



# INFRASTRUCTURE AND ASSET MANAGEMENT PLANS SUMMARY



2008

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## Executive Summary

### Overview

Adelaide City Council owns and is responsible for the management, operation and maintenance of a diverse asset portfolio that provides services to all city users. Infrastructure and Asset Management Plans have been developed to ensure that Council continues to provide effective and comprehensive management of its infrastructure asset portfolios. Infrastructure and Asset Management Plans have been completed for the following asset portfolios:

- Torrens and Stormwater Drainage,
- Lighting, Electrical and CCTV,
- Transportation,
- Buildings, and
- Urban Elements

These plans indicate Councils desire to operate and maintain its asset portfolio to achieve the following objectives.

- Ensure the Council's asset base contributes to the strategic objectives by providing the required levels of service.
- Ensure the councils assets are maintained at a safe and functional standard as set out in the Infrastructure and Asset Management Plans.
- Ensure the inspection and maintenance plan for all Council assets are sufficient to meet the legislative and operational requirements in order to deliver the required levels of service to the community.

The Infrastructure and Asset Management Plans are part of the suite of plans and policies that form part Adelaide City Council's Strategic Plan and are updated annually as part of the Business Plan and Budget process.

This summary document brings together the key aspects of the individual asset Infrastructure and Asset Management Plans into a single, user friendly format.

### Asset Base

Adelaide City Council currently owns a significant portfolio of infrastructure assets. The investment into many of these assets has occurred over several

generations and includes a number of heritage listed assets which require specific increased levels of maintenance. The result of this ongoing investment is an infrastructure asset base which has a current replacement cost in excess of \$780 million with the split between asset classes indicated in the table below.

Portfolio	Replacement Value (\$Million)
Transportation	\$345.3
Buildings	\$279.6
Torrens and Stormwater	\$ 81.8
Lighting, Electrical and CCTV	\$ 44.5
Urban Elements	\$ 30.0
<b>Total</b>	<b>\$781.2</b>

### Asset Condition

The infrastructure assets within Adelaide City Council are generally in good condition. While the age and condition of individual assets within each class is varied, consistent asset renewal and maintenance investment over a long period of time has ensured that the asset base overall is in good condition and is considered appropriate for the current level of service they are expected to provide.

The table below provides a summary of the asset condition across asset classes in the form of % of remaining life. This format provides an easy comparison across asset classes and in future plans can be compared from year to year to indicate trends in asset condition within the city. Ongoing condition audits and assessments provide up to date information on the asset base which enable the remaining life to be updated regularly.

Portfolio	Condition
Torrens and Stormwater	63.1 % Remaining Life

Lighting, Electrical and CCTV	64.0 % Remaining Life
Transportation	58.4 % Remaining Life
Buildings*	46% Good Condition 54 % Fair Condition
Urban Elements **	47.6 % Remaining Life

\*Major Building Inspections Only

\*\*Depreciated Assets Only

## Financial Projections

Financial projections for maintenance and capital renewal costs have been completed for all asset classes. Maintenance cost estimates assume the asset is maintained to provide its current level of service over the expected life of the asset, while renewal costs estimate the expected capital expenditure required to replace the asset at the end of its useful life.

Projected capital renewal expenditure for infrastructure assets over the next 10 years varies between \$10.2 million and \$13.9 million.

Projected total expenditure (maintenance and renewal) over the next 10 years varies between \$13.6 million and \$22.3 million.

The financial projections and requirements identified within this plan feed into Council's Long Term Financial Plan and are budgeted appropriately as part of Council's Annual Business Plan and Budget Process.

## Conclusion

Infrastructure and Asset Management Plans are a first step towards an integrated management program for the City of Adelaide's assets and will be updated annually as part of Adelaide City Council's Business Plan and Budget.

The actions resulting from the Infrastructure and Asset Management Plans include continuous improvement of asset management practices, provision of financial forecasts for inclusion in the Long Term Financial plan, budget process and strategic plan and ongoing improvements of the plans to ensure accurate reflection of the asset portfolios and asset management practices.

# 1 INTRODUCTION

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## 1.1 Background

Adelaide City Council owns and is responsible for the management, operation and maintenance of a diverse asset portfolio that provides services to city users. Infrastructure and Asset Management Plans have been developed for infrastructure assets to meet legislative requirements and to ensure that asset management practices achieve the goal:

'Deliver the required level of service to existing and future customers in the most cost effective way'

The plans demonstrate Council's responsive management of infrastructure assets (and services provided from these assets), compliance with regulatory requirements and proposed funding requirements to provide the required levels of service.

## 1.2 Relationship with Council's Strategic Direction

In 2008 Council developed and adopted its Strategic Directions which set out Council's vision and path into the future. Council's vision is for:

*"A vibrant, populous and sustainable Capital City built upon Adelaide's heritage and lifestyle"*

To assist Council in achieving this vision, a number of outcomes and strategies were developed. The following outcome links Infrastructure and Asset Management Plans to the strategic outcomes and direction of Council:

*Outcome 8: Leading Council*

*A leading Council that makes informed and insightful decisions for the Capital City.*

In addition to this, Council is required by legislation to develop a Strategic Plans which describes Council's role in supporting its vision and sets out the key targets and principles that drive the operation of council. The Infrastructure and Asset Management Plans sit within this framework as part of the suite of documents that make up Council's Strategic Plan and document the principles and directions for the management and maintenance of council's asset base. In order to reflect changes in asset portfolios, asset management practices and emerging strategic directions, these plans are updated annually as part of the annual business plan and budget process.

## 1.3 Scope

This scope of this document is to summarise Adelaide City Council's Infrastructure and Asset Management Plans produced for each asset class. Full copies of these documents are available for viewing in Council's Customer Service Centre (25 Pirie St) or downloadable from Council's web page <http://www.adelaidecitycouncil.com/strategicmanagement>.

Table 1.2 below indicates the Infrastructure and Asset Management Plans that this summary covers, the assets within these classes and the relevant section within this report.

**Table 1.1: Infrastructure and Asset Management Plans**

IAMP	Included Assets	Summary Section
Torrens and Stormwater Drainage	Stormwater mains, inlet pits and pipes, manholes, nodes, channels, stormwater storage basins, gross pollutant traps, weirs, bank protection, boat ramps and	Section 3

	landings and lake aerators.	
Transportation	Road pavement, kerb and water table, parking machines, traffic Islands, bridges and traffic signals.	Section 4
Lighting, Electrical and CCTV	Public lighting, underground ducts, CCTV cameras, CCTV control sites and event electrical supply.	Section 5
Urban Elements	Including: public art works, seats, litter bins, butt out bins, signs, bus shelters, bike racks, fences, flag poles, planter boxes, BBQ's, bollards & drinking fountains.	Section 6
Buildings	ACC owned land and buildings including parklands buildings.	Section 7

## **2 Changes and trends since previous Plan revision.**

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As this is the first Infrastructure and Asset Management summary document, this section is currently unable to be completed. In future revisions of this plan it is expected that this section will analyse changes in the performance of the asset portfolio, including a summary of trends in asset condition and age profiles, asset expenditure and a list/summary of all new assets taken under the control of Adelaide City Council since the previous plan.

## 3 TORRENS AND STORMWATER DRAINAGE

### 3.1 Asset Information

The City of Adelaide stormwater network provides the runoff management and flood mitigation responsibilities for the Adelaide City Council. The network is made up of a series of road reserves, underground stormwater pipes, open channels and creeks/lakes which convey stormwater either into Torrens Lake or directly into adjoining Council stormwater systems. The Adelaide stormwater network works with a combination of a minor and major stormwater system design. The system of underground pipes and creeks are classified as the minor system and convey stormwater runoff from minor storm events (rainstorm events that occur on average once every 10 or 20 years). This minor system is required to prevent nuisance flooding along major pedestrian and vehicle routes. The major system, consisting of road reserves and Park Lands, is used to convey major storm events that produce flows that are in excess of the capacity of the minor system. During these high flow events road reserves and Park Land areas will provide overland flow paths and be inundated with stormwater for short periods of time in order to protect adjacent properties from flooding.

The Adelaide City Council stormwater network is divided into 16 sub-catchments which drain either into the Patawalonga or Torrens Water Catchments. The stormwater management within these two catchments generally operates in the following manner:

#### Torrens Water Catchment

The majority of the Central Business District (excluding the Southern quarter) and all of North Adelaide drain either directly into Torrens Lake or indirectly (via downstream Council systems) into the River Torrens. This is facilitated through the underground network and creek systems.

Parks and Park Land roads adjacent to the River Torrens and Torrens Lake flow directly across Park surfaces and into the Torrens system. Adelaide City Council is responsible for the operation and effective performance of the Torrens Lake and the River Torrens (within its boundary) and also maintains and manages the associated weirs in order to provide amenity, recreation opportunities, habitat management, irrigation resources and flood mitigation.

#### Patawalonga Water Catchment

The Southern quarter of the Central Business District discharges via the underground network into the Parklands Creek system within the South Park Lands. Parklands Creek discharges directly into the Unley stormwater network beneath Greenhill Road which in turn discharges into Brown Hill creek and eventually the Patawalonga.

The Torrens and Stormwater drainage asset types and their respective replacement values are presented below.

