatswood CBD	Insufficient provision of play spaces. Chatswood Park provides the only playground in the Chatswood CBD	Support the establishment of private indoor children's play centres in the Chatswood CBD, retail, commercial and industrial areas (PEP 2013)
Playgrounds in general	Bike tracks to learn to ride bikes safely, especially children aged 2 to 5 years	Include in playground upgrade plans (PEP 2013)
	Some equipment/equipment components not complying with amended standards. Parts may need to be modified.	Annual repairs are required to return equipment to acceptable standard. Some equipment may need to be modified to comply

Location	Service Deficiency	Strategy to address deficiency	
	Equipment over 15 years old.	Upgrades need to be completed to keep pace with aging of equipment – capital programme and financial modelling has been completed to facilitate process.	
Play structures for older children such as climbing nets and walls, flying foxes		Include in playground upgrade plans (PEP 2013)	
	Access issues as identified in the Playgrounds Access Audit (2000)	Continue to modify the playgrounds in parks identified as priorities for improved accessibility, and improve access in future upgrades of all playgrounds (PEP 2013)	

Strategies to address known service deficiencies form part of the list of actions arising from this Plan.

### 5.1.3. Asset condition

The distribution of condition ratings amongst the assets covered by this Plan is shown in Figure 5.1. Council rates the physical conditions based on a standard 0-5 scale, where zero represents a brand new asset and five is the end of the expected life. For detail regarding the condition rating scale, see the AMIS.

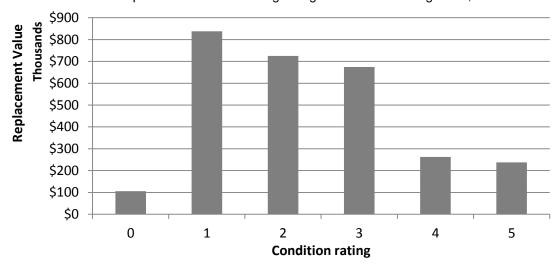


Figure 5.1 Distribution of physical condition ratings

Council's standard condition rating scale has been modified for this asset class. As equipment age is the main driver of renewal timing, condition ratings have been allocated dependent on age. If equipment is 15 years or older, a rating of 5 (or end of expected life) is given and if younger than 15 years, the condition is equal to the age divided by 3. The methodology requires further review to increase criteria for consideration when condition rating these assets, as the 15 year life is an average figure and some items of equipment may have longer or shorter expected useful lives. Replacement of equipment takes place on the basis of comprehensive and regular inspections by a third party, and 15 year old equipment may still be in acceptable condition. Conversely, equipment sometimes deteriorates to a condition beyond repair at a younger age.

# 5.1.4. Asset valuations

Council values all assets at Fair Value. The assumptions and calculation methods associated with valuations are documented in Council's Asset Valuation Methodology. Valuations for the assets covered by this Plan are provided in Table 5.3.

Table 5.3 Valuations for assets covered by this plan

Asset type	Current replacement cost	Depreciated replacement cost (fair value)	2012/13 depreciation expense
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Ass	set type	Current replacement cost	Depreciated replacement cost (fair value)	2012/13 depreciation expense
	assets covered his Plan	\$2,295,969	\$1,141,138	\$126,371

Indicators of Council's financial sustainability can be derived from fair value figures. These are reported in Table 5.4.

Table 5.4 Financial sustainability indicators for assets covered by this Plan

Indicator	Calculation method	Working	Result
Asset consumption	2012-2013 depreciation / depreciable amount * 100	\$126,371/\$2,295,969 x 100	5.5%
Asset renewal	2012-13 renewal spend / depreciable amount * 100	\$84,790/\$2,295,969	3.7%
Asset upgrade	2012-13 capital spend / depreciable amount * 100	\$253,139/\$2,295,969	11%

The consumption rate is higher than the renewal rate which indicates that assets within playgrounds may not being renewed in a timely fashion, however it would be unreasonable to expect these two rates to match exactly as a number of assumptions involved in calculating valuations need to be (and will be continually) refined. In general playground renewals are given priority over park renewals due to risk management factors, and the difference between playground assets consumption and renewal is less than the figures for parks assets.

The upgrade rate indicates that any existing funding shortfalls will be exacerbated in the future because the increases in the overall asset stock will not be matched by funding. This could further compromise Council's ability to provide acceptable levels of service unless appropriate planning measures are put in place. This Plan is a crucial part of that process.

### 5.2. Risk management plan

A general weekly site inspection for all playgrounds is carried out by a specialist contractor with appropriate accreditation. Play equipment, under-surfacing and exercise stations are subject to quarterly inspections in order to meet safety standards. This means that data on playground equipment and condition is available and up-to-date. A detailed annual inspection of under-surfacing, fall zones and equipment is also undertaken. All resulting maintenance work on playgrounds is prioritised according to a priority index that is supplied as part of the inspection.

Playground development is guided by non-legislated Australian Standards. These are listed in Table 5.6As part of each playground upgrade, under-surfacing and equipment is renewed, and layout of equipment designed to ensure travel paths in playgrounds are free from obstruction. Provision of shade for children and carers is considered when playgrounds are designed and upgraded. Existing playground mulch under-surface is topped up and aerated as required to meet appropriate Australian Standards.

Of particular note from the list of standards in Table 5.6 are the Safer By Design principles, the use of which aims to minimise crime and anti-social behaviour including vandalism and graffiti, and help to ensure park and playground users feel that they are in a safe environment. The principles include fostering a strong sense of community ownership of parks, provision of security lighting in appropriate locations, maximising casual surveillance from surrounding properties and providing clear entrances, exits and pathways through the parks.

Playgrounds with a potential nearby hazard such as a busy road, car park, water, bike path, steep drop, sportsground or off leash dog exercise area are fenced. Alternatives such as plants are used if appropriate.

Plant species used in playgrounds are chosen after considering hazards such as thorns, toxicity, irritants and attraction of stinging insects. Facilities such as seating and shade are provided inside the fence to encourage appropriate supervision level by carers. Dogs are not permitted within 10m of playgrounds, as indicated by regulatory signs and in accordance with the Companion Animals Act 1998. Council's smoke free environment policy was adopted 2010 and applies to a variety of public places including within 20 metres of playgrounds.

Any fall that results in a consequence that is more than a minor injury would provide an overall risk score of Very High or Extreme. Regular inspections of equipment and upgrades to meet safety standards are therefore an essential component of risk management. The risk rating is high to extreme for the majority of risks associated with playgrounds. This is due to the nature of the service provided by playgrounds, and the age group using these assets. To evaluate a risk rating for the risks in the above table, some of the worst possible consequences of each risk were considered; for example the consequence of a fall was considered to be a head injury rather than a sore knee. The risk treatment plans are in place to reduce the likelihood and consequences of these risks.

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks to Council. The risk assessment process is documented in the AMIS and identifies credible risks, likelihood of risk events occurring and consequences should the event occur. Risk ratings have been developed so that risks may be evaluated and, where non-acceptable, risk treatment plans developed. Risks for which risk treatment plans are required are listed in Table 5.5.

