1.0 INTRODUCTION

1.1 Background

1.1.1 General

The Strathbogie Shire Council is responsible for the management of diverse range of community assets, and is committed to the operation and management of the assets so as to optimize their benefits to our community for current, and future generations, ie to deliver inter-generational equity.

The Council has developed, and is implementing, an Asset Management Policy. This Policy, which is included in appendix 1, will guide the process of Asset Management by the Council. The policy requires that the lifecycle costs of an asset be considered by, where appropriate, a cross-functional team before asset management decisions are undertaken and implemented.

This Basic Total Asset Management Plan is an integral and tangible element of the implementation of the Policy. This plan is a basic asset management plan, which includes the following information:

- Descriptions of the Council's current asset portfolio
- Definitions of the current levels of service of the asset groups
- Determination of the current condition of the assets
- Definitions of the desired levels of service of the asset groups
- Broad description of lifecycle management activities
- Demand projections and forecasts
- Future funding forecasts and related projected asset condition

This Basic Plan includes information and knowledge on the following physical infrastructure and community facility asset groups:

Physical infrastructure:

- Roads
- Bridges
- Major culverts
- Paved footpaths
- Kerb and Channel
- Underground drainage
- Jetties

Community facilities:

- Buildings
- Waste Management facilities
- Swimming Pools
- Parks and Reserves
- Playgrounds
- Flood Warning System

The information and knowledge relates to:

- Asset inventory
- Asset condition rating
- Asset replacement values
- Levels of Service
- Maintenance and Capital expenditure levels
- Financial Modelling
- Assessment of Confidence levels of the information
- Improvement Plan for the on-going improvement and refinement of this plan

Innovative approaches to asset management will be considered, and where appropriate, will be implemented on a pilot basis initially to test their applicability.

Sustainability is the important concept within asset management. As given in Council's vision for asset management, inter-generational equity is necessary to ensure that our physical assets are available to our future communities. The Council is committed to undertaking sound and systematic asset management practices to make that vision a reality.

1.1.2 Purpose of Asset Management Planning

The size of the Council's investment in the above assets, and the importance of these assets to the community demands excellence in the management of the assets. The community expects the assets to be managed in such a way that costs are minimized, while providing the levels of service that the community desires.

The overall purpose of AM planning is:

> "To meet a required level of service in the most cost effective way (through the creation, operation, maintenance, renewal and disposal of assets) to provide for existing and future customers".

This AMP is the tool for combining management, financial, engineering and technical practices to ensure that the level of service required by customers is provided at the lowest long term cost to the community. The plan is intended to demonstrate that Council is managing the assets responsibly and that customers will be regularly consulted over the price/quality trade-offs resulting from alternative levels of service.

AMP's are concerned with outlining optimal life cycle management strategies and providing details of the associated costs. This identification of future needs, management options and cash flows provides the ability to even out peak funding demands and account for asset depreciation loss of service potential.

The main benefits derived from AM planning are:

- Improved understanding of service level options and standards
- Minimum lifecycle (long term) costs are identified for an agreed level of service
- Better understanding and forecasting of asset related management options and costs
- Managed risk of asset failure
- Improved decision making based on costs and benefits of alternatives
- Clear justification of forward works programmes and funding requirements
- Improved accountability over the use of public resources
- Improved customer satisfaction and organisational image

A fundamental objective throughout the preparation (and future review) of this plan will be to identify potential opportunities for reductions in asset lifecycle costs.

1.1.3 Purpose of this Plan

The preparation and implementation of an AMP from which long term financial strategies will be developed, is a means of the Council complying with these requirements, and provide a basis for sound infrastructure and asset planning.

This plan considers current expenditure and existing levels of service, and using generic asset degradation curves models the consumption or degradation of the asset. Two modelling outcomes are available to Council from our asset management modelling software. The outcomes are:

- Given a fixed, or pre-determined, expenditure level the model predicts the overall average asset condition rating at a future date, and plots a bar-graph of asset condition versus asset amount,
- A desired minimum asset condition level is established, and the model determines the required annual expenditure to achieve the pre-determined asset condition level.

This plan makes a comparison between the budget-based expenditure approach (ie: here is $200,000.00 - do what you can with it!) and the asset-based approach (ie the resources that are needed to replace the consumed or ageing asset)

The plan will develop proposals for the long term condition of the various asset groups based on expected asset degradation or depreciation curves. The curves used in this report have been adopted from similar curves used by other municipalities. The process of asset management is a continuous process, one that is continually refined and improved upon. The curves used to develop the estimated depreciation will need to be reviewed and refined with time when more data and information relevant to the various asset groups is obtained.

The plan does not provide an absolute statement about the expected asset condition and funding requirement. It does provide information on trends and expected condition of the asset base into the future. The confidence levels of the plan are given for each asset group. Obviously, the confidence of the outcome of the modelling is based on the quality of the data and information used to drive the model. This will be refined and improved with time.

The important piece of information to remember when considering the outcome of the financial modelling in this plan is that it provides strong guidance as to future asset condition and funding requirements. It narrows the focus of the asset owner/manager.

The plan also identifies strategies that will be developed and implemented, and processes that will be undertaken to ensure that the Council maximizes the opportunities to optimize the benefits to both this, and future, communities from our asset base. This will ensure inter-generational equity.

General introduction to Asset Groups:

Physical infrastructure:

Road Asset Group:
The assets considered in this section of the Strathbogie Shire Council Asset Management Plan (AMP) are:

- Sealed roads (formation, pavement and sealed surface)
- Unsealed roads (formation and pavement)

Strathbogie Shire Council is responsible for the management of a local road network with an estimated replacement value (excluding land value) of **$87,130,721**.

The Council's local road network has the following details:

Item no:	Sub-group:	Location:	Sealed roads:(sqm)		Unsealed roads:(sqm)		Roads totals:	
			(sqm)	(%)	(sqm)	(%)	(sqm)	(%)
1	Formations:	Total	6,696,945	46	7,838,695	54	14,535,640	100
2		Urban	736,380	11	92,044	1	828,424	6
3		Rural	5,960,565	89	7,746,651	99	13,707,216	94
4	Pavements:	Total	4,153,535	48	4,460,199	52	8,613,734	100
5		Urban	564,897	14	67,446	2	632,343	7
6		Rural	3,588,638	86	4,392,753	98	7,981,391	93
7	Sealed surfaces:	Total	3,674,674	100	0	0	3,674,674	100
8		Urban	552,434	15	0	0	552,434	15
9		Rural	3,122,240	85	0	0	3,122,240	85

The table given below outlines actual expenditure levels in the year 2002/2003 for maintenance and capital renewal. It also outlines Strathbogie Shire Council's budgetted maintenance and capital renewal allocations for the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance expenditure:	1,448,310.00	1,491,300.00
2	Capital renewal expenditure:		
3	*Council funded:*		
4	Bitumen resealing	201,203.00	200,000.00
5	Gravel resheeting	69,191.00	200,000.00

6	*Roads-to-Recovery funded:*		
7	Bitumen resealing	0.00	268,000.00
8	Gravel resheeting	0.00	0.00
9	**Totals:**	**1,718,704.00**	**2,159,300.00**

The Council's sealed surface asset base is approximately 3,700,000 square metres. Council's recent annual expenditure on sealed surface renewal from it's own funds, ie from Council's own capital budget, the annual renewal of the sealed surfaces has been approximately 100,000 square metres. Broadly, this rate of renewal is based on an asset life of 36 years. The accepted asset life of a sealed surface for sound asset management is 12 to 15 years.

The Council's road asset base consists of the following sub-classes, with the associated percentages based on estimated replacement value.

Item No:	Road asset sub-class:	Est. Replacement Value: ($)	Percentage of assets class: (%)
1	Road formation	9,866,302.00	11.32
2	Unsealed pavements	8,299,887.00	9.53
3	Sealed pavements	62,084,519.00	71.25
4	Sealed surfaces	6,880,013.00	7.91
5	**Totals:**	**87,130,721.00**	**100.00**

Bridge Asset Group:
The assets considered in this section of the Strathbogie Shire Council Asset Management Plan (AMP) are the Bridges Asset Group.

Major Culverts are considered under another section AMP.

Strathbogie Shire Council is responsible for the management of a local road bridge network with an estimated replacement value of **$19,013,412.**

The table given below outlines the Council's actual expenditure levels in the year 2002/2003 for maintenance, capital renewal and capital upgrade of the bridge network. It also outlines Council's budgetted allocations for maintenance, capital renewal and capital upgrades from various funding sources in the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance expenditure:	85,484.00	41,000.00
2	Capital renewal expenditure:		
3	*Council funded:*	28,000.00	28,000.00
4	*Roads-to-Recovery funded:*	242,659.00	511,575.00
	Better Roads Vic:	0.00	196,078.00
7	Capital upgrade expenditure:		
8	*Council funded*	12,000.00	12,000.00
9	*Roads-to-Recovery funded:*	103,997.00	653,324.00
10	*Heritage Victoria*	0.00	150,000.00
11	**Totals:**	**472,140.00**	**1,591,977.00**

The Federal Government's Roads to Recovery (R2R) funding from the 2002/2003 and 2003/2004 years has been committed to the Council's 2002/2003 bridge replacement/rehabilitation program. The Council's annual R2R allocation is $770,252.00. Therefore the total injection of external funding into the bridge program is $1,540,504.00. This Council decision provides a substantial "one-off" boost in bridge asset management financial resources.