**Table 3.1: Torrens and Stormwater Drainage Assets**

Asset Type	Quantity	Replacement Value
<b>Underground Pipe Network</b>		
Mains	115.1 km	\$49,919,167
Inlets Pits	3706	\$12,214,813
Inlet Connection Pipes	16.0 km	
Manholes	998	\$1,517,845

Junctions/Nodes	1107	\$1,469,044
<b>Overland Flow Network</b>		
Channels	8.9 km	N/A (Natural earth channels are not valued)
Storage Basins	3	\$776,581
<b>Environmental Treatment</b>		
Gross Pollutant Traps	9	\$1,067,447
<b>Torrens Lake</b>		
Weirs	1 Major, 2 Minor	\$6,975,839
Bank Protection	2.3 km	\$6,414,741
Boat Landings	9	\$911,744
Lake Aerators	16	\$589,622
	<b>TOTAL</b>	<b>\$81,846,843</b>

### 3.2 Condition Summary

The remaining life of stormwater drainage assets is based on their age and condition deterioration since installation. The deterioration projection is based on CCTV camera inspections that have been conducted on a sample of the stormwater network. Expected remaining life is then updated based on the results of these inspections which updates the projected time for asset renewal/replacement. The average remaining life of stormwater assets (at the 2007 stormwater assets revaluation) is 62.2% of expected life which indicates that the network is relatively young and in good condition.

Torrens assets remaining life is based on age (ie installation date records) and condition information for the weirs. The average remaining life of Torrens assets (at the 2007 Torrens assets revaluation) is shown in Table 3.2.

**Table 3.2: Torrens Assets % Remaining Life**

Asset Type	% Remaining Life of Expected Life
Bank Protection	67.4 %
Weirs	43.0 %
Boat Landings	51.0 %

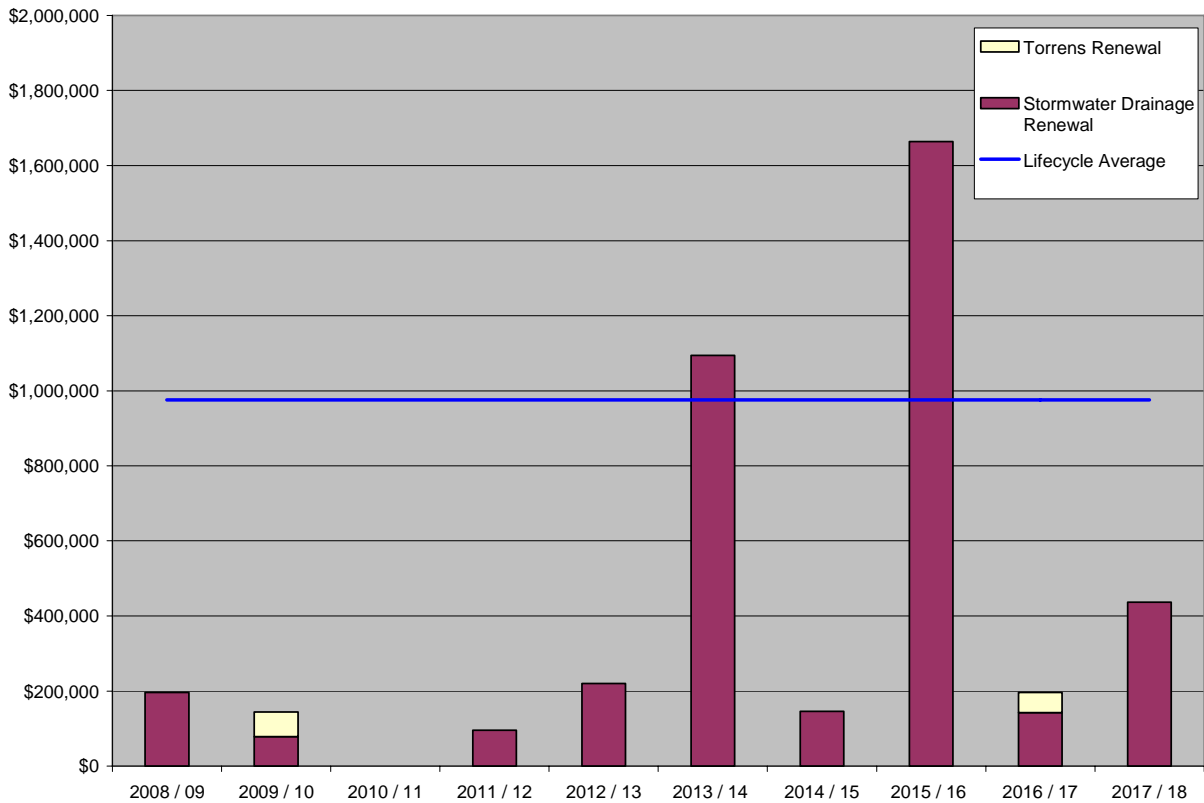
Lake Aerators	91.7 %
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In total, Torrens and stormwater drainage assets have a remaining life of 63.1% of their expected life.

### 3.3 Renewal Summary

The asset renewal profile for stormwater assets has been developed by modelling the expected asset remaining life based on the known age of the pipe and projected condition. The projected renewal expenditure for Torrens and Stormwater Drainage assets over the next 10 years is shown in Figure 3.1.

There is currently no backlog of deferred stormwater or Torrens asset renewals.



**Figure 3.1: Torrens and Stormwater Drainage Assets Projected Renewal Expenditure**

Over the 100 year lifecycle, renewal costs for Torrens and stormwater drainage assets are on average \$0.98 Million per year. Renewal expenditure over the next 10 years is lower than the lifecycle average as the network is relatively young, in good condition and as such does not require significant immediate attention.

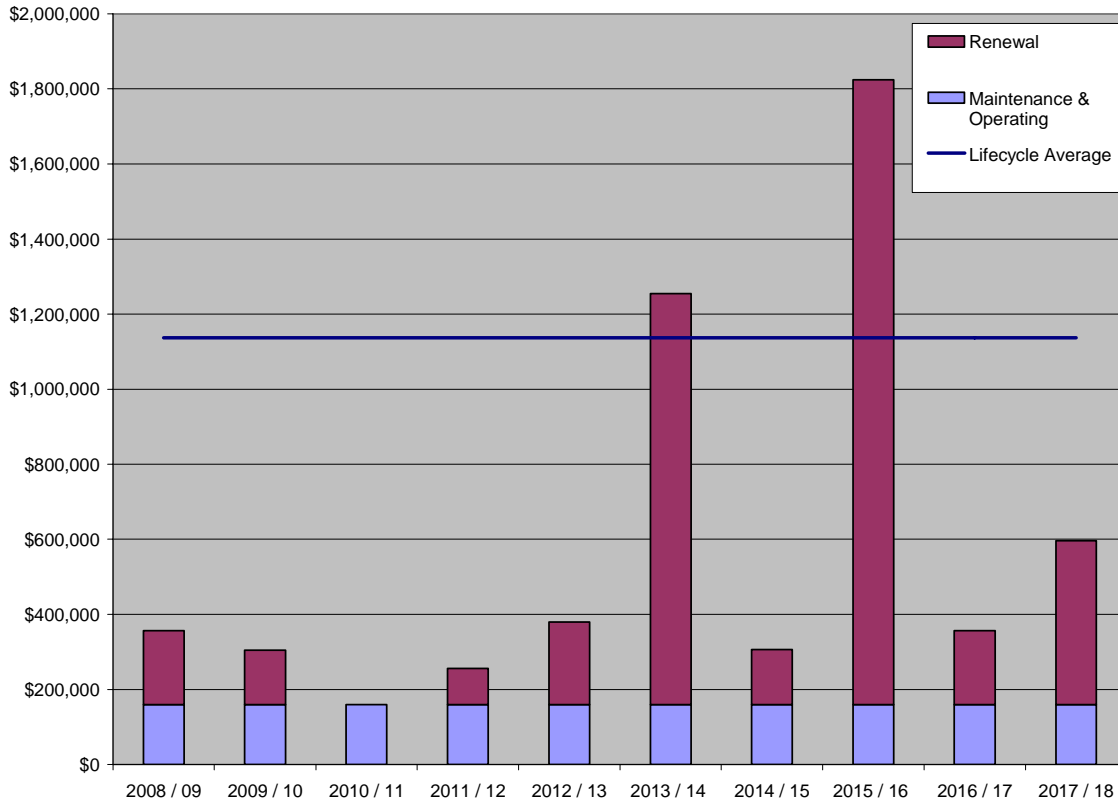
There is an opportunity to bring forward stormwater renewal works which coincide with street resurfacing renewal requirements to reduce the future liability of stormwater renewal. This is appropriate and can be considered when stormwater pipes are approaching the end of their expected lives (within 5-8 years) and as a result would require the road surface to be disturbed to facilitate the programmed drainage works. This is currently assessed annually in conjunction with road resurfacing priorities as part of the Annual Business Plan and Budget Process.

As the City of Adelaide has a fully developed stormwater network, only a minimal increase in the stormwater asset base (and hence renewal expenditure requirements) is anticipated in the longer term.

This minimal increase will be the result of upgrades of certain assets to provide increased levels of minor flooding protection as part of major projects such as North Terrace and Grote Street.

### 3.4 Financial Summary

Overall the projections for the next 10 years for Asset Renewal and Operating costs are presented in Figure 3.2. Over the 100 year life cycle, maintenance and capital renewal costs average out to \$1.14 Million per year.



**Figure 3.2: Torrens and Stormwater Drainage Assets Projected Maintenance and Capital Expenditure**

### 3.5 Stormwater Drainage Summary

Adelaide City Council has a fully developed stormwater network which provides stormwater management and flood mitigation control for the City. Over the next 10 years there is minimal requirement for asset renewal and the timing of renewal requirements can be linked to associated transportation renewal projects to minimise disruptions and inconvenience to the public.

The detailed discussion, assumptions and data analysis that has been summarised in this document can be found in Council's "2008 Torrens and Stormwater Drainage Infrastructure and Asset Management Plan" document available from the Customer Service Centre or via Adelaide City Council's web page.

## 4 Transportation

### 4.1 Asset Information

The City of Adelaide's transportation network comprises road pavements, footpaths, kerb and water table, traffic island and median, traffic signals, bridges and on street parking ticket machines.