Table 5.5 Critical risks and treatment plans for assets covered by this Plan

Asset class	What can Happen	Risk Rating	Risk Treatment Plan
Play Equipment	Fall  Entrapment (gaps can trap body parts such as head, hands, feet and limbs)  Cuts, Piercing, Bruising, Splinters (e.g. from protruding bolts, sharp edges, split timber)  Crush injuries (moving parts in eg swings and see saws crush or pinch)  Entanglement (hooks entangle clothing, ropes form a loop)	Extreme  High  Extreme  Extreme	Weekly, quarterly and annual safety inspections of equipment, borders and under surfacing. Records of inspections produced and stored.  Equipment manufacture and design, playground design (incl fall zones), and installation and under surface to comply with Australian Standards.  Completion of recommended repairs/maintenance with priority rating of 4 (or 5). Implementation of prioritised playground upgrade programme.  Facilities such as seating and shade provided inside the fence to encourage appropriate supervision level by carers. Specific signs at Willoughby Park installed as reminder that supervision required.
	Burn from hot equipment	High	Provision of shade for children and carers is considered when playgrounds are designed and upgraded.
Under- surfacing or Borders	Disease (animal fouling sand) or injury from hidden objects	Very High	Weekly/biweekly cleaning/inspections. Use of playground mulch rather than sand where appropriate.  Dogs prohibited within 10m of playgrounds – advised on regulatory signs and separate signs in playgrounds where required.

Asset class	What can Happen	Risk Rating	Risk Treatment Plan	
	Cuts, Piercing, Bruising, Splinters	High	Weekly, quarterly and annual safety inspections of equipment, borders and under surfacing. Records of inspections produced and stored.	
			Equipment manufacture and design, playground design (incl fall zones), and installation and under surface to comply with Australian Standards.	
			Completion of recommended repairs/maintenance with priority rating of 4 (or 5). Implementation of prioritised playground upgrade programme.	
			Facilities such as seating and shade provided inside the fence to encourage appropriate supervision level by carers. Specific signs at Willoughby Park installed as reminder that supervision required.	
Playground Fencing	Injury from nearby hazard such as cars, bikes, water, dogs, steep drop, sportsground.	Extreme	Playgrounds with a potential nearby hazard are fenced. Alternatives such as plants are used if appropriate. Facilities such as seating and shade are provided inside the fence to encourage appropriate supervision level by carers.  Dogs prohibited within 10m of playgrounds – advised on regulatory signs and separate signs in playgrounds where required.	
Playgrounds	Sunburn	Extreme	Provision of shade for children and carers is considered when playgrounds are designed and upgraded.	
	Passive Smoking	Extreme	No smoking in playgrounds policy adopted.	
	Crime/Anti Social Behaviour	Extreme	Use of Safer By Design/CPTED (Crime Prevention Through Environmental Design) principles, which aim to minimise crime and anti social behaviour and help to ensure park and playground users feel that they are in a safe environment. The principles include fostering a strong sense of community ownership of parks and playgrounds, provision of security lighting in appropriate locations, maximising casual surveillance from surrounding properties and providing clear entrances, exits and pathways.	
	Injury from tree branches	Extreme	Dead wood is removed from trees, trees are under-pruned to remove low branches that may be a hazard, and access ways are kept clear.	
	Trip (due to uneven surfaces, edging, tree roots, concrete footings).	Extreme	Weekly, quarterly and annual safety inspections of equipment and under surfacing.	
	Collisions (between people or people with other obstacles)	Extreme	Playground design and installation (including layout of equipment) comply with Australian Standards.	
	Poisoning, allergic reactions (plants, CCA treated pine)	Extreme	Plants used in playgrounds are checked for toxicity and allergens.  Copper Chromium Arsenate (CCA) treated pine equipment has been removed from playgrounds.	
	Financial crisis, budget not available for upgrades, new playgrounds	High	None at present	
	Changes to Australian Standards or legislation result in modifications required	High	Budget increase to be requested to cover costs of modifications, carried out according to safety priority rating.	
Exercise	As For Play Equipment	-	As for play equipment	
Stations	Muscle strain	Extreme	Instructions for use provided on site.	

The Citizens Panel listed the following as the most important safety issues when visiting playgrounds:

- Play equipment in good repair
- Appropriate undersurface
- Disease from animal fouling/litter or injury from hidden objects

# 5.3. Expenditure plan

Expenditure is calculated over a 20 year period based on current levels of expenditure and projections of funds required to meet target levels of service.

Two levels of funding are considered:

- (1) the base case, where expenditure follows current trends;
- (2) the sustainable case, where target levels of service are achieved and funding shortages may exist.

The types of expenditure covered include maintenance and operational, renewal, upgrade, new and disposal. These are defined in the AMIS. The method of predicting future expenditure to achieve target levels of service and the assumptions applied to modelling techniques are also explained in the AMIS.

All maintenance, renewal, upgrade and new work is carried out in accordance with the standards and specifications in Table 5.6.

Table 5.6 Standards and specifications adhered to during asset-related works

Standard reference/document #	Name and/or description	
AS 4685.1	Playground Equipment: General Safety Requirements and Test Methods	
AS4685.2-6	Playground Equipment: Particular Safety Requirements and Test Methods for Swings, Slides, Runways, Carousels and Rocking Equipment	
AS/NZS 4422	Playground Surfacing: Specifications, Requirements & Test Methods	
AS/NZS 4486.1	Playgrounds and Playground Equipment - Development, Installation, Inspection, Maintenance and Operation	
AS 1428.1-4	Design for Access and Mobility	
Safer By Design Principles/CPTED (Crime Prevention through Environmental Design)	Design principles which aim to minimise crime and anti-social behaviour including vandalism & graffiti, and help to ensure park & playground users feel they are in a safe environment.	

# 5.3.1. Maintenance and operational expenditure projections

Activities included as maintenance and operational expenditure are defined in the AMIS. The past *actual* maintenance expenditure (as opposed to the allocated maintenance budget) trend for the assets covered by this Plan is shown in Table 5.7 and includes operational expenditure.

Table 5.7 Actual maintenance expenditure history

Financial year	Maintenance expenditure	
2006-2007	\$106,058	
2007-2008	\$125,620	
2008-2009	\$153,483	
2009-2010	\$142,212	
2010-2011	\$142,414	
2011-2012	\$109,008	
2012-2013	\$85,661	

The total annual maintenance expenditure is inclusive of: annual contracts for playground safety audits and playground cleaning; all general playground equipment maintenance; and additional funding for upgrades to existing equipment to meet new standards and to cope with increased wear and tear on of playground equipment due population growth and higher usage levels.

The decrease in expenditure in 2011-12 and 2012-13 is mostly due to discontinuation of the playgrounds cleaning contract in January 2012. Some playground maintenance costs completed by Council staff have been included in the park maintenance costs since then, as these costs are currently difficult to separate in Council's financial system. The low 2012-13 expenditure is due to some expenditure occurring at the end of the financial year and subsequently being allocated to the 2013-2014 instead.