The Council's bridge asset base consists of the following sub-classes, with the associated percentages based on estimated replacement value.

Item No:	Bridge asset sub-class:	No. in Sub-class:	Est. Replacemt Value: ($)	Percent of assets class: (%)
1	Timber Bridges	32	2,522,955	13.3
2	Non Timber Bridges	103	15,084,690	79.3
3	Kirwans Bridge	1	1,405,767	7.4
-	**Totals:**	**136**	**19,013,412**	**100.0**

Major Culverts Asset Group:
The assets considered in this section of the Strathbogie Shire Council Asset Management Plan (AMP) are the major culvert assets.

Strathbogie Shire Council is responsible for the management of all major culverts on the local road network. There are currently 376 major culverts in the municipal road network.

The definition of Major Culverts used for the purposes of this AMP is in accordance with the Vicroads bridge inspection guidelines, which are:

> *A major culvert is a culvert having a diameter greater than 1.7metres, or a waterway area of greater than 3.0 square metres*

The estimated replacement value of the Council's major culvert network is **$6,620,293.00**.

The table given below outlines actual expenditure levels in the year 2002/2003 for maintenance and capital renewal. It also outlines Strathbogie Shire Council's budgetted maintenance and capital renewal allocations for the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance expenditure:	1,432.00	5,900.00
2	Capital renewal expenditure:	0.00	0.00
3	**Totals:**	**1,432.00**	**5,900.00**

The Council's major culvert asset base consists of the following sub-classes, with the associated percentages based on estimated replacement value.

Item No:	Major culverts asset sub-class:	Est. Replacement Value: ($)	Percentage of assets class: (%)
1	Major culverts (whole class)	6,620,293.00	100.0
2	**Totals:**	**6,620,293.00**	**100.00**

Paved Footpath Asset Group:
The assets considered in this section of the Strathbogie Shire Council Asset Management Plan (AMP) are:

- Concrete footpaths
- Non-concrete footpaths (eg asphalt)

Strathbogie Shire Council is responsible for the management of a local paved footpath network with an estimated replacement value (excluding land value) of **$1,059,318.00**.

The table given below outlines actual expenditure levels in the year 2002/2003 for maintenance and capital renewal. It also outlines Strathbogie Shire Council's budgetted maintenance and capital renewal allocations for the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance expenditure:	22,239.00	30,600.00
2	Capital renewal expenditure:	0.00	29,000.00
3	**Totals:**	**22,239.00**	**59,600.00**

The Council's paved footpath asset base consists of the following sub-classes, with the associated percentages based on estimated replacement value.

Item No:	Paved footpath asset sub-class:	Est. Replacement Value: ($)	Percentage of assets class: (%)
1	Concrete paths	777,540.00	73.4
2	Non-concrete paths	281,778.00	26.6
3	**Totals:**	**1,059,318.00**	**100.0**

Urban Surface Drainage Asset Group:
The assets considered in this section of the Strathbogie Shire Council Asset Management Plan (AMP) are:

- Kerb and Channel
- Urban open lined drains

Strathbogie Shire Council is responsible for the management of an urban surface drainage network with an estimated replacement value of **$4,378,165.00**.

The table given below outlines actual expenditure levels in the year 2002/2003 for maintenance and capital renewal. It also outlines Strathbogie Shire Council's budgetted maintenance and capital renewal allocations for the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance expenditure:	13,313.00	20,300.00
2	Capital renewal expenditure:	0.00	0.00
3	**Totals:**	**13,313.00**	**20,300.00**

The Council's urban surface drainage asset base consists of the following sub-classes, with the associated percentages based on estimated replacement value.

Item No:	Urban surface drainage asset sub-class:	Est. Replacement Value: ($)	Percentage of assets class: (%)
1	Kerb and channel	3,685,045.00	84.2
2	Brick lined drains	666,440.00	15.2
3	Concrete lined drains	14,610.00	0.3
4	Other lined drains	12,070.00	0.3
5	**Totals:**	**4,378,165.00**	**100.0**

Underground Stormwater Drainage Asset Group:

The assets considered in this section of the Strathbogie Shire Council Asset Management Plan (AMP) are the underground stormwater pipelines

Strathbogie Shire Council is responsible for the management of the urban underground stormwater pipeline network with an estimated replacement value of **$3,013,055.00**.

The table given below outlines actual expenditure levels in the year 2002/2003 for maintenance and capital renewal. It also outlines Strathbogie Shire Council's budgetted maintenance and capital renewal allocations for the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance expenditure:	10,580.00	13,200.00
2	Capital renewal expenditure:	0.00	0.00
3	Capital expansion expenditure:	5,665.00	12,000.00
4	**Totals:**	**16,245.00**	**25,200.00**

The Council's underground stormwater drainage asset base consists of the following sub-classes, with the associated percentages based on estimated replacement value.

Item No:	Stormwater pipeline asset sub-class:	Est. Replacement Value: ($)	Percentage of assets class: (%)
1	RCP – 100mm dia	10,680.00	0.4
2	RCP – 150mm dia	28,380.00	0.9
3	RCP – 225mm dia	212,485.00	7.0
4	RCP – 300mm dia	437,325.00	14.5
5	RCP – 375mm dia	490,900.00	16.3
6	RCP – 450mm dia	405,080.00	13.4
7	RCP – 525mm dia	143,250.00	4.8
8	RCP – 600mm dia	630,640.00	20.9
9	RCP – 750mm dia	61,200.00	2.0
10	RCP – 825mm dia	135,000.00	4.5
11	RCP – 900mm dia	281,400.00	9.3
12	RCP – 1050mm dia	81,075.00	2.7
13	RCP – 1200mm dia	56,000.00	1.9
14	RCBC – 900 x 300 box culv	1,840.00	0.1
15	RCBC – 1200 x 450 box culv	37,800.00	1.3
16	**Totals:**	**3,013,055.00**	**100.0**

Note:
Council is currently undertaking the development of a stormwater drainage master plan for the townships of Euroa and Nagambie. The plan's development includes the development of an inventory of the underground drainage assets, including pipes and pits. Changes to the asset base will be defined in the next version of the Total Asset Management Plan.

Stormwater Pits Asset Group:
The assets considered in this section of the Strathbogie Shire Council Asset Management Plan (AMP) are the Stormwater Drainage Pits

Strathbogie Shire Council is responsible for the management of the system of Stormwater Drainage Pits that are an integral part of the underground stormwater drainage system. The estimated replacement value of the stormwater pit system is **$132,000.00**.

The table given below outlines actual expenditure levels in the year 2002/2003 for maintenance and capital renewal. It also outlines Strathbogie Shire Council's budgetted maintenance and capital renewal allocations for the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance expenditure:	11,990.00	8,400.00
2	Capital renewal expenditure:	0.00	0.00
3	Capital upgrade expenditure:	0.00	8,000.00
4	**Totals:**	**11,990.00**	**16,400.00**

The Council's stormwater drainage pit asset base consists of the following sub-classes, with the associated percentages based on estimated replacement value.

Item No:	Stormwater Drainage Pits sub-class:	Est. Replacement Value: ($)	Percentage of assets class: (%)
1	Standard average pits	132,000.00	100.0
2	**Totals:**	**132,000.00**	**100.0**

Jetties Asset Group:
The assets considered in this section of the Strathbogie Shire Council Asset Management Plan (AMP) are the jetties at Buckley Park, Nagambie

Strathbogie Shire Council is responsible for the management of the jetties. The estimated replacement value is **$210,000.00**.

The table given below outlines actual expenditure levels in the year 2002/2003 for maintenance and capital renewal. It also outlines the Council's budgetted maintenance and capital renewal allocations for the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance expenditure:	1000	1000
2	Capital renewal expenditure:	0	0
3	Capital upgrade expenditure:	0	0
4	**Totals:**	**1000**	**1000**

Community facilities:

Buildings Asset Group:
The assets considered in this section of the Strathbogie Shire Council Asset Management Plan (AMP) are the Council's buildings.

The estimated replacement value (excluding land value) of the Council's Buildings is: **$12,293,800.00**.

The table given below outlines actual expenditure levels in the year 2002/2003 for maintenance and capital renewal. It also outlines Strathbogie Shire Council's budgetted maintenance and capital renewal allocations for the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance:	82,134	123,000
2	Capital renewal:	16,547	51,700
3	Capital upgrade:	115,180	67,200
4	**Totals:**	**213,861**	**241,900**

The Council's building asset base has been segmented into the following broad sub-groups as given in the table below. The sub-groups are based on the assumption that members of the sub-group will be required for similar functions and deliver similar levels of service. The table also provides the associated percentages of the overall building asset group, based on estimated replacement value. The figures in the table are taken from the 2001/2002 annual report.

Item No:	Building asset sub-class:	Est. Replacement Value: ($)	Percentage of assets class: (%)
1	Halls	1,535,000.00	12.5
2	Meeting rooms	1,897,700.00	15.4
3	Offices	2,985,900.00	24.2
4	Plant rooms	1,200,500.00	9.8
5	Pre-schools	944,000.00	7.7
6	Sports facilities	2,194,800.00	17.9
7	Toilets/changerooms	1,535,900.00	12.5
8	**Totals:**	**12,293,800.00**	**100.0**

Waste Management Asset Group:

The Waste Management Asset Group includes the following major elements:

- Violet Town Central Landfill
- Transfer Stations at Avenel, Euroa and Nagambie
- Mini transfer stations at Longwood and Ruffy

The estimated replacement value (excluding land) of these assets is **$861,500.00**

The table given below outlines actual expenditure levels in the year 2002/2003 for maintenance and capital renewal. It also outlines Strathbogie Shire Council's budgetted maintenance and capital renewal allocations for the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance expenditure:	26,800.00	26,800.00
2	Capital renewal expenditure:	0.00	0.00
3	**Totals:**	**26,800.00**	**26,800.00**

The Council's waste management assets consist of the following elements, with the associated percentages based on estimated replacement value.