The transportation asset group can be loosely classified into various asset types. The road pavement network is a predominantly grid shaped road network totalling 129km in length, with an area of approximately 1.7 million m<sup>2</sup>. Road pavements within the City predominantly consist of a Macadam base with an Asphaltic Concrete wearing surface. This network provides vehicular access to all parts of the city, with some routes acting as thoroughfare major metropolitan traffic. The bridge asset group comprises 6 major bridges, 6 major culverts and 42 other minor installations.

Complementary to the road network, Adelaide City Council also manages a major network of paths (both roadside footpaths and Park Land & Squares paths) which provide pedestrian linkages and trafficable roadside interfaces. Associated with this network are Kerb & Water Tables and Traffic Island & Median assets which provide delineation, pedestrian refuge and landscaping to the transportation network.

Adelaide City Council currently owns and is responsible for the maintenance of traffic signals within the City which provide traffic control through signalised intersections and pedestrian crossings. (The operation of the traffic signal assets is undertaken by the Department of Transport, Energy and Infrastructure.). Council, as part of its on street parking and regulation function, also owns and maintains almost 400 parking machines throughout the City.

The Transportation asset types and replacement value are presented in Table 4.1 below.

**Table 4.1: Transportation Assets**

Asset Type	Quantity	Replacement Value
Road Pavements	173,000 m <sup>2</sup>	\$138.0 Million
Kerb & Water Table	245,500 m	\$ 42.8 Million
Footpath	802,000 m <sup>2</sup>	\$ 80.1 Million
Traffic Islands and Medians	59,500 m <sup>2</sup>	\$ 4.9 Million
Traffic Signals & Network	127 installations	\$ 27.4 Million
Bridges	6 Major Bridges, 6 Major Culverts, 42 Minor installations	\$ 46.9 Million
Parking Machines	396	\$ 5.2 Million
<b>TOTAL</b>		<b>\$345.3 Million</b>

### 4.2 Condition Summary

The remaining life of the majority of transportation assets is based on the age of the asset linked to projected deterioration models based on asset material and condition information obtained from rolling condition audits. Large individual assets such as traffic signal installations and bridges require individual

specialist condition audits undertaken periodically. These audits provide an update to the expected life of the asset which is then used to amend estimated replacement/renewal requirements.

The average remaining life of transportation assets (at the 2007 transportation assets revaluation) is shown in Table 4.2.

**Table 4.2: Transportation Assets % Remaining Life**

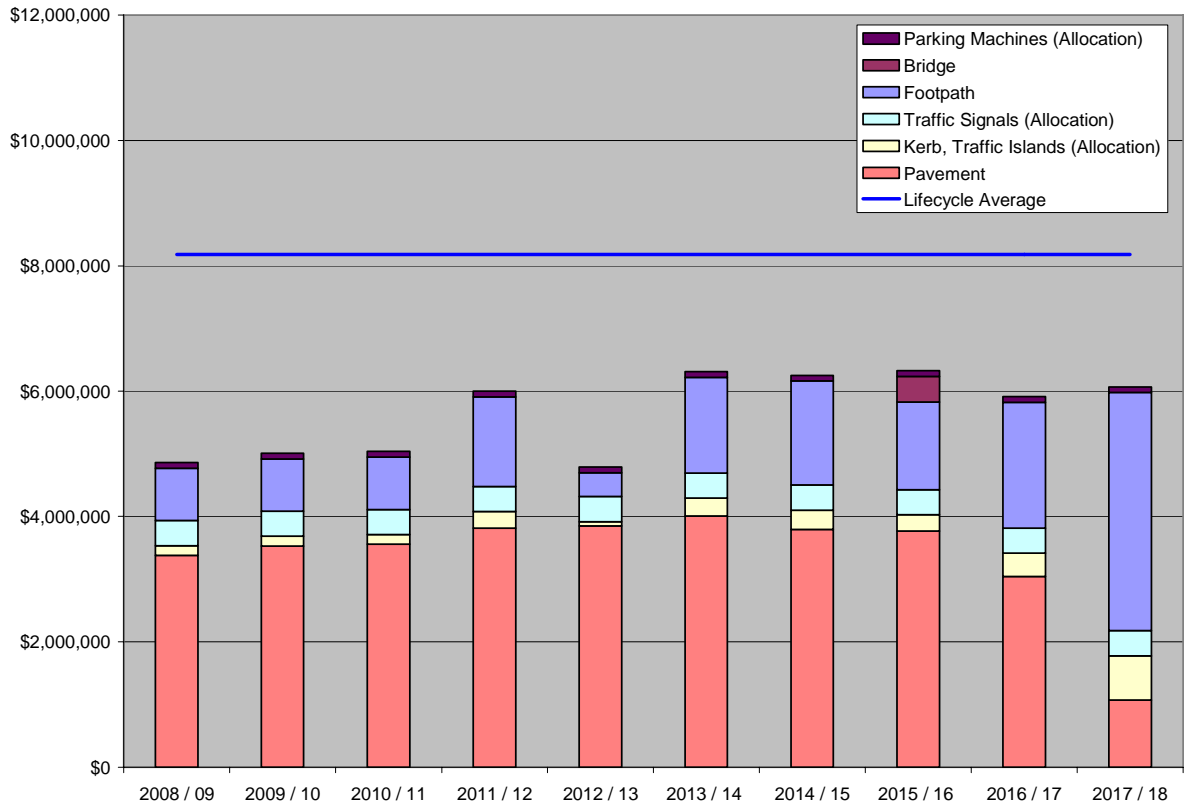
Asset Type	% Remaining Life
Bridges	54.4 %
Road Pavements	61.0 %
Footpaths	67.7 %
Kerb and Water Table	48.6 %
Medians and Traffic Islands	75.6 %
Traffic Signals	49.0 %
Parking Machines	52.4 %

In total, transportation asset have an average remaining life of 58.4 % of useful life.

### **4.3 Renewal Summary**

The asset renewal profile for bridge, footpath and pavement assets has been developed by modelling asset remaining life based on asset expected life, known installation dates and all available condition information. Kerb and traffic islands are renewed as required in conjunction with associated footpath and road assets. For planning purposes, these assets have been given a financial renewal allocation based on the projected footpath and road surface renewal profile. An allocation based on current practice has also been made for traffic signals. At this stage there is not sufficient information to complete a detailed renewal profile for traffic signals, traffic signals are currently the focus of a detailed data collection program and as a result their renewal program requirements will be updated in a future revision of this plan. The replacement of Parking Machines is based on machine age and projected replacement due to technology upgrade requirements. The projected renewal expenditure for transportation assets is shown in Figure 4.1.

There is currently no backlog of deferred transportation asset renewals.



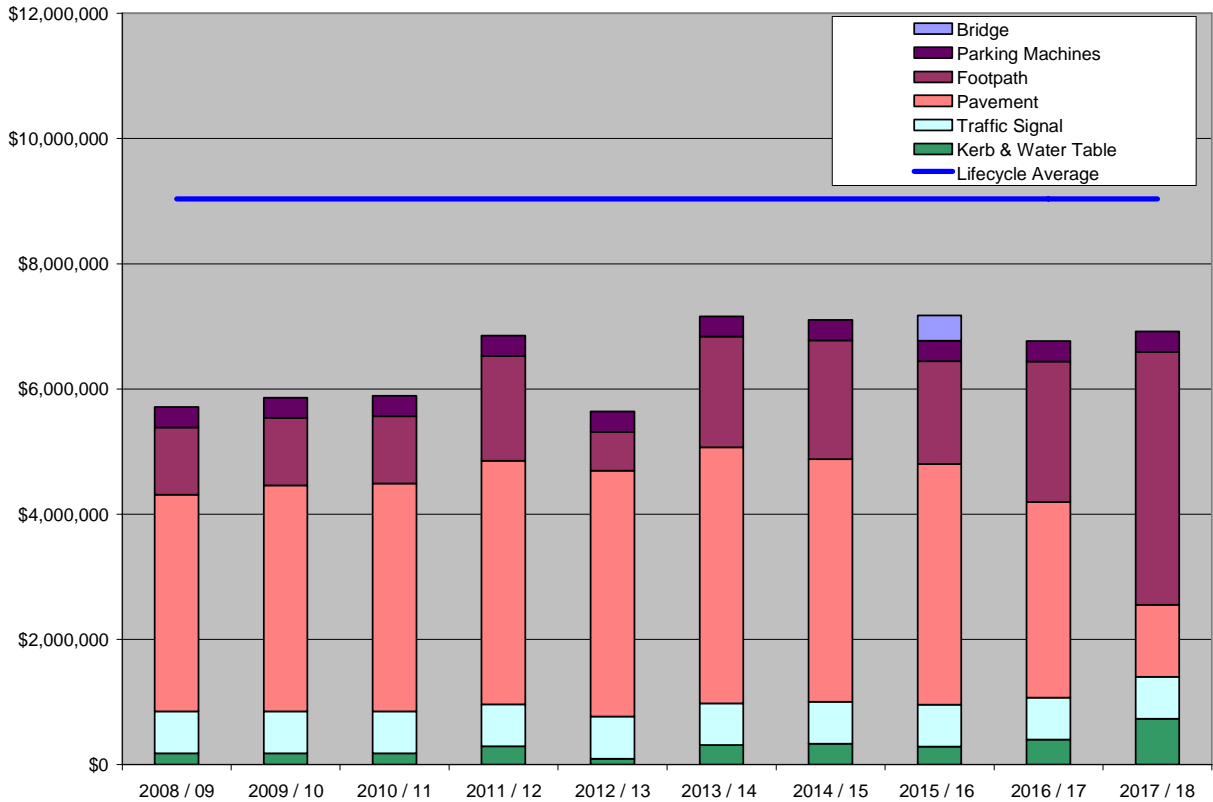
**Figure 4.1: Transportation Assets Projected Renewal Expenditure**

Renewal costs for transportation assets averages out to \$8.2 Million per year when considering the overall renewal profile over the expected lives for all transportation assets. Projected renewal expenditure over the next 10 years, while rising slightly, is significantly lower than this lifecycle average and is a result of minimal bridge works to be completed in this time. The replacement of Councils major transportation bridges will require a significant funding allocation in the longer term. This spike in transportation expense will need careful management and planning.