Annual maintenance expenditure is currently equivalent to 4% of the total replacement value reported in Table 2.1. Over the 20 year planning period approximately \$2.8M of upgrades and new playgrounds are planned. This expenditure is expected to significantly increase the asset stock and therefore the future maintenance required for Playground assets. In addition to the increased asset stock, playground upgrades tend to result in higher use of existing facilities which in turn creates higher maintenance costs due to increased wear and tear. An additional recurrent Priorities Improvement Program (PIP) budget of \$20,000-\$25,000 was introduced in 2008/2009, called "Playground general upgrading/higher usage/safety". This amount has been increased to \$30,000 for the 2013/14 financial year. This funding is used to supplement the Non Organised Open Space budget used for equipment and under surfacing repairs and maintenance requirements identified in the playground inspection safety audit reports. Additional funding would allow Council to address more repairs which is likely to improve condition, meet new standards and reduce the need for more serious repairs.

The difference between current funding levels (base case) and projected required maintenance funding (sustainable case) is shown in

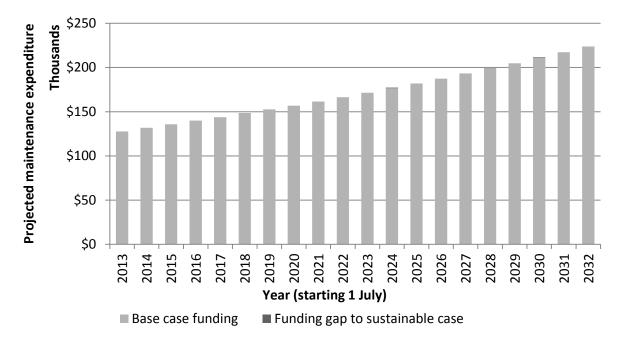


Figure 5.2.

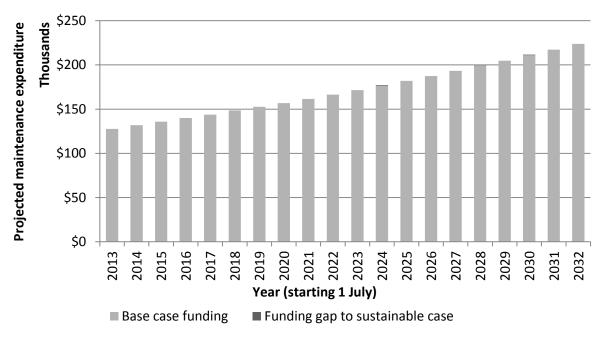


Figure 5.2 Projected maintenance expenditure under the base and sustainable cases.

Maintenance expenditure is also expected to increase as asset condition declines, however Council does not have data to quantify the link at this stage.

# 5.3.2. Renewal expenditure projections

Renewal expenditure depends on levels of service and projections are calculated using modelling techniques and assumptions documented in the AMIS. Renewal of existing playground equipment is scheduled to occur when the equipment is fifteen years old, however as described in Section 3.4 "Current levels of service", there are some pieces of equipment older than 15 years which are scheduled for renewal within the next two years. Results of the 2013 community consultation programme showed that most people thought an existing backlog of playground works should be addressed within five years (a shorter timeframe than for other Open Space assets). Regardless of existing backlogs, additional renewal expenditure may be required in the future as a large number of assets reach their intervention point at the same time. Planning for these periods of intense expenditure is crucial. The modelling technique does have limitations which are also documented in the AMIS but still provides a good estimate of long term average funding requirements.

For the assets covered by this Plan, the cost of renewals is based on knowledge about actual treatment costs. The difference between current funding levels (base case) and projected required renewal funding (sustainable case) is shown in Figure 5.3.

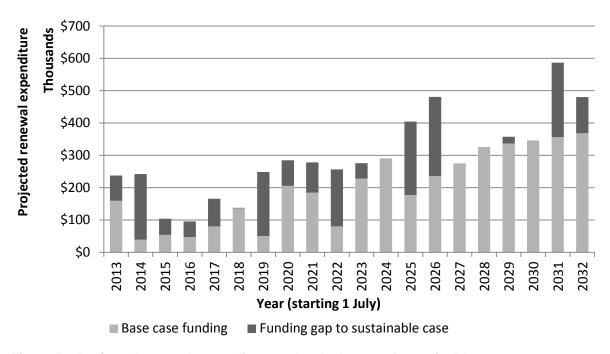


Figure 5.3 Projected renewal expenditure under the base and sustainable cases.

Where funding shortages mean that renewals cannot be completed in a timely fashion, the asset pool is expected to decline in condition overall. Figure 5.4 shows the expected degradation in the average condition of the asset pool, as well as the distribution of condition by replacement value. Park and playground budgets are combined in Council's financial system, known as the "Non Organised Open Space" budget. As safety is such an important consideration for this asset class, playgrounds projects will be prioritised ahead of park projects, therefore funding shortages would affect park renewal projects in addition to playgrounds renewals. If funds were not available to renew playground equipment when necessary, equipment would be removed and not replaced.

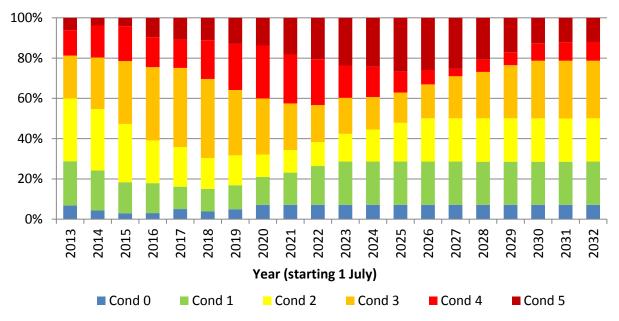


Figure 5.4 Projected asset average condition and distribution under the base case funding

Low cost renewal methods will be used wherever practical. An example of low cost renewal is the restoration of play equipment instead of replacement. For example, due to its distinctive shape, rather than replace the 40

year old swing at Cleland Park during the 2009 park upgrade, adjustments were made to the chain length and the space between the seats in order to meet standards, and its structure was examined and tested. The costs of structural examination and adjustments to bring equipment to standard, however, can often mean that restoration is not a viable option.

The use of alternatives to traditional play equipment such as landscape features to provide challenging and fun play opportunities with a broad range of textures, materials and sensory elements to experience can also be an effective strategy to reduce renewal costs. A range of natural and recycled materials are used to create spaces that encourage exploration, adventure, discovery and construction eg the plants, rocks and a short loop track into bushland at Castle Cove Park, and the sandstone boulder borders in many of Willoughby's playgrounds that test balancing skills when children make their way along them, or use the boulders as stepping stones. The stones can also be a good place to sit and rest, talk or watch. Creative play spaces are provided by using planting, sand-pits, mounding, rock features and textured and patterned pathways and, where space allows, open grass areas are provided for more informal play such as ball games, crawling and running.

# 5.3.3. New and upgrade expenditure projections

New or upgrade capital works are defined in the AMIS. For the assets covered by this Plan, new and upgrade works are identified from

- Master plans developed for the park following targeted community consultation
- Willoughby Open Space and Recreation Plan completed by Parkland Environmental Planners 2013.
- Technical knowledge of Parks and Reserves Co-ordinator
- Land developments (e.g. Market Gardens Park)

The playgrounds renewals programme largely dictates the prioritisation and timing of the new and upgrade programme, as these are usually completed simultaneously (except for completely new playgrounds). Playground upgrades are also often aligned with park upgrade projects.