Item No:	Waste management sub-class:	Est. Replacement Value: ($)	Percentage of assets class: (%)
1	Violet Town central landfill	346,000.00	40.2
2	Avenel transfer station	160,000.00	18.6
3	Euroa transfer station	179,500.00	20.8
4	Nagambie transfer station	170,000.00	19.7
5	Longwood mini transfer station	4,000.00	0.5
6	Ruffy mini transfer station	2,000.00	0.2
7	**Totals:**	**861,500.00**	**100.0**

Swimming Pools Asset Group:
The assets considered in this section of the Strathbogie Shire Council Asset Management Plan (AMP) are:

- Swimming Pools (4 no.)
- Associated water treatment facilities

The estimated replacement value of the Strathbogie Shire Council's swimming pools and associated water treatment facilities (excluding land value) is: **$2,115,000.00**.

The table given below outlines actual expenditure levels in the year 2002/2003 for maintenance and capital renewal. It also outlines Strathbogie Shire Council's budgetted maintenance and capital renewal allocations for the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance expenditure:	7,494.00	7,400.00
2	Capital renewal expenditure:	33,994.00	23,300.00
3	Capital upgrade expenditure:	14,592.00	14,500.00
4	**Totals:**	**56,080.00**	**45,200.00**

The Council's swimming pool asset base consists of the following sub-classes, with the associated percentages based on estimated replacement value.

Item No:	Swimming Pool asset sub-class:	Est. Replacement Value: ($)	Percentage of assets class: (%)
1	Swimming pools	1,845,000.00	87
2	Water treatment facilities	270,000.00	13
3	**Totals:**	**2,115,000.00**	**100**

Parks and Reserves Asset Group:

Council is responsible for the maintenance and management of 82 parks and reserves throughout the shire. These parks and reserves are located in the major urban areas of Avenel, Euroa, Nagambie and Violet Town. The Council also has 13 major garden beds which are located in Euroa and Nagambie.

The total maintained area of these parks and reserves is 91.5 hectares

A parks hierarchy has been developed for the prioritization of funding and management activities. The hierarchy reflects the common understanding that some parks and reserves have a greater impact and benefit to the appearance of the towns. Limited economic resources require that this approach is taken to ensure maximum benefit for the financial allocation and resources available.

The parks and reserves are maintained to a standard to allow safe use, and easy access to the facilities with some major parks and high use areas containing a low level of public lighting for night time pedestrian access.

The typical capital assets in the parks and reserves are given below:

- → Pumps and irrigation systems
- → Fences
- → Garden beds
- → Public lighting

The estimated capital replacement improvement value of the parks and reserves is **$275,000.00**

Council is developing a Parks and Reserves Management Plan for the management all the Parks and Reserves within the Shire. This Management Plan will cover a range of issues including: park furniture, lighting, amenity features, cultural works, as well as on-going maintenance and development.

Council has developed an Urban Tree Management Plan for the management of urban trees in the parks and reserves under Council management. This Plan will also cover street trees throughout the townships within the shire. It will allow Council to ensure that the urban treescape of the Shire is not only maintained, but enhanced to improve the overall amenity of the area together with appropriate risk management practices to address Council's obligations and liabilities.

Playground Asset Group
The assets considered in this section are the Playgrounds in various parks, reserves and other sites throughout the municipality.

The Council has responsibility for the management of 24 playgrounds. The locations of the playgrounds and their estimated replacement values are given in the following table:

Item no:	Town:	Playground:	Estimated current value:
1	Avenel	Jubilee Park	12,000
2	Avenel	Pre-school	4,000
3	Creightons Creek	Creightons Creek Rec Reserve	2,000
4	Euroa	Bicentennial Park	5,000
5	Euroa	Dr Dunn Memorial Park	5,000
6	Euroa	Lions Park	12,000
7	Euroa	Pre-school	5,000
8	Euroa	Rotary Park	35,000
9	Euroa	Euroa Skate Park	4,000
10	Longwood	Longwood Recreation Reserve	8,000
11	Nagambie	Apex Park	500
12	Nagambie	Blayney Reserve	12,000
13	Nagambie	Buckley Park	21,000
14	Nagambie	Glass Square Reserve	0
115	Nagambie	Maternal and Child Health	1,000
16	Nagambie	Pre-school	3,200
17	Nagambie	Recreation Reserve	5,000
18	Nagambie	River Street Reserve	4,000
19	Strathbogie	Recreation Reserve	1,000
20	Violet Town	Hurt Street Reserve	1,000
21	Violet Town	Lions Park	12,000
22	Violet Town	Pre-school	2,000
23	Violet Town	Recreation Reserve (west)	8,000
24	Violet Town	Recreation Reserve (east)	1,000
25		**Total:**	**163,700**

The playgrounds consist of a mix of swings, climbing frames, aged and recent equipment, particulate loose softfall and rubberized softfall. Some playgrounds are fenced.

Most of the Council's playgrounds are available to the general public.

The use of the playgrounds associated with the pre-schools is controlled by the preschool staff, and they are not available to the general public. The pre-school playgrounds are only available during pre-school hours.

Council has commenced the development of a Playgrounds Management Plan to ensure that these assets are managed responsibly into future, recognizing the various and diverse stakeholders involved, and the obligations on Council.

Flood Warning System Asset Group:
The asset considered in this section of the Strathbogie Shire Council Asset Management Plan (AMP) is the Council's flood warning system for the Castle, Honeysuckle and Seven Creeks.

Strathbogie Shire Council is responsible for the management of the flood warning system which has an estimated replacement value of **$210,000.00**.

The table given below outlines actual expenditure levels in the year 2002/2003 for maintenance and capital renewal. It also outlines Strathbogie Shire Council's budgetted maintenance and capital renewal allocations for the 2003/2004 year:

Item No:	Item name:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Maintenance expenditure:	7,982	7,982
2	Capital renewal expenditure:	0	6,000
3	**Totals:**	**7,982**	**13,982**

The Council's flood warning system asset base consists of the following sub-classes, with the associated percentages based on estimated replacement value.

Item No:	asset sub-class:	Est. Replacement Value: ($)	Percentage of assets class: (%)
1	Base stations	27,000	12.9
2	Field stations – structures	120,000	57.1
3	Field stations - instrumentation	63,000	30.0
4	**Totals:**	**210,000**	**100.0**

Levels of Service:

Introduction:
A key objective of this Total Asset Management Plan (TAMP) is to match the level of service provided by the asset, with the expectations of the community. This requires a clear understanding of the community's needs, expectations and preferences.

This section considers the issue of levels of service, which are also referred to as standards.

The levels of service defined in this section will be used:

- To inform the community of the proposed type and level of service to be offered
- To enable the community to assess suitability, affordability and equity of the services offered
- As a focus for asset management AM tactics proposed to deliver the required level of service
- To measure the effectiveness of this AM plan
- To identify the benefits and costs of the services offered

Ideally the target levels of service for the roads group of assets should reflect current industry standards and be based on:

- **Community/user expectations**: information gained from the community and users on expected quality and price of services provided.

- **Statutory requirements**: Legislation, regulations, environmental standards and Council's local laws and management plans that impact on the way in which assets are managed. These requirements set a minimum level of service to be provided.

- **Strategic and Corporate Goals**: provide guidelines for the scope of current and future services offered, and manner of service delivery, and define specific levels of service which the organization wishes to achieve.

Community/user Expectations:
Council has commenced the Best Value Victoria review process to determine the community's expectations and requirements for the level of service provided by the various asset groups. The results of these initial reviews will be incorporated into new maintenance standards as they are developed. This plan is based on the existing levels of service provided by the Council.

Statutory requirements:
In accordance with the requirements of the Local Government Act 1989, and various other State Legislation, Strathbogie Shire Council has the responsibility for the maintenance of the of our various asset groups.

The council does not have, at this date – June 2004, specific local laws that relate to the minimum levels of service to be provided by the various asset groups.

Strategic and Corporate Goals:
Council has identified the following corporate objective within the Corporate Plan:

"Continue to develop systematic approaches to the maintenance and improvement of Council's road, footpath, bridge and drain networks."

This outlines the Council's commitment to developing systematic, comprehensive and sustainable approaches to the management of Council's physical assets.

Council has developed, and is implementing, an asset management policy that requires that the whole life-cycle cost of an asset be considered by, where appropriate, a cross-functional team before asset management decisions are undertaken and implemented.

Innovative approaches to asset management will be considered, and where appropriate, will be implemented on a pilot basis initially to test their applicability.

Sustainability is the important concept within asset management. As given in Council's vision for asset management, inter-generational equity is necessary to ensure that our physical assets are available to our future communities. The Council is committed to undertaking sound and systematic asset management practices to make that vision a reality.

Current levels of service:

Physical Infrastructure:

Road Asset Group:

Statutory Requirements:
In accordance with the requirements of the Local Government Act 1989, Strathbogie Shire Council has the responsibility for the maintenance of the of the municipal road network.

Recent State Government legislation, the Road Management Act 2004, has placed a requirement on this, and other councils in the state, to develop road asset management and maintenance standards for the municipal road network by 01 July 2004.