The transportation network is fully developed it is not expected to have a significant increase to its asset base in the longer term. Additional assets associated to major city improvements (Tram extension, North Tce, new traffic signal installations) will increase the asset base slightly and will have an impact on the renewal requirements, however this impact is manageable over the longer term.

## 4.4 Financial Summary

Overall the projections for the next 10 years for Asset Renewal and Maintenance/Operating costs are presented in Figure 4.2.



**Figure 4.2: Transportation Assets Projected Maintenance and Capital Expenditure**

Over the life cycle, maintenance and capital renewal costs average out to \$9.1 Million per year. The impact of major streetscape upgrades (North Terrace) will have an immediate impact on operational expenditure that will need to be managed and monitored in the short to medium term.

## 4.5 Transportation Summary

Adelaide City Council has an integrated network of roads, footpaths, bridges and traffic signals which provide the transportation network requirements for the City of Adelaide. Over the next 10 years there is an increasing need for asset renewal expenditure and in the longer term, large replacement projects for major bridge assets will require careful funding consideration. Overall the network is in good condition and the asset class is providing the required level of service for the community.

The detailed discussion, assumptions and data analysis that has been summarised in this document can be found in Council's "2008 Transportation Infrastructure and Asset Management Plan" document available from the Customer Service Centre or via Adelaide City Council's web page.

## 5 Lighting, Electrical and CCTV

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### 5.1 Asset Information

#### 5.1.1 Lighting and Electrical and CCTV Assets - Adelaide City Council Owned

The City of Adelaide is serviced by a system of public lighting along roads, footpath, Squares and pathways within Park Lands throughout the city precinct. The street lighting provides night time illumination for pedestrian and vehicle safety, security for visitors and residents and contributes to the night time amenity of the city.

Adelaide City Council's lighting assets comprises lighting columns, street lights, above ground and underground cabling and ducts, fuse pits and switchboards. In addition there are a small number of gas street lights in scattered locations. Power supply assets are generally owned by ETSA, however in some cases underground power reticulation infrastructure, mostly in the Park Lands, is owned by Adelaide City Council.

Other forms of lighting owned by Adelaide City Council include:

- lighting of monuments,
- floodlighting of buildings
- floodlighting of the Torrens Lake
- up lighting and bud lighting of trees
- decorative lighting for special occasions and events.

There are numerous types of columns used for street lighting purposes mainly as a result of the ancillary equipment mounted on lighting columns, for example, traffic signal equipment, banners, street and parking signs, floodlights, power outlets, CCTV security cameras. Predominantly lighting columns are galvanised steel manufactured with spherical type lights. In special locations, such as ceremonial streets, highly decorative types of painted poles and 'Adepole' have been installed.

ETSA is involved with the operation and maintenance of Adelaide City Council owned public lighting assets to varying degrees. More detailed information with respect to this can be found in the Lighting, Electrical and CCTV Infrastructure and Asset Management Plan.

Adelaide City Council owns and maintains a network of cameras that are monitored by the Police Security Services Division to improve safety for visitors and residents within the City of Adelaide. The Department of Transport, Energy and Infrastructure also has limited access to cameras for traffic management purposes. A total of 38 cameras are operated within the public realm.

Finally, Power Switchboards, Bollards and Outlets are provided in various locations around the city for events and special occasions.

#### 5.1.2 ETSA Owned Assets

Approximately 50% of the public lighting service provided within the City of Adelaide is provided by ETSA owned assets to Adelaide City Council at a cost. This service is provided via lighting attachments to existing overhead power supply infrastructure. ETSA operate and maintain these assets and charge Adelaide City Council a tariff. There is approximately 60 km of overhead powerlines and supporting stobie pole infrastructure within the City of Adelaide. This infrastructure ranges from low voltage to high voltage 66kV cables.

The service provided by ETSA owned assets is generally not adequate to meet Adelaide City Council requirements. The deficiencies are described in the Lighting Policy and are primarily a result of poor

aesthetics and the limitations of using existing power supply pole infrastructure for non standard ETSA lighting fixtures, banner poles, traffic signals etc.

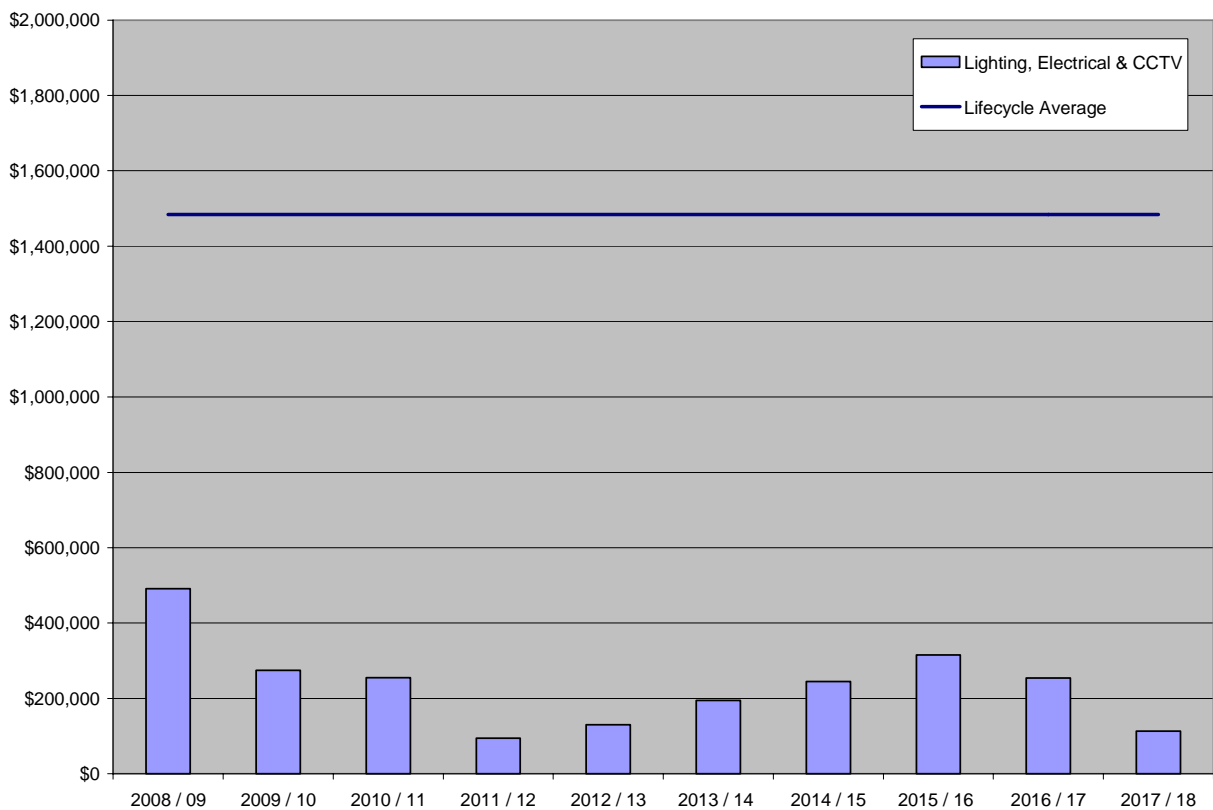
Upgrades to lighting assets involve the disposal of existing infrastructure, undergrounding of the associated power supply and installation of lighting columns. This process typically significantly increases the Adelaide City Council asset base while either maintaining or enhancing an existing service. This enhancement process and the impact on the asset base is described in further detail in the Lighting, Electrical and CCTV Asset Management Plan.

## 5.2 Condition Summary

The remaining life of lighting, electrical and CCTV assets is based on the age of the existing assets and for lighting columns can be verified through periodic condition assessment. The average remaining life of lighting, electrical and CCTV assets (at the 2007 lighting, electrical and CCTV assets revaluation) is 63.95%. CCTV assets are not depreciated.

## 5.3 Renewal Summary

The asset renewal profile has been developed by modelling asset remaining life based on asset expected life, known installation dates and available condition information. The projected renewal expenditure for Lighting, Electrical and CCTV assets is shown in Figure 5.1.