The total value of planned new and upgrade works for the assets covered by this Plan is \$2,797,330, of which only \$1,260,614 could be completed under the current levels of expenditure (base case). If those works that can't be completed under current funding levels address a known service gap or demand issue (see Section 4.2) they are planned for under the sustainable case. The difference between current funding levels (base case) and projected required capital funding (sustainable case) is shown in Figure 5.5.

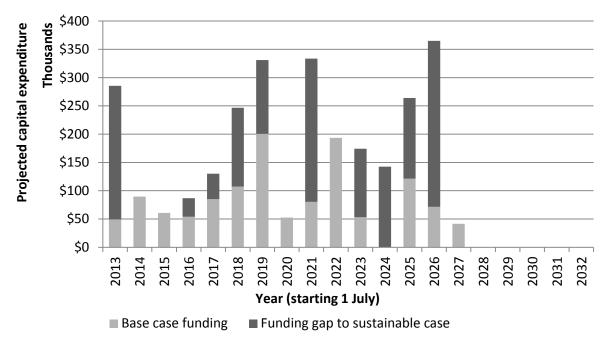


Figure 5.5 Projected capital expenditure under the base and sustainable case.

It should be noted that, since new and upgrade expenditure adds to the asset stock, increases in maintenance and probably also operational expenditure can be expected in conjunction with all capital projects.

# 5.3.4. Disposal plan

Disposals are defined in the AMIS. There are currently no playground assets identified for disposal.

# 5.4. Summary of future costs

For each of the funding scenarios (base case and sustainable case) the total projected expenditure is displayed in Figure 5.6 and Figure 5.7. Base case funding for maintenance/renewal/capital works mean that Council will face a shortage of funds for the assets covered by this Plan. Over the 20 year period, this shortage amounts to a total of \$2,868,938 or an average of \$143,447 per year.

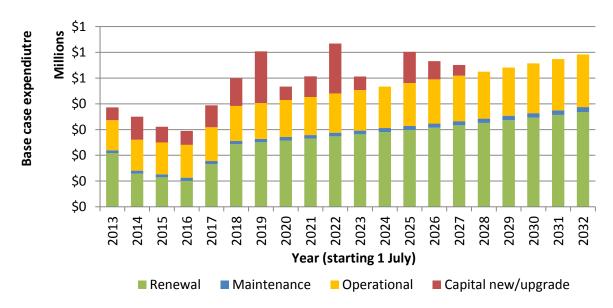


Figure 5.6 Projected 20 year asset expenditure under the base case

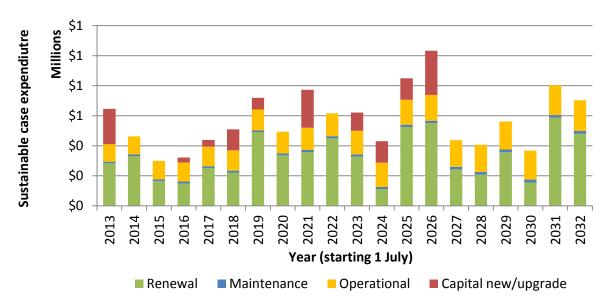


Figure 5.7 Projected 20 year asset expenditure under the sustainable case

These financial projections involve many assumptions, as detailed in the AMIS, and will be continually refined.

# 6. Financial summary

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan.

# 6.1. Financial statements and projections

Total projected expenditure under each of the two financial scenarios are presented on a single set of axes in Figure 6.1. Expenditure is not broken down into types.

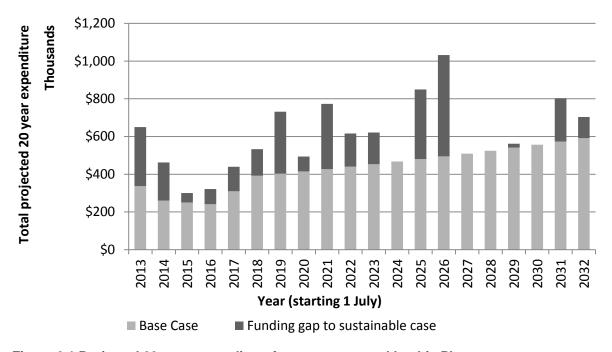


Figure 6.1 Projected 20 year expenditure for assets covered by this Plan

Inflation has been applied at a rate of 3% per annum but no allowance for discount rates has been made.

### 6.2. Life cycle costs and sustainability

Life cycle cost is the average annual cost of meeting target service levels. Life cycle costs include periodic asset renewals and regular maintenance, and operational expenditure where relevant. Life cycle cost can be calculated on an individual asset basis, and the total compared to current levels of expenditure for an indicator of financial sustainability.

A gap between life cycle cost and current expenditure gives an indication of whether the community is currently paying their share of the assets being consumed. Life cycle costing will be refined with each reiteration of this Plan as more information is collected about asset inventories, treatment costs and asset degradation. Life cycle costs for the assets covered by this Plan are provided in Table 2.1.

Table 6.1 Life cycle cost analysis

Life cycle cost (annual)	Life cycle expenditure (annual)	Life cycle gap
\$436,920	\$370,309	\$66,611

This Plan is the key to addressing the life cycle gap because it provides guidance on future levels of service and resources required to provide those services.

### 6.3. Funding strategy

The information from this Plan, including funding gaps, feeds directly into Council's Long Term Financial Plan (LTFP). The LTFP should be consulted for all funding strategies.

#### 6.4. Valuation forecasts

Asset replacement values will increase as additional assets are added to the asset stock. The capital works programme includes expansion of several playgrounds and land developments may lead to two new playgrounds being constructed in the future. Depreciation expense will vary according to the expenditure level, since depreciation patterns vary throughout the life cycle of assets. Fair value is expected to increase in line with additions to the new asset stock, but if assets are not renewed in a timely fashion the overall fair value is more likely to drop. Table 6.2 compares the current and projected total replacement cost, depreciation expense and written down value of all assets covered by this Plan under each of the two expenditure cases (base and sustainable).

Table 6.2 Asset valuation forecasts under the base and sustainable cases

Financial case	Year	Replacement cost (M)	Annual depreciation expense (M)	Written down value (fair value) (M)
Paga agas	1	\$2.30	\$0.13	\$1.14
Base case	20	\$2.71	\$0.18	\$1.49
Custoinable sass	1	\$2.30	\$0.13	\$1.14
Sustainable case	20	\$2.71	\$0.18	\$1.59

The replacement costs remain the same between year 1 and year 20, as new assets described in Sections 4.4 and 5.3.3 cannot currently be included in the financial modelling system producing these forecasts. As would be expected, the written down value is highest in year 20 of the sustainable case.

# 6.5. Key assumptions made in financial forecasts

The broad assumptions applied to all asset classes in producing financial forecasts are described in the AMIS. Assumptions that relate specifically to this asset class are as follows:

- Repair or renewal work results in asset condition being restored to 0 (brand new)
- Assets repair and renewal costs will rise at the same rate as inflation rates index.