Road Classification Hierarchy:
Strathbogie Shire Council has developed a functional road hierarchy, as outlined in the Council's Road Hierarchy Plan, to classify the various elements of our municipal road network. This hierarchy is used to provide the basis for Council's Risk Management process, levels of service provision and maintenance requirements.

The classification system and the interpretation of the classifications are given below. It is important to appreciate that the hierarchy is based on the function of the roads in the first instance.

The roads are then classified using traffic volumes. It is the traffic volumes that will affect the physical geometric properties, and maintenance standards for the road. A greater traffic volume results in a greater exposure to risk of an event occurring for the road user, and the Council.

The classifications are:

- **Arterial roads:**
  The prime function of the arterial road system is to provide for major regional and inter-regional traffic movement in a safe and efficient manner. In our Council's case these roads are part of the statewide declared main road network. Their maintenance and renewal is funded by Vicroads. These roads are classified "C" roads in the national classification system.

- **Link roads/streets:**
  The prime function of the link road is the safe and efficient movement of traffic. They provide the link between the arterial road and the municipal road system. The link road provides a link between the major areas of the shire, as well as providing some property access.

- **Collector roads/streets:**
  The collector road has a mixed function. It provides both a traffic mobility function as well as a property access function. They generally provide the link between the link road and the access road. The collector road will also provide a link between areas of the shire.

- **Access roads/streets:**
  The prime function of the access road is access to abutting properties, and minor movements to other properties within a local area. These roads are generally minor in nature.

- **Industrial roads/streets:**
  These roads provide for the movement of industrial traffic, although other vehicles may also use these roads. These roads are designed specifically for the requirements of heavy industrial vehicles. Due to the possible lower traffic volumes using these roads they may not have the same standard of cross section as might be provided for other collector and access roads.

All of these classifications have been developed to assist Council to determine its maintenance, renewal and rehabilitation priorities.

The Strathbogie Shire Council has a large municipal road network as a result of the municipality's geographic, topographic and climatic conditions.

The flat to undulating landform to the north of the Hume Freeway allows ready access over the entire area and the nature of the economic activity reflects the ability of the natural resources to support broadacre farming and intensive agricultural industry.

The area of the municipality to the south of the freeway is primarily the strathbogie ranges and plateau area. Once on the plateau, the undulating terrain provides ready access, and therefore the requirement for long lengths of road.

The Council's total road network comprises the following categories and lengths (kms):

Urban sealed:	83.31
Urban unsealed:	18.57
Urban total:	**101.88**
Rural sealed:	640.86
Rural unsealed:	1398.12
Rural total:	**2038.98**
Overall total:	**2140.86**

Traffic data:
Traffic data, such as traffic volume counts, speed and the make-up of the traffic stream are important parameters in an assessment of asset life and usage. Traffic data is used to determine service levels to be provided, and the design of asset capital renewal/rehabilitation treatments. It is an integral element of any risk assessment associated with an asset, as it provides input into the Council's hazard exposure levels

Further, traffic data is one of the factors used in consideration of the need for capital enhancement, expansion or disposal of an asset.

The Strathbogie Shire Council currently has an on-going program of capturing traffic data through the use of a traffic classifier, as well as with simple traffic volume counters. To date traffic volumes have been recorded on a significant majority of the Council's road asset segments. This process will be on-going to ensure that the data is current, and reflects the current road asset usage.

Seasonal road usage is a factor that the Council has to consider when using traffic data. The nature of some of the industry throughout the municipality requires periods of intense, or heavy, usage followed by periods of low asset usage. If this seasonal loading factor is not considered, the raw traffic data will skew the captured results resulting in inappropriate decisions.

General description of road assets:

The council maintains an extensive road network consisting of both urban and rural roads, which serve our community. In value, they are the Council's largest group of assets with an estimated replacement cost of $87,130,721.00. The following table provides an analysis of the components in our road network, ie classifications and lengths:

Item no:	Local Road Network	Total length (km)	Sealed length (km)	Unsealed length (km)	Replacement Cost ($)
1	Urban link streets	21.98	21.98	0	2,746,958.00
2	Rural link roads	548.92	412.44	136.48	45,964,001.00
3	Urban collector streets	27.35	23.68	3.67	2,892,239.00
4	Rural collector roads	958.19	180.78	777.41	22,795,731.00
5	Urban access streets	52.45	37.89	14.56	4,196,591.00
6	Rural access roads	505.45	49.39	456.06	7,099,347.00
7	Fire access roads	26.53	0	26.53	56,908.00
8	**Totals:**	**2,140.86**	**724.17**	**1416.69**	**87,130,721.00**

Within Strathbogie Shire, the responsibility and level of service to each of the above classifications is as follows:

Item no:	Classification:	Responsibility:	Level of service delivery:
1	Arterial	Vicroads	Maintain existing level of service No upgrade of standards
2	Link	Council	Maintain existing level of service Upgrade if successful in obtaining external funding Crash "blackspots" to be treated subject to obtaining grants
3	Collector	Council	Maintain existing level of service Upgrade if successful in obtaining external funding Crash "blackspots" to be treated subject to obtaining grants All weather access to be maintained to dwellings
4	Access	Council	Maintain existing level of service All weather access to be maintained to dwellings

Design parameters:

The following tables set out the existing design parameters for the various road classifications

Local road network – sealed:

Item no:	Activity	Urban link	Rural link	Urban collector	Rural collector	Urban access	Rural access
1	Formation width – no k&c	>= 9.2m	>= 8.6m	>= 9.2m	>= 8.6m	7.0m	8.6m
2	Formation width – k&c	>= 8.3m		>= 7.9m		>= 7.5m	
3	Pavement width	>= 7.4mm	6.2m	>=7.0m	6.2m	>= 6.6m	6.2m
4	Pavement depth (min)	250mm	250mm	250mm	250mm	250mm	250mm
5	Seal type	asphalt	10mm	asphalt	10mm	asphalt	10mm
6	Seal width	>= 7.4m	6.2m	>= 7.0m	6.2m	>= 6.6m	6.2m
7	Vehicles/day	> 150vpd	> 150 vpd	> 150 vpd	> 150 vpd	> 150 vpd	> 150 vpd
8	Load limit	nil	nil	nil	nil	As reqd	As reqd
9	Roadside drains	yes	yes	yes	yes		Yes
10	Line marking	yes	yes	yes	yes	As reqd	As reqd
11	Guide posts	No	yes	no	yes	no	yes

Local road network – unsealed:

Item no:	Activity	Urban link	Rural link	Urban collector	Rural collector	Urban access	Rural access	Fire access road
1	Formation width	N/a	8.6m	N/a	9.2m	N/a	< 8.6m	3.5m
2	Pavement width	N/a	6.2m	N/a	6.2m	N/a	6.2m	N/a
3	Pvmnt depth(min)	N/a	250mm	N/a	250mm	N/a	250mm	N/a
4	Surface type	N/a	Gravel	N/a	Gravel	N/a	Gravel	Earth
5	Surface width	N/a	6.2m	N/a	6.2m	N/a	4.0m	3.5m
6	Vehicles/day	N/a	< 150 vpd	N/a	< 150 vpd	N/a	< 150 vpd	N/a
7	Load limit	N/a	nil	N/a	nil	N/a	As reqd	N/a
8	Roadside drains	N/a	yes	N/a	yes	N/a	yes	As reqd
9	Guide posts	N/a	yes	N/a	yes	N/a	yes	no

Bridge Asset Group:
Introduction:

The Strathbogie Shire Council has a large number, and a diverse range of bridge types as a result of the municipality's geographic, topographic and climatic conditions.

The flat to undulating landform to the north of the Hume Freeway allows ready access over the entire area and the nature of the economic activity reflects the ability of the natural resources to support broadacre farming and intensive agricultural industry.

The area of the municipality to the south of the freeway is primarily the strathbogie ranges and plateau area. Once on the plateau, the undulating terrain provides ready access.

Across the whole of the municipality, watercourses meander and flow across the flatter country, and cascade form the plateau to the flat plains to the north of the Hume Freeway. This feature, together with the fact that in an earlier time, before the creation of the Strathbogie Shire, each local government area had different preferred method of crossing waterways has given this Council a range of waterway crossings to manage.