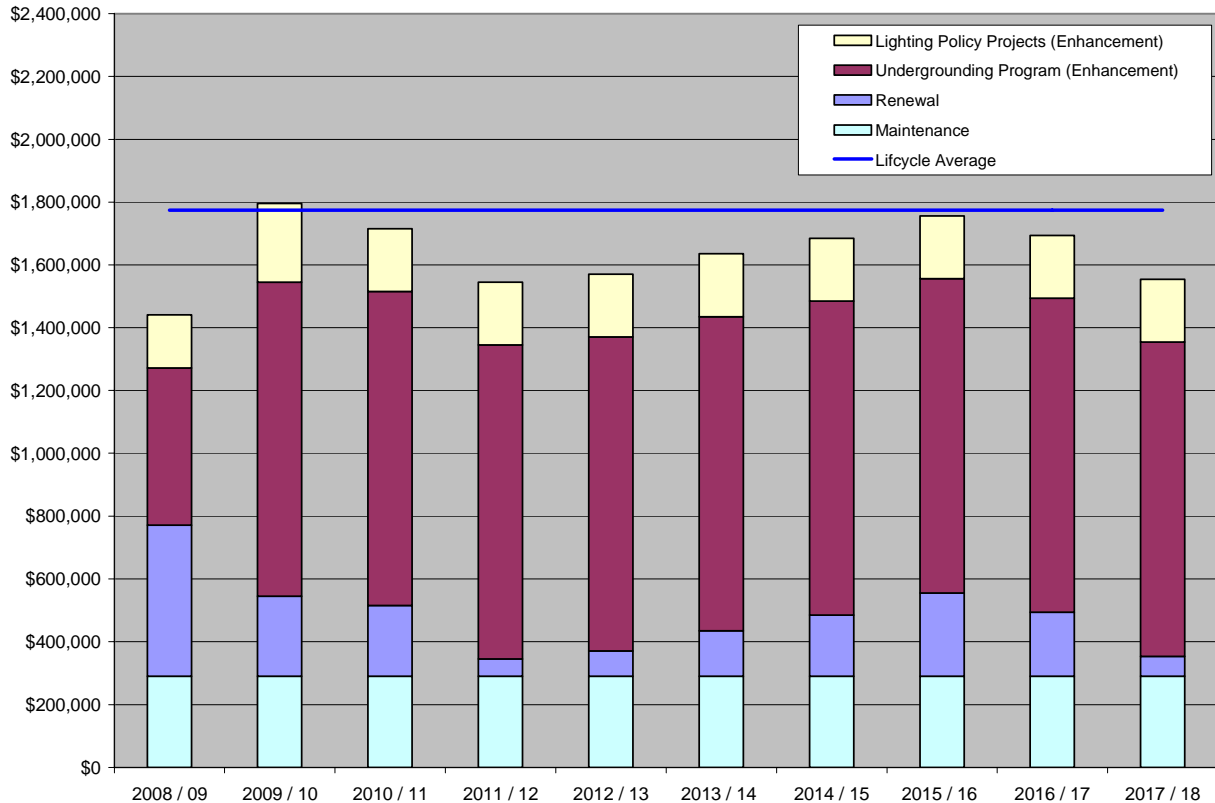
**Figure 5.1: Lighting, Electrical and CCTV Assets Projected Renewal Expenditure**

Renewal costs for Lighting and Electrical assets average out to \$1.5 Million per year when considering the overall renewal profile over the expected lives for all assets. Renewal expenditure over the next 10 years is significantly lower than the lifecycle average due to the good condition of the lighting and electrical asset base. However, additional expenditure will be required in the short term to improve the standard of lighting in poorly lit streets to the required level of service. In some cases this is undertaken when renewing the existing assets within the street however minor lighting improvements are also funded within the renewal program as required to reduce public risk and safety issues. As a result while the

projected spend over the next 10 years is less than the average expenditure, additional budget is allocated as part of Council's renewal program to enable minor upgrades to occur. The priority of these minor upgrades is driven by the Lighting Policy and lighting standard gap analysis. As a consequence, the expectation is an annual budget between \$1 and \$1.5 million per year over the next 10 years.

### 5.4 Financial Summary

The financial summary for lighting, electrical and CCTV assets are shown in Figure 5.2. This includes projections for maintenance and all capital expenditure (renewal and upgrade/expansion/new assets).



**Figure 5.2: Lighting, Electrical and CCTV Projected Maintenance and Capital Expenditure**

Over the lifecycle, renewal and maintenance costs for lighting electrical and CCTV assets averages out to \$1.8 Million per year.

### 5.5 Lighting and Electrical Summary

Adelaide City Council manages a network of lighting, electrical and CCTV assets that is part owned by ETSA. These assets provide night time illumination for pedestrian and vehicle safety, security for visitors and residents and contribute to the night time amenity of the city.

Over the next 10 years there is a minimal requirement for the renewal of Adelaide City Council owned assets, however there will be a requirement for minor upgrades to supplement existing Adelaide City Council and ETSA owned assets in order to bring them up to current lighting standards for public risk and safety reasons.

The detailed discussion, assumptions and data analysis that has been summarised in this document can be found in Council's "2008 Lighting, Electrical and CCTV Infrastructure and Asset Management Plan" document available from the Customer Service Centre or via Adelaide City Council's web page.

## 6 Urban Elements

### 6.1 Asset Information

The City of Adelaide has a large suite of public realm assets which it classifies as Urban Elements. These elements include all street and park furniture assets, public artworks and monuments, recreational elements (playgrounds, BBQ's etc) and other urban furniture items (Flag poles, bus shelters etc). These assets contribute to the amenity and user friendly aspect of the City.

The Urban Elements asset base has a current replacement value in excess of \$30 million. The split of assets covered by the Urban Elements Infrastructure and Asset Management plan and their replacement values are shown in Table 6.1.

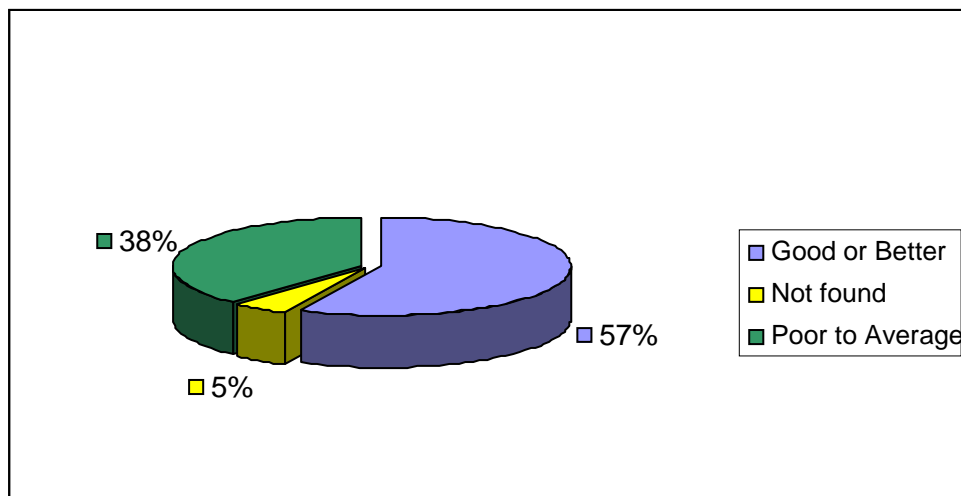
**Table 6.1: Urban Elements Assets**

Asset Type	Quantity	Replacement Value
Public Artworks	Monuments & Statues (42), Sculptures (35), Commemorative Furniture (38), Water Features-Fountains (16), Water Features-Plant (14), Water Features-Ponds (17), Plaques & Tablets (111), Commemorative Drinking Fountains (5), Artworks General (4)	\$18,000,000.00
Bus Shelters	Adshel Advertising (88), Adshel Non Advertising (20), Concrete / Timber / Glass (18)	\$1,700,000.00
Seats City Streets	Adelaide Suite Type 05 (220), Type 03 (1) North Terrace Type (77), Rundle Mall Type (47)	\$4,579,608.00
Seats Park Lands & Squares	Adelaide Suite Type 05 (123), Willow Branch Type 04 (518), Type 02 (1), Type 03 (324), Type 09 (73), Type 10 (7), Type 11 (2), Type 12 (26), Type 13 (2), Type 14 (10), Type 15 (4), Type 16 (10), Type 17 (3), Type 18 (6), Type 20 (1), Type 21 (2), Type 26 (6), Type 27 (9), Type 28 (1)	
Bin Surrounds City Streets & Squares	Adelaide Suite (133), Rundle Mall Suite (45), Green Suite (181), Melbourne St Suite (23), O'Connell Street Suite (21)	\$1,579,140.00
Bin Surrounds Park Lands	Green Suite (684)	
Butt Out Bins City Streets & Squares	Units (239)	\$60,000.00
Bike Racks	Type 1 & Type 2 (165)	\$81,000.00
Flag Poles	Grote Street (22) Victoria Square (2)	\$250,000.00

	Floral Clock King William Rd (1)	
Bollards	(90)	\$2,479,800.00
Planter Boxes	(218)	\$134,000.00
BBQ's	(36)	\$150,000.00
Drinking Fountain	(17)	\$227,700.00
Pergola's	(6)	\$50,000.00
Rundle Mall Canopy	(1)	\$1,000,000.00
Gates, Fences & Barriers	Gates (17), Fences & Barriers (68)	\$950,738.00
Playgrounds & Equipment	(23)	\$60,000
Signage	(179)	Unknown
Retaining Walls	Unknown length, data to be verified	Unknown
	<b>TOTAL</b>	<b>\$30,010,986.00</b>

## 6.2 Condition Summary

Remaining life of depreciated urban element assets (BBQ's, Rundle Mall Canopy, Playgrounds) are based on age (installation date) and condition audits. The average remaining life of depreciated urban element assets (as at the 2007 urban element assets revaluation) is 47.56%. Public artwork condition has been externally audited and a snapshot summary is provided below in Figure 6.1.