Accuracy of future financial forecasts may be improved in future revisions of this asset management plan by the following actions:

- Continued revision of assumptions relating to valuations such as useful life, pattern of consumption and residual values.
- Revision of condition rating of playground equipment to include factors other than age.

# 7. Asset Management Practices

This section summarises Council's current asset management practices in terms of software systems and business processes. All information that applies to Council as a whole can be found in the AMIS. Only information relating specifically to the assets covered by this Plan is covered here.

# 7.1. Accounting/financial systems

Using Council's existing financial system, project numbers are assigned to each park location (and some of the larger playgrounds), although not individual assets at each location, and activity numbers and "natural account" numbers are used to provide further information about expenditure. The accuracy of the data obtained from the system is reliant upon the accuracy in which staff timesheets and purchase orders are completed. Accuracy is further affected by the difficulties involved with splitting purchase orders over multiple sites (such as would be required for undersurface top-ups), and activating new combinations of numbers.

It is difficult to separate maintenance expenditure into the categories of reactive and planned, and maintenance expenditure from operational using the system. All are recorded under the single classification of "recurrent" expenditure.

Thresholds have been developed for the assets covered by this Plan to determine whether expenditure is classed as maintenance or capital. This information is held in Council's asset valuation methodology.

### 7.2. Asset management systems

Council is in the process of implementing Infor Public Sector Suite as its corporate asset management system. Details of Council-wide implementation, including inctegration with other Council systems, can be found in the AMIS.

The status of asset management system implementation for the assets covered by this Plan is input of playground areas, equipment, softfall and softfall edging.

Information flow requirements and processes

The key information flows into this asset management plan are:

- Data from the asset register on size, age, value, condition, remaining life (see asset valuation methodology);
- Unit rates for treatments/replacements and asset consumption patterns (see asset valuation methodology)
- Adopted service levels (Section 3.3 of this Plan)
- Projections of various factors affecting future demand for services (Section 4.1 of this Plan)
- Available budgets from the long term financial plan
- Long term capital project planning
- Outputs from renewal modelling
- Data on new assets acquired by Council and future disposals

The key information flows from this asset management plan are:

- The works program
- The annual operational plan and budget
- The 4 year delivery program

Required funding to address any renewal and maintenance gaps for the long term financial plan Business processes in relation to the assets covered by this Plan are continually being improved 7.3. Standards and guidelines This Plan has been prepared under the Division of Local Government's Integrated Planning & Reporting Framework with guidance from the IPWEA International Infrastructure Management Manual.

### 8. Plan Improvement and Monitoring

This section deals with the improvement of this Plan and the management of assets covered by this Plan, including performance measures, an action plan for improvement and review procedures.

### 8.1. Performance measures

The effectiveness of this Plan can be measured in the following ways:

- Integration of the contents of this Plan with the other documents that constitute the Integrated Planning and Reporting Framework, particularly the Resourcing Strategy.
- The level of deviation from previously published capital works programs and budgets.
- Improvement in data confidence.

The following improvements relating to the above measures have been made since the 2012 Asset Management Plan:

- The newly created full time position of Open Space Assets Co-ordinator was filled in 2012. The requirement for this position was identified in the Resourcing Strategy.
- Results of consultation with the community undertaken during 2013 have been used to confirm intervention thresholds, maintenance response times and community levels of service relating to playgrounds maintenance.
- Capital thresholds for major types of work have been developed and documented in the Asset Valuation Methodology document

Performance measures relating to maintenance response times are listed in Appendix A – Maintenance and inspection program"

### 8.2. Action plan for improvement

Actions that can be undertaken to ensure this Plan is improved in the future are listed in Table 8.1

**Table 8.1 Action plan for improvement** 

Task #	Task description	Officer Responsible	Resources required
1	Transfer playground fencing and gate data from parks data so it can be assessed separately due to different condition requirements and funding budgets.	Open Space Assets Co- ordinator	
2	Calibrate existing condition rating system from contracted inspectors to Council's standard rating system	Open Space Assets Coordinator, AM Controller/Officer	
3	Access the IPWEA Practise Note regarding condition rating of Open Space Assets when released (3-6 months time from January 2014). Review condition ratings, useful lives and degradation patterns and compare to My Predictor modelling to ensure accuracy.	Open Space Assets Coordinator and Parks and Reserves Coordinator	
4	Investigate methods to separate maintenance and operational expenditure and planned and reactive maintenance expenditure using Council's financial system, and check that activity numbers exist for all maintenance activities.	Open Space Assets Coordinator	

Task #	Task description	Officer Responsible	Resources required
5	Improve methods of updating asset information in systems following completion of capital works projects and renewals.	Open Space Assets Coordinator, Parks and Reserves Coordinator and Recreation Projects Officers	
6	Identify asset treatment costs that will reduce further maintenance requirements to add to My Predictor modelling	Open Space Assets Coordinator and Parks and Reserves Coordinator	
7	Collect drainage under softfall and earthworks data relating to playground construction and upgrade. Add to inventory if will affect financial planning in future.	Open Space Assets Coordinator and Parks and Reserves Coordinator	
8	Consider combining Parks Asset Management Plan and financial modelling with Playgrounds Asset Management Plan to facilitate budget allocations.	Open Space Assets Coordinator, Parks and Reserves Coordinator and AM Controller/Officer	

Improvement in Council-wide asset management practices, business processes, workflows and systems is detailed in the AMIS.

## 8.3. Monitoring and review procedures

This Plan will be reviewed in November and December annually during the preparation of the annual budget and amended to recognise any changes in levels of service and/or resources available to deliver those services as a result of financial decisions in the long term financial plan.

### 9. References

NSW DLG Integrated Planning and Reporting Manual

http://www.dlg.nsw.gov.au/dlg/dlghome/Documents/Information/Intergrated%20Planning%20and%20Reporting%20Manual%20-%20March%202013.pdf

Willoughby City Strategy 2013-2029

http://www.willoughby.nsw.gov.au/Community/Community-Planning/Willoughby-City-Strategy/

Willoughby City Council Delivery Program 2013-2017 and Operation Plan <a href="http://www.willoughby.nsw.gov.au/About-Council/Forms-Policies---Publications/delivery-program-and-operational-plan-2010-2014/">http://www.willoughby.nsw.gov.au/About-Council/Forms-Policies---Publications/delivery-program-and-operational-plan-2010-2014/</a>

Willoughby City Council Resourcing Strategy http://www.willoughby.nsw.gov.au/About-Council/Forms-Policies---Publications/resourcing-strategy/

Crosswhite, Janice (1997). Playgrounds Development Plan.

Infrastructure Services Division with Parkland Environmental Planners (2013), Open Space and Recreation Action Plan.

Infrastructure Services Division with Parkland Environmental Planners 2010, Open Space and Recreation Plan Issues Paper.