This difference would be due to a number of factors including:

- Understanding of the scope of the project
- The design life of the structure
- The materials available for construction
- The technology available to the municipalities
- Financial resources available
- Political factors as determined by previous, and current, Councils

The current level of service delivery for the bridges group can be defined in terms of the following factors:

- Type of bridge structure (eg concrete, timber, etc)
- Clear width of deck
- Gross load capacity
- Provision of signage

The current levels of service provided have been determined using the following factors:

- Road hierarchy classification
- Traffic surveys
- Number of houses served
- Commercial vehicles/industry usage
- Road network connectivity
- Political factors as determined by previous and current Councils

General description of bridge assets:

The council maintains an extensive bridge network that serves our community. In value, they are the Council's second largest asset group, after the roads group, having an estimated replacement cost of **$19,013,412.**

The following table provides an analysis of the bridges components, in relation to their position within the road hierarchy classification:

Local bridge/road network – road classifications, lengths, bridge load limits & replacement costs:

Item no:	Road hierarchy classification:	Total length (km)	Load-limited bridges:	Open-limit bridges:	Total no. of bridges:	Replacement Cost ($)
1	Urban collector streets	21.98	2	6	8	2,213,959
2	Rural collector roads	548.92	18	27	45	8,115,385
3	Urban service streets	27.35	0	4	4	862,202
4	Rural service roads	958.19	23	32	55	6,236,434
5	Urban access roads	52.45	0	0	0	0
6	Rural access roads	505.45	14	3	17	1,010,845
7	Fire access roads	26.52	0	0	0	0
8	Footbridges		0	6	6	343,882
9	**Totals:**	**2140.86**	**57**	**78**	**136**	**19,013,412**

Within Strathbogie Shire, the responsibility and level of service to each of the above classifications is as follows:

Item no:	Classification:	Responsibility:	Level of service delivery:
1	Arterial	Vicroads	Maintain existing level of service No upgrade of standards
2	Link	Council	Maintain existing level of service Upgrade if successful in obtaining external funding
3	Collector	Council	Maintain existing level of service, if appropriate Upgrade if successful in obtaining external funding
4	Access	Council	Maintain existing level of service, if appropriate Upgrade if successful in obtaining external funding

Design parameters:

The following tables set out the existing bridge design parameters for the various road classifications:

Item no:	**Feature:**	**Urban link**	**Rural link**	**Urban collector**	**Rural collector**	**Urban access**	**Rural access**
1	Design load capacity	T44/SM1600	T44/SM1600	T44/SM1600	T44/SM1600	T44/SM1600	T44/SM1600
2	Structure type	Conc/steel	Conc/steel	Conc/steel	Conc/steel	Conc/steel	Conc/steel
3	Traffic clear width:						
3	*Two lane bridge:*	7.4m min	6.8m min	6.8m min	6.8m min	6.8m min	n/a
4	*Single lane bridge:*	4.5m	4.5m	4.5m	4.5m	4.5m	4.5m
5	Separate pedn acc	yes	desirable	yes	desirable	desirable	n/a
6	Signage	yes	yes	yes	yes	yes	yes

Major Culvert Asset Group:
The major culverts throughout the municipality provide for legal axle continuity throughout the road network.

The current level of service delivery applies throughout the municipality. Service levels are defined in terms of:

- Type of structure – eg concrete, steel number of cells, endwalls
- Width of trafficable surface
- Condition of trafficable surface
- Provision of signage and guardrailing
- Traffic volumes and type
- Levels and frequency of inundation
- Adequacy of horizontal and vertical alignments

The current levels of service provided have been determined by a the same factors that the determined the levels of service provided by the bridge asset group, namely:

- Road hierarchy classification
- Traffic surveys
- Number of houses served
- Commercial vehicles/industry usage
- Road network connectivity
- Political factors as determined by previous and current Councils

Paved Footpaths:
Current service levels for paved footpaths vary across the municipality due to the history, age, topography and policies of the former councils, and materials and funds available.

Strathbogie has approximately 36,000 squares metres of paved footpath. The majority, 75%, of the paved footpath network is concrete. The balance of the network consists of a mix of surfaces, including: asphalt, sprayed bitumen seal, and interlocking segmental pavers.

Service levels can be defined in terms of:

- Provide a safe and satisfactory access
- Maintenance of the structural integrity of the footpath
- Type of surface – concrete, asphalt, pavers etc.
- Width of footpath – varies from 1.2m to in excess of 3.5m
- Degree of accessibility, longitudinal gradients, crossfall
- Condition of path smoothness
- Compliance to the requirements of the disabled and aged communities
- Linkages to others footpaths and accessways in key locations in the urban areas

Council conducts regular inspections of the paved footpath network on a priority basis. The priority system is hierarchial, and based on an assessment of the risk exposure to Council of the footpath, and probable user-groups. Rectification works of defects identified during the inspections are programmed and undertaken. These works include:

- Removal of discontinuities by grinding or “filleting”
- Removal and replacement of discrete sections of the path
- Overlaying the defect, to remove the abrupt change

Urban Surface Drainage Assets:
The current levels for this asset group are based on the following requirements:

- Monitoring of the age, condition, operation and effectiveness of the system
- Safety of the asset
- Provide effective drainage of the adjoining road pavement

Underground Stormwater Drainage System:

The current levels of service for this asset group, which includes both the pipeline and pit system, are defined in terms of the following:

- Protect properties from the design stormwater runoff flows
- Monitor the age, condition and operation of the pipeline system
- Monitor the age, condition and operation of the pit system
- Regular maintenance and cleaning of the system
- Removal of stormwater from properties

The underground drainage network is predominantly constructed from reinforced concrete pipes, of varying sizes, connected to junction pits.

The existing underground drainage system exists mainly in the urban areas of Euroa, Nagambie and Violet Town. There is minimal underground stormwater drainage in Avenel and Longwood.

Jetty Assets:

The current levels for this asset group are based on the following requirements:

- Monitoring of the age, condition, operation and effectiveness of the system
- Safety of the asset

Community facilities:

Buildings Asset Group:
Strathbogie Shire has a diverse range of buildings that vary in age condition and usage.

The types, and use, of the buildings varies, with some being mixed use with a range of users, others being suitable only to a particular group. A number of the buildings are underutilized.

The spread of the major urban centres throughout the municipality, and the history of the Shire, explains the presence and duplication of some building assets. Small local communities established meeting centres and public halls that were used for many purposes, frequently, and they were a symbol of community. With the passage of time, the local communities dissipated and the focus became more broad. The local meeting places were used less, and the population's mobility affected interest and maintenance of these meeting places.

Council has a number of these meeting places and halls, each with it's own characteristics and challenges, and each with varying degrees of support amongst the immediate local community. The continued existence of these buildings is going to be one of the major decisions made by the community and the Council.

Increasingly higher standards of maintenance, building regulation requirements, and improved risk management practices is forcing a re-focus on the viability and continued existence of these buildings.

The complex issue of building ownership, land ownership, land control, committees of management crown land etc make the clear definition of responsibilities difficult to clarify with certainty. The range of occupancy agreements, and the two types of committees of management complicate the issue further.

Current levels of service of buildings focus on:

- Structural stability
- Compliance with building safety requirements
- Aesthetically pleasing, appropriate presentation
- Weatherproof
- Suitable for the function and purpose of the building
- Satisfy user group requirements

Waste Management Asset Group:
The current service delivery levels of the waste management assets provide a consistent waste management program across the municipality.

One objective of Council's Waste Management Strategy requires that the whole waste management process be self-funding. This objective is being achieved.

The Council has undertaken a service review of elements of the Waste Management Service, in particular the kerbside collection service. A weekly, domestic, kerbside garbage collection service is provided in the urban, as well as in some of the rural areas of the municipality. A fortnightly kerbside recycling service is provided in the urban areas.

Further, the Council has implemented a number of environmentally responsible services as part of the Counci's Waste Management Strategy, including:

- Recyclable facilities at all waste disposal sites
- Resource recovery centres at the major transfer stations and the central landfill

The current hours of operations of the landfill and the transfer stations are shown below:

Item No:	Facility name:	Facility open:	Facility closed:
1	Violet Town central landfill	Sat, Tues, Fri: 08.30 – 12.00hrs Wed, Thurs: 13.00 – 16.00hrs Sun: 10.00 – 15.00hrs	Monday, Anzac Day, Christmas Day, Good Friday, Total Fire Ban Days
2	Avenel transfer station	Sat, Sun: 10.00 – 14.00hrs	Monday to Friday Anzac Day, Christmas Day
3	Euroa transfer station	Mon, Wed, Thurs, Sat: 08.30 – 12.00hrs Sun: 10.00 – 15.00hrs	Tuesday, Friday Anzac Day, Christmas Day
4	Nagambie transfer station	Sat, Mon, Wed, Fri 08.30 – 12.00hrs Sun: 12.00 – 15.00hrs	Tuesday, Thursday, Anzac Day, Christmas Day, Good Friday
5	Longwood mini transfer station	Wed: 13.00 – 17.00hrs Sun: 08.00 – 12.00hrs	Monday, Tuesday, Thursday Friday, Saturday, Anzac Day, Christmas Day
6	Ruffy mini transfer station	Wed: 08.00 – 12.00hrs Sun: 13.00 – 17.00hrs	Monday, Tuesday, Thursday Friday, Saturday, Anzac Day, Christmas Day

The Council is required to satisfy the requirements, and conditions of the Waste Discharge Licence for the Violet Town Central Landfill, and the State Government's waste minimization programs. Council is meeting these requirements.

Swimming Pools:

The current levels of service for swimming pools and the associated treatment facilities can be defined in terms of:

- Monitoring the age, condition, operations and reliability of the pool structure, surrounds and grounds
- Monitoring the age, condition, operations and reliability of the associated treatment facilities
- Ease of access to the pool and facilities
- Hours of operation
- Provision of furniture and shade facilities
- Provision of "alternative entertainment" resources eg: inflatable toys

Strathbogie Shire has four pool complexes, one in each major urban area of the municipality.

The Council has removed diving boards and diving facilities from the pools because of the amended Royal Life Saving Society pool operating guidelines. This reduced the levels of service provided at relevant pools. Community consultation, facilitated by an external consultant, has been conducted with user groups of all pool complexes to determine some of their desires.

Parks and Reserves Asset Group:

Strathbogie Shire Council currently maintains the parks and gardens within the municipality on a priority basis. The priority basis reflects the common understanding that some parks and gardens have greater impact and benefit to the appearance of towns. Limited economic resources require that that this approach is taken to ensure maximum return for financial allocation and resources.

Council's parks are maintained to a standard to allow safe use and easy access to the facilities with some major parks and high use areas containing a low level of public lighting for night-time pedestrian access.