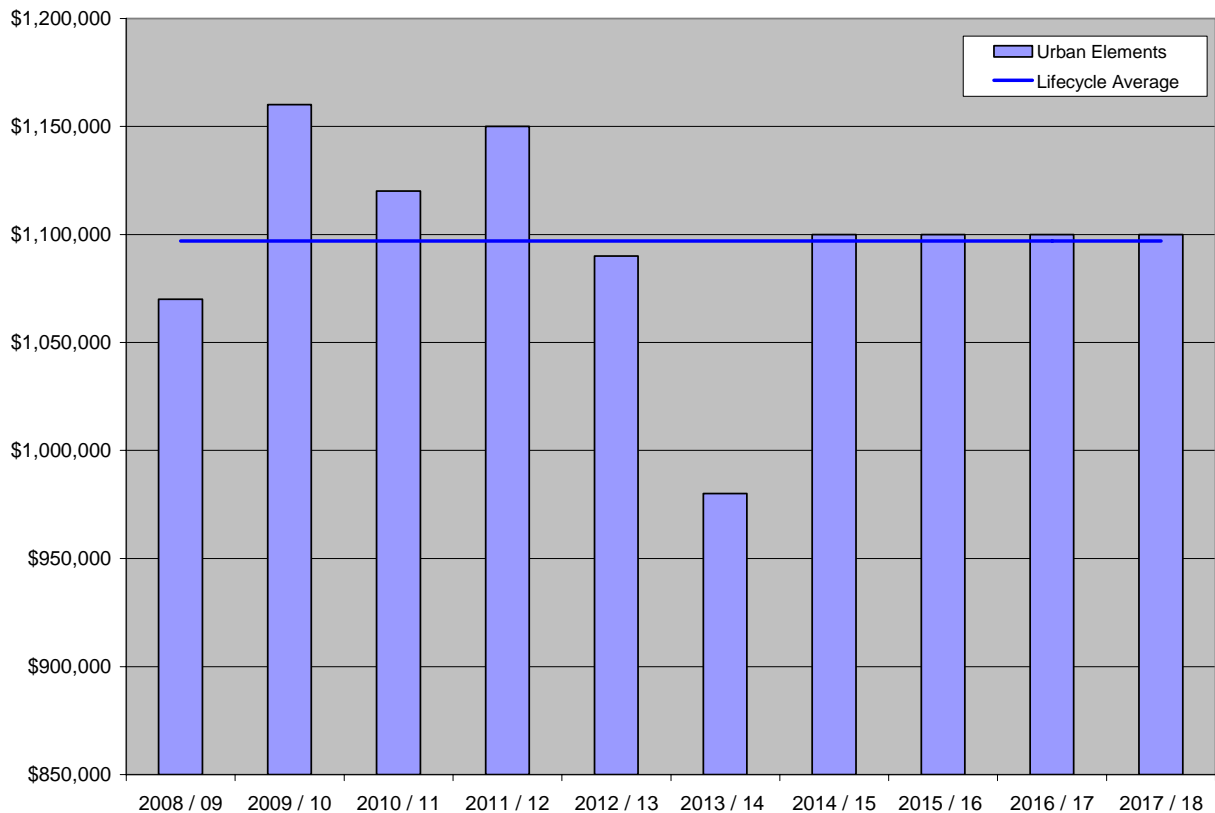


**Figure 6.1: Public Artwork condition at 2007**

All non depreciable urban elements (individual seats, bins, bollards etc) are not managed at an individual assets level due to the large numbers of assets and the minimal benefit in managing these assets in this manner. These assets are replaced on an ad-hoc needs basis (due to deterioration or damage from vandalism etc). As a result, there is no program for condition audits or analysis.

### 6.3 Renewal Summary

The asset renewal profile has been developed by modelling asset remaining life based on asset expected life, known installation dates and available condition information. For assets which are replaced on an ad hoc basis (seats, bins etc) an annual allocation determined from historical replacement rates has been applied to cover renewal costs. The projected renewal expenditure for Urban Element assets is shown in Figure 6.2.

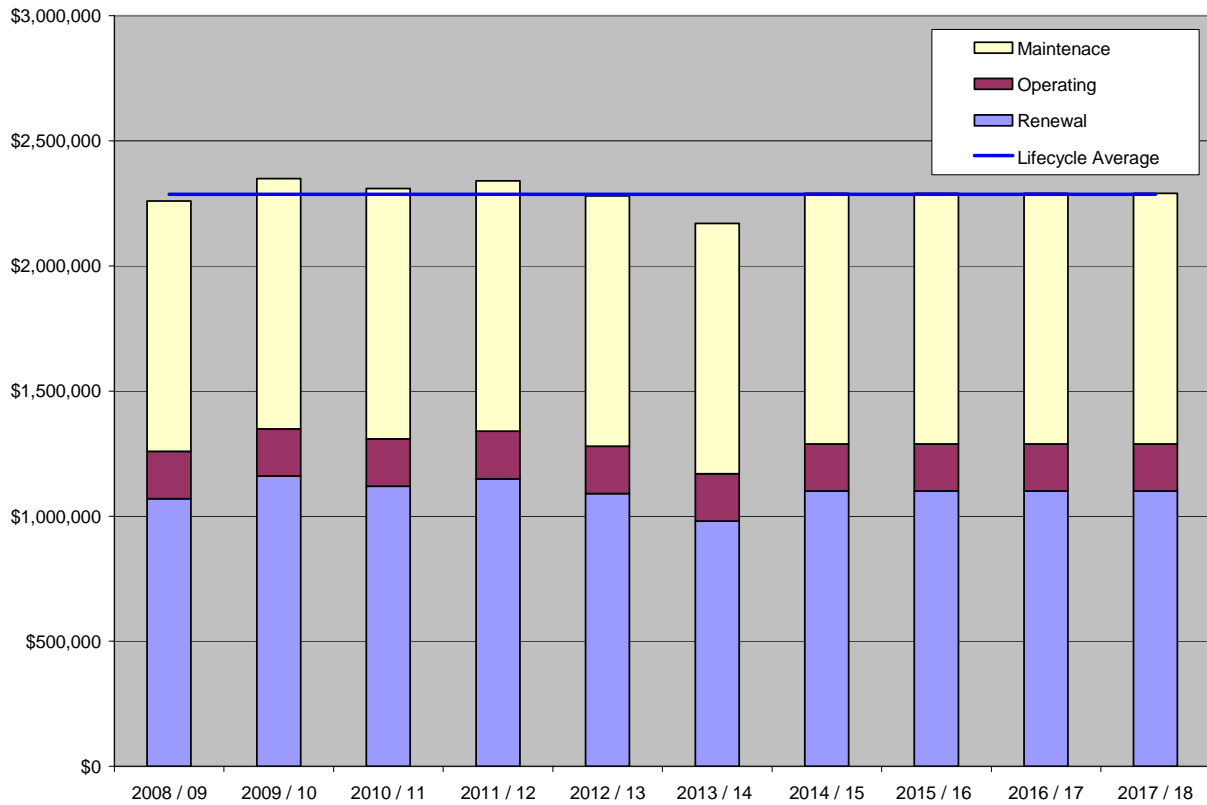


**Figure 6.2: Urban Elements Projected Renewal Expenditure**

Over the life of all Urban Element assets the projected average annual cost for the next ten years is \$1.1 Million. It is anticipated over the longer term that the renewal expenditure for urban elements will increase. This will require monitoring in future revisions of this plan, however given the increasing demand for public amenity and the financial implications the success of improved public spaces such as Grote St and North Tce has on this asset group, the assumption of increased expenditure requirement over the longer term is appropriate.

### 6.4 Financial Summary

The financial summary for urban element assets is shown in Figure 6.3. This includes projections for maintenance and all capital expenditure (renewal and upgrade/expansion/new assets).



**Figure 6.3: Urban Elements Projected Maintenance, Operating and Renewal Expenditure**

Over the life of all urban element assets the projected average annual cost for the next ten years is \$2.3 Million.

## 6.5 Urban Elements Summary

Adelaide City Council has a large suite of Urban Element assets which improve the amenity and experience of City users. The majority of these assets are suitably replaced in an ad hoc manner as their condition warrants. It is anticipated that expenditure over the longer term for urban elements will increase as additional city users demand an improved public amenity and experience within the City.

The detailed discussion, assumptions and data analysis that has been summarised in this document can be found in Council's "2008 Urban Elements Infrastructure and Asset Management Plan" document available from the Customer Service Centre or via Adelaide City Council's web page.

## 7 Buildings

### 7.1 Asset Information

Adelaide City Council provides a diverse property and building portfolio that houses its staff and delivers significant benefit to the community in the form of community buildings and spaces.

The portfolio comprises Council's administration facilities (Town Hall, Colonel Light Centre, London Road Depot), specific community buildings (Central Market and Aquatic Centre), City U-Parks, Public conveniences and a large number of various Park Land buildings. A description of these different asset groups that make up the building and property assets are provided below:

- Council Operations Facilities (Major): Main buildings which are used to run the Council Operations. Includes Colonel Light Centre, London Road Depot, Eagle, Queens and Gladstone Chambers and Nursery.
- Council Operations Facilities (Minor): Minor Operational buildings predominantly scattered throughout the Park Lands. Includes Horticultural Lunch Rooms/Facilities, Storage Sheds etc
- Business Operation Facilities: Buildings which are used for Council business purposes. Includes Gold Course Club House, Aquatic Centre, Central Market, U-Parks.
- Major Community Facilities: Council buildings/structures which have a predominant community use focus, includes Town Hall, Tynte St Library, Elder Park Rotunda, Rundle Canopy
- Minor Community Facilities: Minor Council buildings/structures which have a community use focus or are used by community groups. Majority relate to Park Lands sporting groups.
- Public Conveniences
- Leased Properties: Buildings that the council is the Lessee. Includes Grote and Hutt St Libraries and some U-Parks.

These asset groups, the number of buildings within each group and their replacement value is presented in Table 7.1 below.