.id (informed decisions) forecast, 2013

## 10. Appendix A - Maintenance and inspection program

Playground visit frequencies are divided into levels and assigned to each playground within the asset management system. These are assigned to each playground based on the following criteria:

- Facility visitation rate number of people using the playground, frequency of use
- Playground development

Service frequencies for each playground are shown in Table 10.1

Table 10.1 Playground service frequencies

Level 1	Level 2			
2 visits/week incl Sat am	1 visit/week	1 visit/week		
Bales Park	Artarmon Reserve	Greville St	Robert Street	
Beauchamp Park	Cambridge	Hotham	Sanders	
Hallstrom Park	Campbell	Kingsford-Smith	Scotts Crescent	
Chatswood Park	Carlson	Linden Way	Sutherland	
Willoughby Park	Castle Cove	Lowanna	The Bailey	
	Cleland	Marlow Street	Thomson	
	Clive	Muston	View Street	
	Cortile	Naremburn	Warners	
	Denawen	John Roche	Warrane	
	Edgar	OH Reid	Wickham	
	Dawson/Market			

The definition of each of these frequency levels is given in Table 10.2

Table 10.2 Playground service visit frequency definitions

Frequency Level   Frequency of visits		
Level 1	2 visits per week (1st visit safety inspection and cleaning, 2nd visit cleaning on	
Level 2	1 visit per week (safety inspection and cleaning)	

The standard activities carried out during every regular site visit are as follows:

- Safety inspection
- Remove litter and dangerous objects (sharps, glass, asbestos)
- Clear leaves and debris
- Rake sand

Additional tasks which are carried out on independent schedules are listed in Table 10.3.

Table 10.3 Playground programmed tasks

Task description	Frequency			
Aerate softfall mulch	Once/6-12 months as required – dependent on usage & weather			
Top up sand in sandpit	Checked once/ year, topped up as required. Bales Park, Jersey Rd Reserve and Willoughby Park checked twice/year.			
Top up softfall mulch	All categories checked once/year, topped up if required. Willoughby Park requires twice/year.			
Repair equipment	Priority rating 3 all categories over 12 months as per Playfix audits.			

Council's response time for reactive tasks and the conditions under which they will be carried out are listed in Table 10.4. These are consistent with Council's customer service charter and the response times currently built in to the service request system, and will also apply to activities carried out using the asset management system when it is fully implemented.

Table 10.4 Reactive maintenance tasks and response times

Asset type	Task	Intervention Level	Make Safe Time	Repair Time (from notification)	Performance Measurement
Playground equipment	Repair equipment	Equipment safety hazard, not able to be used.	24 hrs	Dependent on availability of parts.	90%
Whole playground	Site Cleanup	Presence of sharps, broken glass.	24 hrs	24 hrs	90%
Whole playground	Dead wood	Presence of dead wood in overhanging trees	24 hrs	1 week.	90%
Ground surface	Top up sandpit or softfall	As programmed, or when depth less than 300mm as reported during weekly, quarterly or annual safety/cleaning inspections.	N/A	1 month	90%
Fences	Repair fences	Fence does not perform function adequately or is hazardous.	24 hrs	1-2 weeks all categories.	90%
Playground equipment & softfall	High pressure water cleaning (gurney)	Algae/moss growth on equipment and/or softfall in hazardous location or quantity	24 hrs	2 weeks	90%

# 11. Appendix B - Capital works program

The values shown in Table 11.1 and Table 11.2 refer to equipment renewals only. Other project costs such as earthworks, drainage, undersurface and the costs of extra equipment have not been included at this stage. Associated upgrade costs for assets such as turf, furniture and garden bed are included in the parks upgrades capital works programme.

Table 11.1 Base Case 2013-2017

Site	Type of work	Description	Value	Year
Muston Park	New	install rocket	\$65,000	2013
Beauchamp Park	Upgrade	stage 3	\$145,00 0	2013
				2013
Willoughby Park	Renewal	preschool playground renewal	\$20,000	
Gore Hill Park	Renewal	renew exercise station	\$35,000	2013
Cambridge Park	Upgrade		\$10,075	2014
Warrane Reserve	Upgrade		\$9,100	2014
Scott Crescent Reserve	Upgrade		\$8,273	2014
Robert Street Park	Upgrade		\$19,959	2014
Marlow Street Reserve	Upgrade		\$4,602	2014
Linden Way Reserve	Upgrade		\$4,642	2014
Castle Cove Park	Renewal		\$11,193	2015
Hallstrom Park	Renewal		\$49,086	2015
Chatswood Park	Renewal		\$20,016	2015
Edgar Street Reserve	Renewal		\$16,574	2015
Lowanna Park	Renewal		\$21,551	2015
Cortile Reserve	Renewal		\$16,040	2016
John Roche Playground	Renewal		\$34,423	2016
The Bailey	Renewal		\$5,473	2016
Greville Street Reserve	Renewal		\$3,908	2016
Thomson Park	Renewal		\$73,711	2017
Artarmon Reserve	Renewal		\$40,000	2017
Campbell Park	Renewal		\$11,423	2017
View Street Park	Renewal		\$6,620	2017

Table 11.2 Sustainable Case 20 years

Site	Type of work	Description	Value	Year
Muston Park	New	install rocket	\$65,000	2013
Beauchamp Park	Upgrade	stage 3	\$145,000	2013
				2013
Willoughby Park	Renewal	preschool playground renewal	\$20,000	
Gore Hill Park	Renewal	exercise station	\$35,000	2013

Cambridge Park	Upgrade		\$10,075	2014
Warrane Reserve	Upgrade		\$9,100	2014
Scott Crescent Reserve	Upgrade		\$8,273	2014
Robert Street Park	Upgrade		\$19,959	2014
Marlow Street Reserve	Upgrade		\$4,602	2014
Linden Way Reserve	Upgrade		\$4,642	2014
Castle Cove Park	Renewal		\$11,193	2015
Hallstrom Park	Renewal		\$49,086	2015
Chatswood Park	Renewal		\$20,016	2015
Edgar Street Reserve	Renewal		\$16,574	2015
Lowanna Park	Renewal		\$21,551	2015
Cortile Reserve	Renewal		\$16,040	2016
John Roche Playground	Renewal		\$34,423	2016
The Bailey	Renewal		\$5,473	2016
Greville Street Reserve	Renewal		\$3,908	2016
Thomson Park	Renewal		\$73,711	2017
Artarmon Reserve	Renewal	Stage 1	\$40,000	2017
Campbell Park	Renewal	ougo :	\$11,423	2017
View Street Park	Renewal		\$6,620	2017
Naremburn Park	New	Exercise station no.2	\$40,000	2018
Jersey Road Reserve	Renewal	Plan preparation	\$0	2018
Muston Park	Upgrade	Playground upgrade - Stage 1	\$100,000	2018
Artarmon Reserve	Renewal	Plan preparation	\$0	2018
Kids Cottage (Childcare Centre)	Renewal	Plan preparation	\$0	2018
Jersey Road Reserve	Renewal		\$12,508	2018
Willoughby Park	New	Install new exercise station	\$25,000	2019
Market Gardens	New	Plan preparation	\$0	2019
Denawen Park	Renewal	Plan preparation	\$0	2019
Stoker Playground	Renewal	Plan preparation	\$0	2019
Warners Park	Renewal	Plan preparation	\$0	2019
Muston Park	Upgrade	Playground upgrade - Stage 2	\$100,000	2019
Kids Cottage (Childcare Centre)	Renewal		\$45,972	2019
Artarmon Reserve	Renewal	Playground renewal	\$24,623	2019
Denawen Park	Renewal	Playground renewal	\$74,784	2019
Naremburn Park	Renewal	Plan preparation	\$0	2019
Stoker Playground	Renewal		\$12,250	2019
Willoughby Park	Renewal	Plan preparation	\$0	2019
Warners Park	Renewal		\$51,898	2020
Bales Park	Renewal	Plan preparation	\$0	2021
Willoughby Park	Renewal	Playground renewal - Stage 1	\$79,197	2021
Willoughby Park	Renewal	Playground renewal - Stage 2	\$79,197	2021