A number of the Council's premium parks have underground irrigation systems. These systems are currently maintained on an "as-need" basis.

Most garden beds are planted with perennials and shrubs to minimise the need for maintenance/replanting of annuals. Seasonal planting in strategic high profile gardens provides fresh and vibrant displays at particular times of the year.

Until recently, tree maintenance was undertaken on a reactive basis. Council has developed an Urban Tree Management Plan to manage the removal and replacement of trees in the parks, which will continue to allow long term asset management practices to be implemented. It is important to note that this plan is built on the assumption that trees are not considered to be capital assets.

Street trees for pedestrian clearance have been maintained on a reactive basis. This activity will be managed within the parks and reserves maintenance agreement, and will reduce the reactive approach to tree management.

Clearance from overhead powerlines, in the declared areas of Avenel and Euroa townships is performed on an annual basis, with annual audits and pruning. This is undertaken in accordance with the Powerline Clearance Vegetation Management Plan. The Powerline Clearance Plan is reviewed annually, and submitted to the Office of the Chief Electrical Inspector, as required by the relevant legislation.

Factors to be considered with Level of Service delivery include:

- Quality of facilities (ie: fit for purpose)
- Safety of facilities (ie: safe for use)
- Accessibility of facilities (ie: ease of access, disabled, location)
- Aesthetics

Playgrounds Asset Group:
Strathbogie Shire Council has responsibility for the management of 24 playgrounds throughout the municipality. The playgrounds are primarily in the main towns of Avenel, Euroa, Nagambie and Violet Town.

Current levels of service are based on the following considerations:

- Monitoring age, condition, and operation of the playground equipment
- Monitoring the quality and quantity of the softfall surrounding the play equipment
- Accessibility of equipment by all members of the community
- Safety of equipment and compliance with relevant legislation and Australian Standards in relation to design and siting

Council undertakes regular inspections of the playgrounds for compliance with accepted equipment maintenance and safety standards.

Council is currently developing a playground management plan for this asset group. This plan will include the need to review continued existence of playgrounds, future capital expenditure requirements, compliance, and determine priorities for improvements. The need for continued existence of playgrounds is reviewed in accordance with the age and condition of the equipment, demographic changes and community consultation.

Playground equipment is provided by various funding sources, namely the Council, various service clubs and external government grants. Where possible, Council leverages it's allocations with the relevant service clubs to achieve a better outcome for the community.

Playground equipment provided by external sources requires Council approval before it can be installed in a Council playground. The Playground Management Plan covers this aspect.

Flood Warning System:

The current levels of service for the flood warning system asset group, which includes both the base and field stations, are defined in terms of the following:

- Reliability of operations
- Accurate and responsive output
- Regular, routine maintenance of the system to ensure on-going operation

The field stations include the concrete structure that houses the instrumentation and the associated "hard" features such as fencing and stream gauges, together with the instrumentation such as the rain gauges and data loggers.

The base stations are located in the Council's euroa office and the emergency service complex in Euroa.

The system was installed in 1997, and provides data and information on rainfall and streamflows in the Castle, Honeysuckle and Seven Creeks.

The system is currently maintained, under a maintenance agreement, by Thiess Environmental Services.

Desired Level of Service:

General:
Council will continue to implement the best value Victoria review process as required by Council's Asset Management Policy and the Local Government Act 1989.

Information from these external reviews, and Council's own internal reviews of it's asset management strategies and tactics, will flow through to improve to improve Council's management practices of it's physical assets.

Physical infrastructure:

Road Asset Group:
Council will continue to provide at least the same levels of service currently provided. Community and stakeholder consultation will be consultation before any proposed reduction in levels of service.

The Council will complete the development of a Municipal Road Safety Strategy (MRSS), and will implement relevant outcomes of the strategy as practical within Council's resource capabilities. The Council will use the MRSS to seek external funding to treat identified road safety issues.

The completed functional road hierarchy will guide all road maintenance and capital expenditure.

Bridge Asset Group:
The Council is `aware of the vital role that the bridges group play in the maintenance, integrity and connectivity of the local road network. The ability to freely use a road network is contingent upon a bridge system that is able to sustain the unhindered movement of all legal traffic loadings.

The challenge for this Council is to be able to manage the bridge asset group through the asset management cycle under increasing, and changing load volumes and weights. Council's bridge assets were designed for the standard design load pattern "of-the-day". However, with increasing legal load capacities, and increasing design standards, a design standard that met the then industry requirement, is now below the current industry requirement. The number of commercial vehicles, and the allowable axle loads are increasing.

To address these changing requirements, and recognizing the industry need for the flexibility to operate whilst minimizing costs through the "economies of scale" concept, Council will undertake load capacity audits of all of its bridges as an element of the AM process. This will give Council a better understanding of the load capacity of the bridge network.

The exposure to risk will be a factor in the prioritization of bridges considered, and this information will feed into Council's bridge prioritization system. In regard to the upgrading of the bridge system, the Council will focus attention on the link and collector road network, and roads with high traffic volumes, whilst refining the bridgeworks prioritization system.

The Council is aware of the need to ensure that all constraints to the operation of industry, and economic activity are removed wherever possible. Council will work to achieve this in accordance with Council's operational and strategic plans, financial capability and the relevant legislation and regulations.

The Council will continue to explore the potential for, and use of, Special Benefit Schemes as a funding source for the renewal, upgrade and expansion of the bridge asset group.

Major Culverts:
Council will continue to provide at least the current levels of service of this asset group

Changes to current levels of service will only be undertaken following consultation with the relevant community and stakeholders, and in accordance with the Council's Asset Management Policy.

Paved footpaths:
Desired levels of service will be based on community consultation, compliance with state legislation, environmental standards and statutory and local planning guidelines, and the need to provide a safe and practical footpath network.

Expansion of the paved footpath network will predominantly be incorporated in the development of new residential subdivisions in the urban areas.

The development of a Footpath Management Plan for each of the urban areas will ensure that a strategic and consistent approach exists. The use of Special Benefit Schemes to fund the upgrade and/or expansion the footpath network will be investigated and implemented as one mechanism to fund these increased service levels.

Regular inspections and condition assessment of the paved footpath network will be undertaken to ensure the safety and functionality of this asset group. Failure of this asset to function effectively will expose Council to increased risks in asset preservation, and liability.

Urban Surface Drainage:
Council will continue to provide at least the current levels of service of this asset group

Changes to current levels of service will only be undertaken following consultation with the relevant community and stakeholders, and in accordance with the Council's Asset Management Policy.

Regular inspections and condition assessment of the asset will be undertaken to ensure the safety and functionality of the asset group. Failure of this group to function effectively will have serious adverse effects on the adjoining road structure.

Underground Stormwater Drainage System:

Desired level of service will be based on compliance with legislation, environmental awareness, environmental standards and community expectations. To this end, the Strathbogie Shire Council is currently developing a Stormwater Management Plan for the following townships:

- Avenel
- Euroa
- Longwood
- Nagambie
- Violet Town

Contributions to the development of the plan are being provided by the EPA and the Goulburn Broken Catchment Management Authority (gbcma)

This plan will identify opportunities for improvements in the quality of the stormwater runoff moving through the Council's underground system. Future maintenance and capital works on the stormwater system will take into account the findings of the completed Stormwater Management Plan.

Jetties:
Desired levels of service will be based on community consultation, compliance with state legislation, environmental standards and statutory and local planning guidelines, and the sound risk management principles.

The Council has recently engaged a consultant to investigate the integrity of the jetties, and has held community meetings to discuss future options for the jetties, and the Buckley Park area.

Regular inspections and condition assessment of the jetties will be undertaken to ensure their safety and functionality. Failure of this asset to function effectively will expose Council to increased risks in asset preservation, and liability.

Community facilities:

Building Asset Group:
The expectations of user groups will continue to increase, and the requirements of building regulations will become more rigorous. Further, improved risk management practices and the requirements of insurance providers for Council to minimize risk exposure will force higher safety standards on building owners and managers.

The changing views and needs of the community, and legislation requirements, will require the provision of improved access to all user groups.

Council has not undertaken a disability access audit of it's buildings. Such an audit will be undertaken. The audit will identify where improvements can be made to improve the access level of service provided.

Council will continue to investigate the size, and range, of the building asset group to determine the ongoing needs of the community and stakeholders. The Council will address each asset and determine answers to a number of questions, including:

- Is the asset still needed?
- Can the need be satisfied by a less expensive or alternative asset?
- Is it the role of the Council to provide the asset?

Recent experience has shown that rationalization and disposal of building assets can be a difficult process on a number of grounds. However, it is important that these issues be addressed so that informed decision making can be undertaken, and that this is a normal aspect of the asset management process.

Council will determine the exact roles and responsibilities with regard to all the assets within this asset group, and develop a database of this information.

Waste Management Asset Group:
Continued community consultation, compliance with state legislation and EPA requirements will define some of the desired service levels.

Council will continue to implement its Waste Management Strategy, adjusting the implementation as required by the appropriate stakeholders.

The Violet Town Central Landfill will be exhausted in approximately four years, and will be rehabilitated and monitored to meet environmental and EPA guidelines. A transfer station will be constructed at the site of the rehabilitated landfill to provide continued waste disposal services to the area of the municipality currently served by the landfill. The Council will work with the Goulburn Valley Regional Waste Management Group, and the EPA, to develop an environmentally acceptable outcome.

The Council will keep the community informed of these developments.