**Table 7.1: Buildings Assets**

Asset Type	Quantity	Replacement Value
Council Operational Facilities (Major)	18	\$24,923,000
Council Operations Facilities (Minor)	39	\$2,389,750
Business Operation Facilities	20	\$91,826,000
Major Community Facilities	8	\$71,374,000
Minor Community Park Land Facilities	71	\$9,917,500
Public Conveniences	31	\$1,888,400

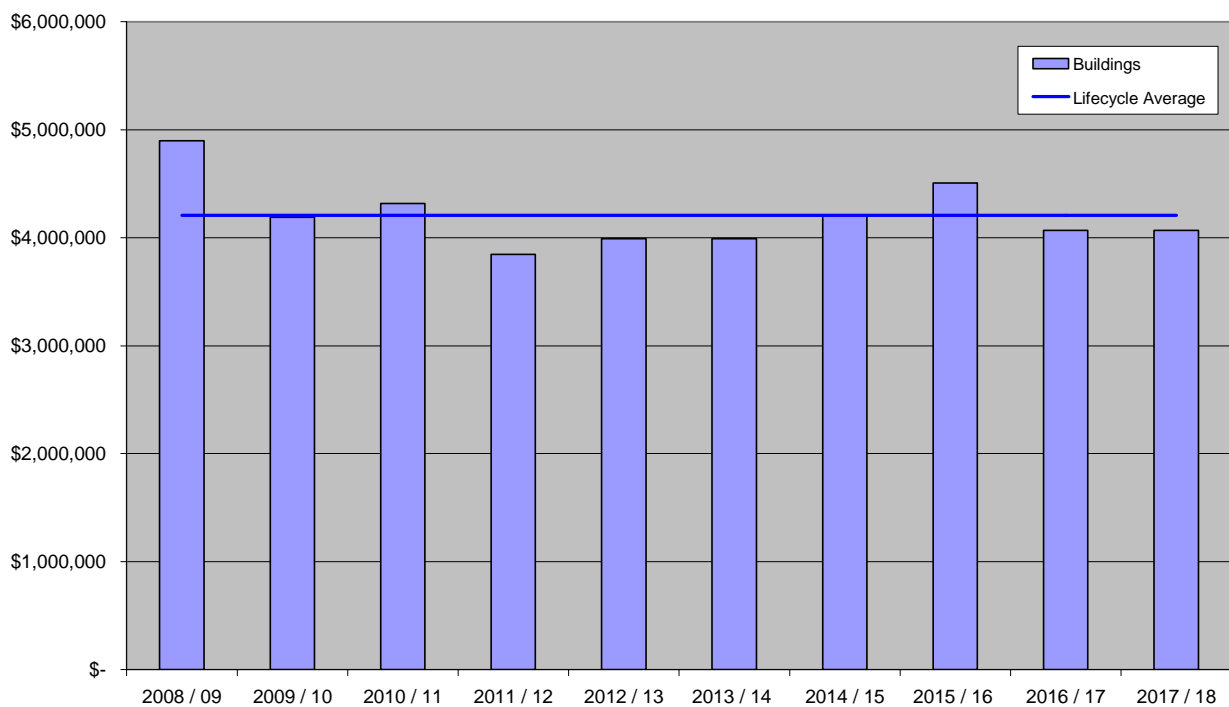
Leased Properties (Council as Lessee)	9	\$1,510,000 (Value of Improvements Council has funded in Leased Buildings)
TOTALS	236	\$279,593,860

## 7.2 Condition Summary

Recent condition inspections have been carried out for 13 of the 18 major buildings, with all properties rating either as Good (6) or Fair (7) on a scale ranging between Poor-Fair-Good-Very Good. Inspections are undertaken on a rolling basis with the remaining major buildings scheduled for completion in 2008 and all minor Park Lands buildings scheduled for inspection in 2009. The inspections focus on all aspects of the properties including legislative compliance (fire systems, emergency lighting etc), building structure and fabric, electrical services, hydraulic services vertical transport (lifts) and building amenity (fit outs, carpets, fittings etc)

## 7.3 Renewal Summary

The asset renewal profile has been developed by modelling asset remaining life based on asset expected life, known installation dates and available condition information. The projected renewal expenditure for building assets is shown in Figure 7.1.



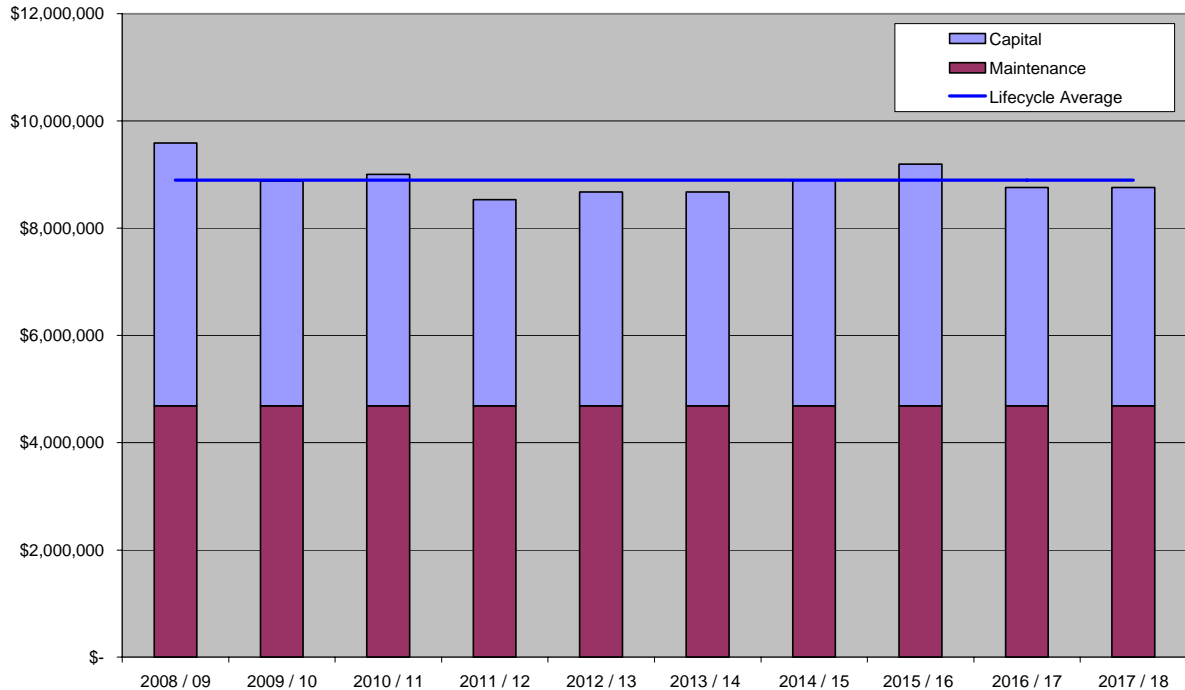
**Figure 7.1: Buildings Projected Renewal Expenditure**

Over the next 10 years the average annual expenditure for building assets is \$4.2 Million. This renewal cost does not include the complete demolition and construction of new buildings, only the renewal of building systems and assets (lifts, fire systems, air conditioners etc) and the maintenance/repair of building fabric (facades, minor structural repairs). The complete demolition and construction of new council properties is not covered within the renewal program and would be a strategic business decision of council requiring funding to a level that is not available within the Council’s capital renewal budget.

The renewal requirements for building assets may increase as a result of possible increases to the building portfolio. This includes the recently completed central bus station and will also include any major works associated with Victoria Park and the Aquatic Centre.

## 7.4 Financial Summary

The financial summary for building assets is shown in Figure 7.2. This includes projections for maintenance and all capital expenditure.



**Figure 7.2: Buildings Projected Maintenance and Capital Expenditure**

Over the life of all building service assets the projected average annual cost for the next ten years is \$8.9 Million.

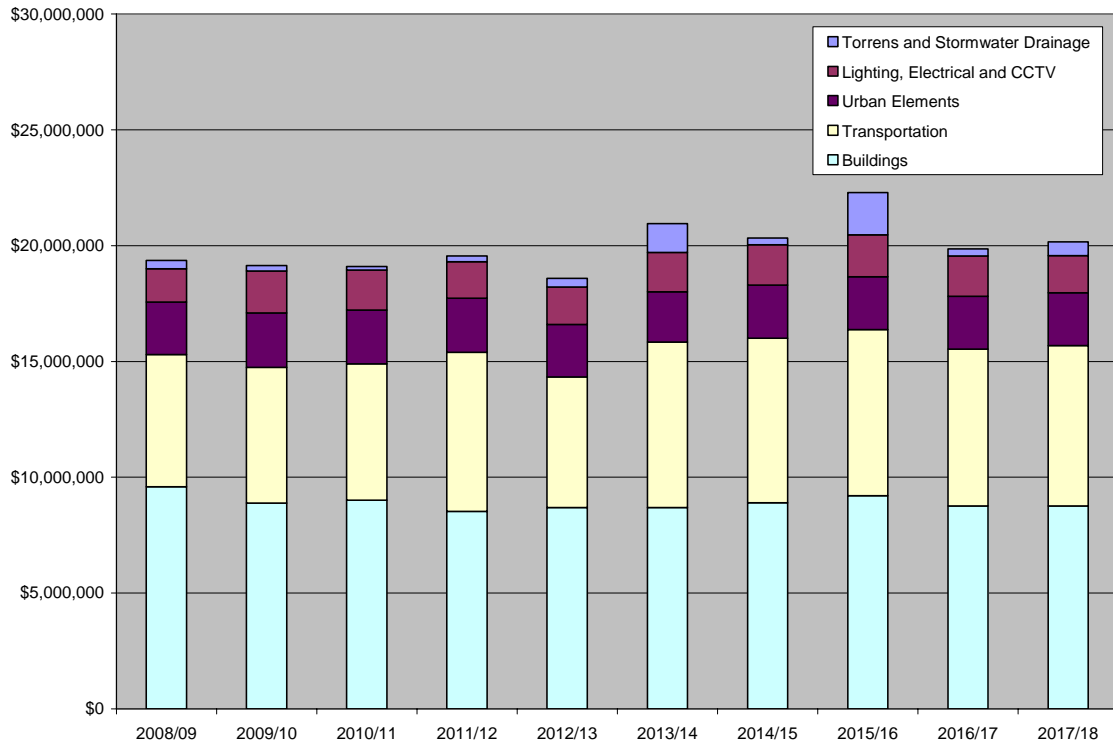
## 7.5 Buildings Summary

Adelaide City Council has a diverse portfolio of building assets which provide accommodation to its staff and provide community places for the city. The building portfolio is in fair to good condition and there is currently no backlog of deferred renewal works. It is anticipated that renewal expenditure requirements will increase due to recent portfolio additions and potential future growth.