Naremburn Park	New	Playground upgrade- new equipment for 6-12 year olds	\$180,000	2021
Naremburn Park	New	Install a slide from the viewing platform in to the proposed older childrens playground	\$20,000	2021
Naremburn Park	Renewal		\$27,719	2022
Bales Park	Renewal	Playground renewal	\$61,079	2022
Cleland Park	Renewal	Plan preparation	\$0	2022
Wickham Park	Renewal	Plan preparation	\$0	2022
Wickham Park	Renewal		\$9,808	2022
Sanders Park	Renewal	Plan preparation	\$0	2022
Sutherland Park	Renewal	Plan preparation	\$0	2022
Market Gardens	New	New playground installation	\$150,000	2023
Cleland Park	Renewal		\$9,946	2023
Sanders Park	Renewal		\$20,738	2023
Sutherland Park	Renewal		\$57,360	2023
Gore Hill Playground	New	Plan preparation	0	2024
OH Reid Reserve	Renewal	Plan preparation	\$0	2024
Willoughby Park	Upgrade	Playground upgrade - Stage 1 waterplay	\$100,000	2024
Hotham Street Reserve	Renewal	Plan preparation	\$0	2025
St Peters Green	Renewal		\$10,883	2025
Bicentennial Netball	Renewal	Plan preparation	\$0	2025
Kingsford Smith Park	Renewal	Plan preparation	\$0	2025
OH Reid Reserve	Renewal		\$92,422	2025
Willoughby Park	Upgrade	Playground upgrade - Stage 2 waterplay	\$100,000	2025
Hotham Street Reserve	Renewal		\$5,276	2026
Gore Hill Playground	New	New playground installation - water play	\$150,000	2026
Bicentennial Netball	Renewal		\$12,539	2026
Kingsford Smith Park	Renewal		\$41,203	2026
Willoughby Park	Upgrade	Playground upgrade - Stage 3 waterplay	\$50,000	2026
Dawson Street Reserve	Renewal	Plan preparation	\$0	2026
Clive Park	Renewal	Plan preparation	\$0	2026
Gore Hill Playground	New	New playground installation	\$210,000	2027
Beauchamp Park	Renewal	Plan preparation	\$0	2027
East Willoughby Preschool	Renewal		\$20,000	2027
Dawson Street Reserve	Renewal		\$19,480	2027
Clive Park	Renewal		\$4,642	2027
Cambridge Park	Renewal	Plan preparation	\$0	2028
Beauchamp Park	Renewal		\$68,362	2028
Robert Street Park	Renewal	Plan preparation	\$0	2028
Hallstrom Park	Renewal	Plan preparation	\$0	2028
Warrane Reserve	Renewal	Plan preparation		2028
Scott Crescent Reserve	Renewal	Plan preparation		2028
Marlow Street Reserve	Renewal	Plan preparation		2028

Linden Way Reserve	Renewal	Plan preparation	0	2028
Cambridge Park	Renewal		\$10,075	2029
Castle Cove Park	Renewal	Plan preparation	\$0	2029
Chatswood Park	Renewal	Plan preparation	\$0	2029
Edgar Street Reserve	Renewal	Plan preparation	\$0	2029
Lowanna Park	Renewal		\$21,551	2029
Robert Street Park	Renewal		\$19,959	2029
Hallstrom Park	Renewal		\$49,086	2029
Warrane Reserve	Renewal		\$9,100	2029
Scott Crescent Reserve	Renewal		\$8,273	2029
Marlow Street Reserve	Renewal		\$4,602	2029
Linden Way Reserve	Renewal		\$4,642	2029
Castle Cove Park	Renewal		\$45,774	2030
Chatswood Park	Renewal		\$34,016	2030
Cortile Reserve	Renewal	Plan preparation	\$0	2030
Edgar Street Reserve	Renewal		\$16,574	2030
Greville Street Reserve	Renewal	Plan preparation	\$0	2030
John Roche Playground	Renewal	Plan preparation	\$0	2030
Lowanna Park	Renewal		\$21,551	2030
Cortile Reserve	Renewal		\$16,040	2031
Greville Street Reserve	Renewal		\$3,908	2031
John Roche Playground	Renewal		\$34,423	2031
View Street Park	Renewal	Plan preparation	\$0	2031
Campbell Park	Renewal	Plan preparation	\$0	2031
Thomson Park	Renewal	Plan preparation	\$0	2031
View Street Park	Renewal		\$6,620	2032
Campbell Park	Renewal		\$11,423	2032
Thomson Park	Renewal		\$73,711	2032

## 12. Appendix C - Levels of service

Table 12.1 Feelings overall about playgrounds in Willoughby (Citizens Panel)

Response	Percentage of Total Responses
Generally better than acceptable	20%
Generally acceptable	60%
Mostly acceptable, a few isolated areas that are unacceptable	20%
A mixture of acceptable and unacceptable	0
Mostly or all unacceptable	0

When the Citizens Panel was asked if (i) a small playground within walking distance of your home or (ii) a larger site with a greater range of facilities that services a wider area was more important to them, 93% of respondents thought the smaller site was more important, and 7% thought the larger site more important.

**Table 12.2 Maintenance of exercise stations (Citizens Panel)** 

	Better than acceptable	Acceptable	Not Acceptable
Exercise Stations	1	13	0
Play Equipment	6	9	0
Undersurfacing	4	11	0
Children's Bike Tracks	2	11	1
Fencing	5	9	1
General playgrounds servicing and cleaning	2	12	1

### Feelings about the number of playgrounds in the neighbourhood (Citizens Panel)

Response	Percentage of Total Responses
There are more than I need	13.3%
The number of playgrounds is just right	53.3%
There are sufficient playgrounds but they are usually too busy	26.7%
There should be more parks	6.7%

Table 12.3 Level of satisfaction with number of playgrounds in the neighbourhood (Community Assets Survey)

Response	Number of responses
Poor	4
Some improvement needed	13
Satisfactory	27
Good	43
Very Good	19
No opinion	6
Do not use	15

Table 12.4 Assets ranked in order of importance (Citizens Panel)