Swimming Pools:
The Council will continue to consult with the community over desired levels of services from these facilities.

Levels of service provided must satisfy the legal requirements of various legislative and advisory authorities, and Council's risk management requirements.

Parks and Reserves Asset Group:
The desired levels of service delivery will be based on a number of factors including:

- Community's perception and requirements through a consultative process
- Environmental factors
- Legislation
- Planning requirements
- Council's corporate and strategic plans

Playgrounds:

Council will continue to provide at least the current levels of service of this asset group, with further community and stakeholder consultation in accordance with the proposed Playground Management Plan. The Playground Management Plan proposes to reduce the number of playgrounds maintained by the Council to allow for improved levels of service at the remaining playgrounds. The Council will make the final decision on future levels of service in accordance with the Asset Management Policy.

Council is proposing to install rubberized softfall at all playgrounds as they are renewed or upgraded, in accordance with the Playground Management Plan.

Flood Warning System:
Council will continue to provide at least the same level of service as part of the Council's overall flood management activities.

Council will continue to work with the Bureau of Meteorology to ensure that the flood warning system remains relevant, effective and reliable.

In future, it is proposed to expand the system if considered appropriate and effective following further investigation. This will be considered further during a flood management study for Violet Town

There are currently no plans to extend the flood warning system to the other major towns of Avenel and Nagambie.

Future Demand

Demand forecast:
The 2001 national census recorded Strathbogie Shire's total population as 9121.

A Department of Infrastructure research unit has prepared population and household projections for all Victorian local government areas up to the year 2021, a 20 year projection. The projections are based on the 1996 national census data.

The number of households in the 2001 census was 3711. The DoI study predicted that the over the next 20 years, the number of households within the municipality would increase to 4335, an increase of 624, or a 17% increase.

This growth will be the result of a number of factors including:

- **Industry changes:** – shift from solely broad-acre traditional farming practices to intensive agricultural industries due to the municipality's geographic location and natural resources. The creation of the Strathbobie Special Use Precinct (SSUP) will affect required levels of service for a number of Council's asset groups.
- **Aging population:** - people retiring to a rural environment, within relatively close proximity to regional centres with excellent transport links to Melbourne and Albury-Wodonga
- **Culture:** - youth and young people trending to leave the small towns in favour of living in larger cities

Impact of growth:
An increase in the number of households, and a changing industrial base, will result in an expansion of demand for the Council's asset base.

Further research is required on projections of growth and the possible impact of this growth and change. This will be considered as part of the improvement plan for the total asset management plan. On this basis, this plan does not allow for accelerated or increased asset consumption or usage.

Information Systems

Maintenance Management Systems (MMS):
Currently the Council is implementing a maintenance management system. The system, the Huefner Works Management System (WMS), is not fully operational, but is expected to be fully functional in 2004/2005. The MMS will be used to support the capital asset management system.

This will ensure that information obtained from the day-to-day maintenance operations performed on the assets is available for the management of the overall asset base, providing superior long term asset management results.

The information from the MMS will feed through into Capital Asset Management System. This additional information on the location, the type of maintenance activities undertaken, the quantities of resources required and the costs will ensure that the Capital Asset System is operating with current information, and therefore ensuring better outcomes for the asset base.

An MMS will also allow for the monitoring of maintenance performance, both actual outputs and costs, against agreed standards.

A Maintenance Management System will provide the Council with the valid data and information to objectively demonstrate to the community that it is:

- making better informed decisions on behalf of the community
- providing improved service delivery through Service Agreement monitoring and evaluation of performance under a Maintenance Plan
- satisfying the Best Value Victoria principles, particularly the principles of continuous improvement and benchmarking of service provision

The MMS will result in improved customer service, and reduce Council's risk profile. The documentation of the various MMS's, will form part of Council's Integrated Management System ensuring that maintenance activities comply with the agreed quality, environmental and OH&S standards. The Council will be able to rely on this documentation in defence, as evidence of appropriate maintenance performance, in the event of a "non-feasance", or another legal liability claim.

Asset Management Systems:
The Council's asset data is stored in a variety of databases and sources.

The data of Council's physical infrastructure asset groups, including an inventory of assets, condition assessment and depreciated and replacement valuations for these various asset groups is stored in the Moloney Asset Management System.

The data for other asset groups are stored in either MS Excel or MS Access databases.

The establishment of a common database system that allows for uniform treatment, manipulation and presentation of data and information is important for achieving equitable, consistent, and optimal outcomes from the asset management process.

Geo-spatial Information System (GIS):
Council's physical asset information is currently not linked to the GIS. It is proposed to llink the physical asset databases to the GIS in 2004/2005 to allow graphical display of assets, and asset condition.

It is planned to progressively establish the links to the GIS for all of Council's physical asset and community facilities groups. This will improve the delivery of services to the community

Lifecycle Management Plan

General introduction:

Maintenance Plans:
The Maintenance Plan defines the how the Council will maintain the asset to achieve the optimal life, and provide the required level of service from the asset as it moves through it's life-cycle. The maintenance plan is an integral part of an asset management plan.

The maintenance plan establishes responsibilities of the relevant parties involved in the maintenance process, the required levels of service, and the intervention levels necessary for maintaining the dependability of the asset during it's service life.

The Strathbogie Shire Council recently implemented a formal maintenance plan for the performance of maintenance on the following Physical Infrastructure asset groups:

- road assets
- bridges
- major culverts
- footpaths
- kerb and channel and lined drains
- underground stormwater drainage

Implementation of this maintenance plan commenced in January 2003. A copy of the physical infrastructure maintenance plan, including activity standards and intervention levels is attached in Appendix 2.

The Strathbogie Shire Council recently implemented a formal maintenance plan for the performance of maintenance on the following Community Facilities asset groups:

- parks and reserves
- playgrounds

Implementation of this maintenance plan commenced in January 2003. A copy of the community facilities maintenance plan, including activity standards and intervention levels is attached in Appendix 3.

The Council will continue develop maintenance plans for the following asset groups during 2003/2004 and 2004/2005 following discussions with the community and other stakeholders:

- jetties
- buildings
- waste management facilities
- swimming pools
- flood warning system

Life Cycle Activities/Works:

Definitions used in this Asset Management Plan:

Operations:
Operations works are works that are of a minor or aesthetic nature. They do not affect the physical nature or condition of the asset.

Maintenance:
Maintenance works are the on-going day-to-day work activities necessary to keep assets at a specific standard, and to prevent early failure or deterioration. It is expenditure on an asset, which maintains the asset in use, but does not increase its service potential or life.

Assets have a design life, and will be consumed, or used, at a rate. The rate of asset consumption is represented as a graph of asset condition versus asset age. This graph is the asset degradation curve. Maintenance activities are intended to keep the asset operating along the design asset degradation curve.

If maintenance is not performed, or insufficient maintenance is performed, the life and dependability of the asset will be significantly reduced, thereby reducing the level of service provided to the user by the asset, and increasing overall life-cycle costs for the asset owner.

Capital Renewal:
Capital renewal works are for the replacement of the consumed component of the asset.

Capital renewal is expenditure on renewing an existing asset, or portion of an infrastructure network, to it's previous level of service. It increases the service potential, or extends the life, of the asset.

Capital Upgrade:
Capital upgrade works are works that improve or upgrade an existing asset to a higher or improved capability.

The asset, or infrastructure network, then delivers an upgraded, or higher, level of service to the user.

Upgrading of an asset does result in increased operations, maintenance and capital costs to Council. These must be considered in the evaluation of any capital upgrade proposal.

Capital Expansion:
Capital expansion works are works that extend an infrastructure network to a new group of users.

It is anticipated that capital expansion works will be generally be funded externally and therefore the short term impact of the expansion works will be negligible. However, the long term operations, maintenance and capital renewal expenditure will be funded by the Council. Therefore, in accordance with the Council's Asset Management Policy, the life-cycle costing of these works must be considered before implementation.

Disposal:
Disposal works are works that retire, or dispose of, existing assets.

Disposal works involves a logical examination of the asset to be able to answer a number of questions about the asset, including:

- Is the asset still needed?
- Can the need be satisfied by a less expensive or alternative asset?
- Is it the role of the Council to provide the asset?

Roads Group:

This section contains the lifecycle management plan for the following key elements of the road asset group:

- Road formations
- Unsealed pavements
- Sealed pavements
- Sealed surfaces

Each of these elements will be considered separately.