The detailed discussion, assumptions and data analysis that has been summarised in this document can be found in Council's "2008 Buildings Infrastructure and Asset Management Plan" document available from the Customer Service Centre or via Adelaide City Council's web page.

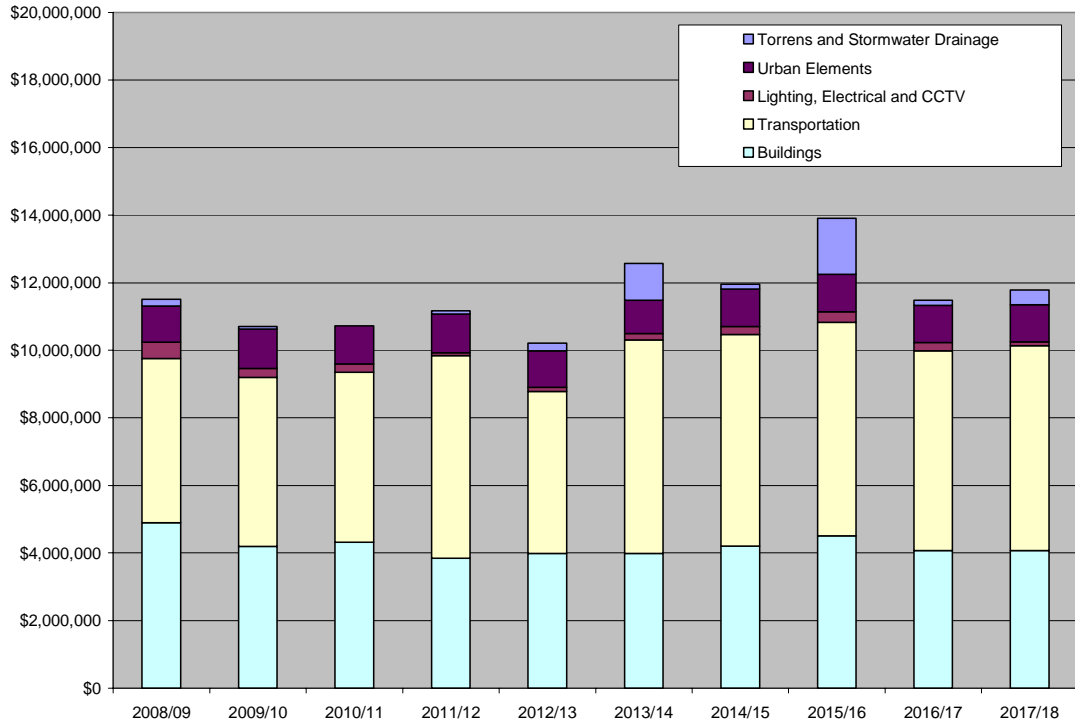
## 8 Financial Summary

The combined financial projections for all asset classes covered in this plan are provided in Figure 8.1. Over the next 3 years, the projection sits at a relatively constant rate of just under \$19 million. This is provided for through Council's capital and operating projects program and its operational budget.



**Figure 8.1: Combined Projected Capital and Operating Expenditure**

The financial projections specifically for all capital asset renewal projected expenditure (all asset classes) are provided in Figure 8.2. Over the next 3 years, the projection for Capital Renewal sits between \$10.5 and \$11.5 million, with an increase over the longer term to a peak of almost \$14 million in 2015/16.



**Figure 8.2: Combined Projected Renewal Expenditure**

The comparison between the Capital Asset Renewal expenditure requirements from these plans and the current “real” renewal provision within the Long Term Financial Plan for the next 3 years are presented in Table 8.1 below. Currently Council has allocated sufficient budget within its Long Term Financial Plan to meet its Capital Asset Renewal Requirements.

**Table 8.1: 2008/2011 Renewal Budget and Renewal Requirement**

Asset Type	2008/2011 Asset Management Plan Renewal Requirement	2008/2011 LTFP Projected Real* Renewal Expenditure (Incl O/H)
Transportation	\$14.91 Million	\$14.86 Million
Lighting, Electrical and CCTV	\$0.99 Million	\$1.30 Million **
Torrens and Stormwater Drainage	\$0.27 Million	\$0.77 Million ***
Urban Elements	\$3.35 Million	\$3.38 Million
Buildings	\$13.41 Million	\$13.43 Million
<b>TOTALS</b>	<b>\$32.93 Million</b>	<b>\$33.75 Million</b>

\* In this context the term “real” with regards to Capital Asset Renewal Expenditure relates to the actual dollars which are expected to directly replace or renew existing assets. This does not equate exactly to the figures within Council’s Long Term Financial Plan

for Capital Asset Renewal. Certain asset renewal projects will include elements that enhance or upgrade the service provided by the asset for a reason other than for the purposes of asset renewal. (i.e. the provision of additional public seating as part of a footpath renewal project). These "value-add" aspects are not "real" renewal expenses for the purposes of ensuring the renewal requirements of these plans are met).

\*\* Current levels of lighting in some locations within the City are deemed unsatisfactory and require additional funds to upgrade the lighting to bring them up to current lighting standards.

\*\*\* Torrens and stormwater drainage have an increased renewal cost over the next 3 years in comparison to the plan requirements as certain drainage projects have been brought forward to coincide with corresponding road surface works within the street.

## 9 Key Assumptions

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- Assets will remain in Council ownership throughout the planning period.
- All dollar values are stated as at June 2007 with no allowance made for inflation over the planning period.
- Long term asset renewal timings are based on the life expectancy of the asset and the proposed alignment with other asset groups. Timings within the 3 year program have been determined using the longer term plan as a guide with individual project candidates then inspected and prioritised manually by the relevant Asset Manager.
- Maintenance costs are based on historical expenditure and assume no significant increases in service requirements or contractor/material rates.
- The value of assets were adopted from the most recent revaluation:
  - Buildings: 2003 Property Re-Valuation.
  - Park Land assets: 2003 Park Lands Re-Valuation.
  - All other assets: 2007 Infrastructure Re-Valuation.
- Renewal figures are based on Brown-fields construction costs.
- Renewal of assets were estimated under the principle of current engineering equivalent. (i.e. "like for like" if it exists or the now current material/object equivalent)
- Where additional information exists regarding the proposed future renewal (i.e. if a material is scheduled to change due to the footpath paving policy), then this was taken into account when developing the forward estimates. It is assumed for the purposes of this plan that all policies and guidelines will remain in place for the life of the plan. Changes to Council Policies will have an impact on the projections for asset expenditure.

## **10 Plan Improvement and Monitoring**

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### **10.1 Plan Review**

Once adopted, the Infrastructure and Asset Management Plans form part of the formal suite of plans required under the Local Government Act. The plans will remain current until replaced by an updated plan adopted in conjunction with the adoption of any New Strategic Plan as required under the Local Government Act. (At present this must occur within 2 years of a new Council being elected.)

The Infrastructure and Asset Management Plans are a living document which is relevant and integral to the daily Asset Management activities at Council. To ensure the plan remains useful and relevant, the following process of AM plan monitoring and review activities will be undertaken:

- Formal adoption of the plan by Council in conjunction with the Strategic Plan
- Review and formally adopt levels of service.
- Revise Plan annually to incorporate and document changes to work programs, outcomes of service level reviews and new knowledge resulting from the AM improvement program. (To be adopted as part of the Annual Business Plan and Budget Process each year)
- Quality assurance audits of AM information to ensure the integrity and cost effectiveness of data collected (ongoing).

### **10.2 Plan Monitoring**

The following indicators will be monitored to measure the effectiveness of this Plan.

- Compliance with legislative requirements – Audit of plan in comparison to Local Government Act, 1999 Requirements
- Quality of Services Delivery – Increasing or 100% compliance with service targets.
- Quality of Risk Management – No events occurring outside the risk profile.
- Benchmarking with comparable Councils – Maintain performance of Asset Management practices in comparison to other Local Government Organisations.

### **10.3 Plan Improvement**

The suite of Infrastructure and Asset Management Plans are prepared with the expectation that they will be updated and improved annually as information, and as a consequence analysis, improves. To this end each Infrastructure and Asset Management Plan has a list of plan improvements which have been identified to improve the quality of the plans in future revisions. These improvements will be the focus of Council's data collection and analysis resources each year and will be an integral part of the annual review and update process. Improvement tasks identified for 2008/2009 have been summarised in Table 10.1. For details on improvements to individual plans, please refer to individual Infrastructure and Asset Management Plans for these details.

**Table 10.1: 2008/2009 Plan Improvement Tasks**

Task No	Asset Group	Task	Responsibility	Resources Required	Timeline
1.	All	Update and revise plan to reflect changes in asset portfolio and business practices.	Capital Planning	Internal	Annual – part of Business Plan and Budget Process
2.	All	Review of maintenance practices to ensure alignment to service level requirements	Capital Planning, City Wide Services, Asset Management	Internal	Annual – part of Business Plan and Budget Process
3.	All	Ongoing rolling program of data collection.	Capital Planning	Internal, Existing Programs	Ongoing
4.	All	Develop and review detailed risk analysis and planning for critical assets.	Capital Planning, Asset Management	Internal	June 2009
5.	All	Review service levels and commence Internal and Elected Member consultation on service level provision.	Capital Planning, Asset Management	Internal	June 2009
6.	Urban Elements	Targeted audit to verify and improve accuracy of assets data base for priority 1 assets: Artworks, Bike Racks, Drinking Fountains, BBQ's, Gates, Fences & Barriers.	Capital Planning, Asset Management	\$15,000	June 2009
7.	Torrens and Stormwater Drainage	Include stormwater drainage specific questions in annual customer surveys.	Corporate Planning and Performance	Internal	June 2009