Assets	Score
"Traditional" play equipment such as swings, slides, spinners, climbers	122
Open grass area for crawling, running, informal ball games	122
Fencing	119
"Creative" spaces such as sandpits, rock and timber features, textured surfaces, sculptures, sound boxes, artworks, plantings, musical play equipment	109
Footpaths	103
Bubblers	96
Associated assets for children and carers such as seating, picnic settings, BBQs, rubbish bins	90
Children's Bike Tracks	76
Signage	67
Water play equipment	52
Interactive electronic activities equipment	34

Table 12.5 Do playgrounds provide for children of all abilities (Citizens Panel)

Response	Number of responses
Yes	7
Not enough for lower skill levels e.g. toddlers	3
Not enough for higher skill levels e.g. over	
10s	7
No opinion	2

### Table 12.6 Feelings about playground fencing (Citizens Panel)

Response	Number of responses
Playgrounds should always be fenced, regardless of size and location	7
Fencing is only needed if hazards such as busy roads, water or steep drops are nearby	7
No opinion	1
Other (specify)	0

Table 12.7 Acceptable Time to Address Backlog (Citizens Panel Survey)

Response	Number of Responses
0-5 years	11
5-10 years	4
10-20 years	0
20-50 years	0
50+ years	0

Table 12.8 Level of satisfaction with quality of playground assets (Community Assets Survey)

Response	Number of responses
Poor	2
Some improvement needed	18
Satisfactory	32
Good	31
Very Good	19
No opinion	10
Do not use	16

The regular customer satisfaction surveys undertaken by Council provide some results in regard to importance and satisfaction levels with various facilities and services.

The following results are extracted from the 2012 Willoughby City Council Community Survey Management Report prepared by IRIS Research Ltd:

The mean score out of 5 for "satisfaction – Infrastructure Assets" was 3.8 for condition of playgrounds and play equipment. These results are all classified as "high satisfaction" scores, and are in the top five of the twelve asset types included in the survey.

When compared to data on the performance of Councils which are comparable (Metropolitan Councils) to Willoughby City Council, the following results were achieved:

- Performing on par with comparable measure: Provision of playgrounds and maintenance of ovals and sporting grounds
- Performing significantly better than comparable measure: Maintenance of parks and playgrounds

# 13. Appendix D - Risk analysis

A comprehensive listing of risks applicable to playgrounds can be found in Table 13.1. Risks that receive a rating of High, Very High or Extreme are addressed in the body of this Plan with treatment strategies as appropriate to the relevant asset or group of assets (see Section 5.2 "Risk management plan").

Table 13.1 Risk analysis for playground assets

Asset	Risk Category	Risk – what can happen?	Consequence score	Likelihood score	Risk rating
	Community wellbeing Financial	Fall	5	5	Extreme
	Community wellbeing	Entrapment (gaps can trap body parts such as head, hands, feet and limbs)	5	3	Extreme
Play equipment	Community wellbeing	Cuts, Piercing, Bruising, Splinters (eg from protruding bolts, sharp edges, split timber)	3	3	High
	Community wellbeing	Crush injuries (moving parts in eg swings and see saws crush or pinch)	5	3	Extreme
	Community wellbeing	Entanglement (hooks entangle clothing, ropes form a loop)	5	3	Extreme
	Community wellbeing	Burn from hot equipment	3	3	High
Halama Carllanda	Community wellbeing	Disease (animal fouling sand/injury from hidden objects)	4	3 *	Very High
Undersurface/borders	Community wellbeing	Cuts, Piercing, Bruising, Splinters	3	3	High
Playground Fencing	Community wellbeing Financial	Injury from nearby hazards such as cars, bikes, water, dogs, steep drops or sportsgrounds	5	4	Extreme
	Community wellbeing	Sunburn	3	5	Extreme
	Community wellbeing	Passive smoking	4	5	Extreme
	Community wellbeing	Crime/anti-social behaviour	5	3	Extreme
Playgrounds General	Community wellbeing Financial	Injury from tree branches	5	3	Extreme
	Community wellbeing	Trip (due to uneven surfaces, edging, tree roots, concrete footings).	4	4	Extreme
	Community wellbeing	Collisions (between people or people with other obstacles)	4	4	Extreme
	Community wellbeing	Poisoning, allergic reactions (plants, CCA treated pine)	5	4	Extreme

Asset	Risk Category	Risk – what can happen?	Consequence score	Likelihood score	Risk rating
	Strategic Financial Political Service Delivery Community Wellbeing	Financial crisis, budget not available for upgrades, new playgrounds	2	4	High
	Financial Regulatory	Changes to Australian Standards or legislation result in modifications required.	3	3	High
	Community wellbeing	Fall	5	5	Extreme
	Community wellbeing	Entrapment	5	3	Extreme
	Community wellbeing	Cuts	3	3	High
Exercise Stations	Community wellbeing	Crush injuries	5	3	Extreme
	Community wellbeing	Burn from hot equipment	3	3	High
	Community wellbeing Financial	Muscle Strain	3	5	Extreme

<sup>\*</sup>Needle stick injury "The risk of contracting an infection from a needle stick injury in a public place is extremely small" (Kidsafe "Creating Safer Playspaces" info sheets).

## 14. Appendix E - Future Demand

Figure 14.1 and Table 14.1 provide extra data relating to demand forecasts from Section 4.1.

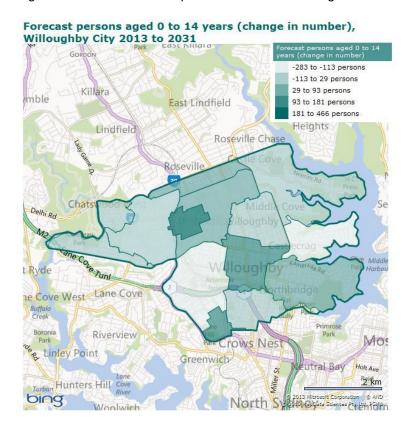


Figure 14.1 Forecast persons 0-14 2013 to 2031 (.id forecast 2013)

Table 14.1 Change in number of persons 0-14 between 2013 and 2031 (.id forecast 2013)

Willoughby City Council's small areas	2013		2031		Change	
(Persons aged 0-14 years)	num	%	num	%	2013 to 2031	
Willoughby City Total	13,111	18.2	13,736	16.7	625	
Artarmon	1,544	16.7	1,261	13.6	-283	
Castle Cove - Middle Cove	779	19.5	806	19.9	27	
Castlecrag	688	22.3	575	19.8	-113	
Chatswood (Balance - East)	1,266	15.7	1,359	15.6	93	
Chatswood (Balance - West)	1,294	16.9	1,265	16.2	-29	
Chatswood (CBD)	886	13.1	1,351	12.1	465	
Chatswood West - Lane Cove North	786	20.6	815	20.0	29	
Naremburn	1,049	18.0	1,042	16.7	-7	
North Willoughby - Willoughby East	1,377	21.9	1,371	22.0	-6	

Willoughby City Council's small areas	2013		2031		Change	
(Persons aged 0-14 years)	num	%	num	%	2013 to 2031	
Northbridge	1,389	22.1	1,470	21.9	81	
Roseville	511	21.6	563	18.7	52	
St Leonards	209	9.4	347	8.6	138	
Willoughby	1,331	20.9	1,512	19.5	181	