The following tables contain the unit rates used to prepare the valuations of the various sub-asset groups:

Road formations:

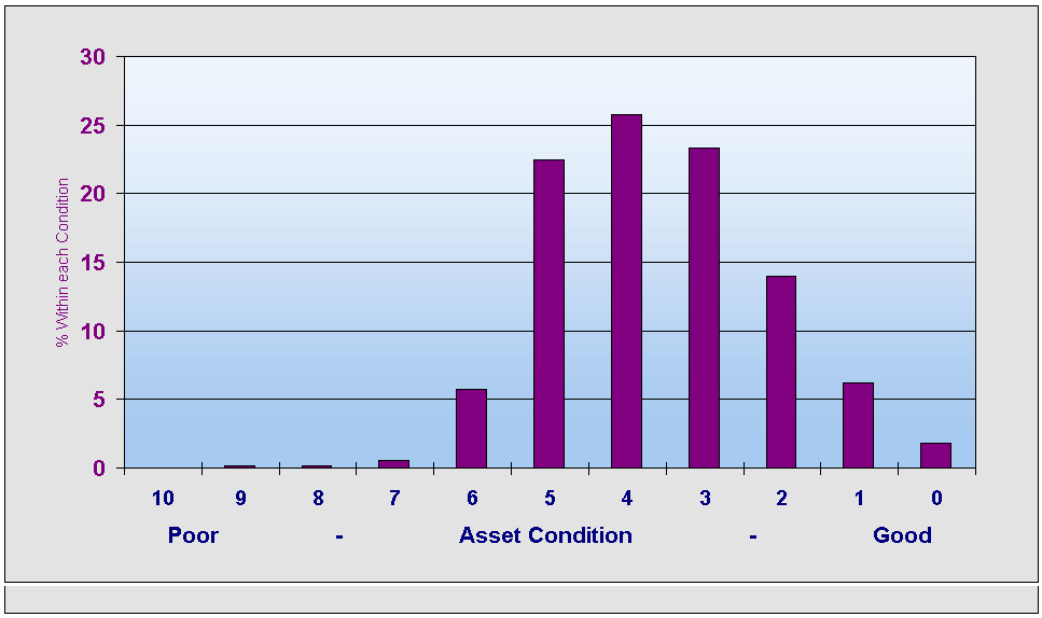
Item No:	Code:	Code description:	Valuation rates:		Asset Life: (yrs)
			$/sqm	% residual val	
1	F	Formation – no cut or fill	0.00	90	100
2	F2	Cut/fill up to 200mm	0.30	90	100
3	F5	Cut/fill 200 to 500mm	1.00	90	100
4	F10	Cut/fill 500 to 1000mm	2.50	90	100
5	F15	Cut/fill 1000 to 1500mm	5.00	90	100
6	F20	Cut/fill 1500 to 2000mm	10.00	90	100
7	F25	Cut/fill 2000 to 2500mm	20.00	90	100
8	F30	Cut/fill 2500 to 3000mm	30.00	90	100
9	FS	sunken formation due to loss of mat'l	0.00	90	100

Sealed and unsealed pavements:

Item No:	Code:	Code description:	Unit rates: ($/sqm)		Asset Life: (yrs)
			Area>100sqm	Area<100sqm	
		Sealed pavements:			
1	1	Sealed pavements – rural	15.00	37.50	70
2	2	Sealed pavements - urban	18.00	45.00	70
		Unsealed pavements:			
3	P5	Unseal pavmt with 50mm design depth	2.50	3.75	15
4	P10	Unseal pavmt with 100mm design depth	4.00	6.00	15
5	P/M	Unseal pavmt – patch only under maint.	0.50	0.00	25
6	Z	Unseal pavmt – no imported pavmt mat'l	0.00	0.00	25
		Proposed next treatment codes:			
7	NRS	Next rural sealed road ave treatment	11.40		70
8	NUS	Next urban sealed road ave treatment	15.00		70
9	P10/N	Next unsealed P10 treatment	3.00		15
10	P5/N	Next unsealed P5 treatment	1.75		15

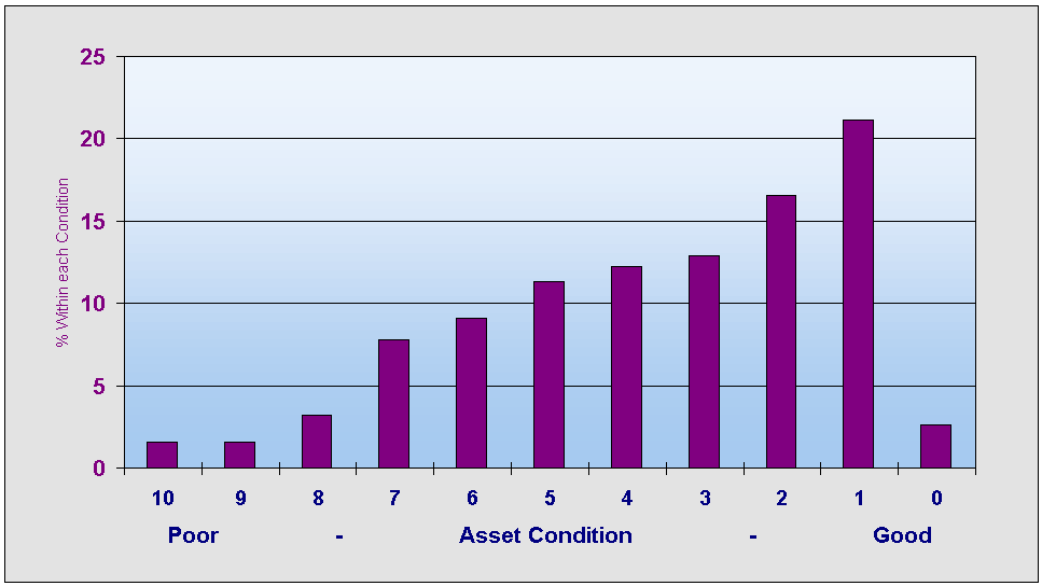
Present Condition Distribution For :- ***Sealed Pavement*** **Assets**

Graph EC 1 Weighted Average Asset Condition **3.60** Total Asset Replacement Value 49,081,838 *Year* 2004



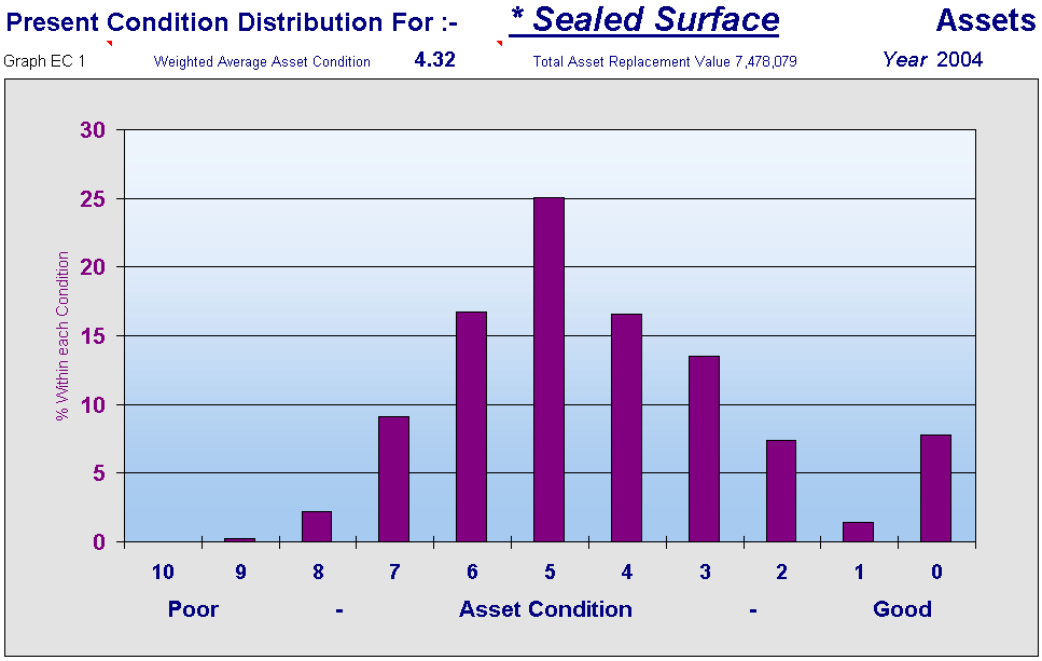
Present Condition Distribution For :- ***Unsealed Pavement*** **Assets**

Graph EC 1 Weighted Average Asset Condition **3.63** Total Asset Replacement Value 6,384,926 *Year* 2004



Sealed surface treatment codes:

Item No:	Code:	Code description:	Unit rates: $/sqm	Asset Life: (yrs)
1	AS	Asphalt	12.50	22
2	ER10	Elastic binder type 10mm reseal	2.20	15
3	ER14	Elastic binder type 14mm reseal	2.50	18
4	ER7	Elastic binder type 7mm reseal	2.00	13
5	FS10	Final seal 10mm	1.80	15
6	FS14	Final seal 14mm	2.00	18
7	FS7	Final seal 7mm	1.60	13
8	IS10	Prime and seal 10mm	0.00	15
9	IS14	Prime and seal 14mm	0.00	18
10	IS7	Prime and seal 7mm	0.00	12
11	PS10	Primerseal 10mm	0.00	1
12	PS14	Primerseal 14mm	0.00	1
13	PS7	Primerseal 7mm	0.00	1
14	R10	Reseal size 10mm	1.80	15
15	R14	Reseal size 14mm	2.00	18
16	R5	Reseal size 5mm	1.60	13
17	R7	Reseal size 7mm	1.60	13
18	RC	Reinforced concrete – priced with pavement	0.00	0.00001
19	SE/10	Surface enrichment over 10mm seal	1.10	12
20	SE/14	Surface enrichment over 14mm seal	1.10	12
21	SE/7	Surface enrichment over 7mm seal	1.10	12
22	SE/IS10	Surface enrichment over initial seal 10mm	1.10	12
23	SR10	Scrap rubber reseal size 10mm	2.20	15
24	SR14	Scrap rubber reseal size 14mm	2.50	18
25	SR7	Scrap rubber reseal size 7mm	2.00	13
26	SS	Slurry seal	4.00	13
27	GATT	Graded aggregate total treatment	5.00	15



The average condition, age and various valuations of the road asset group are provided in the table below:

Item No:	Asset Desc.	qty	unit	Average condition	Ave Age	Replcmt Value ($)	WDV ($)	Accum Deprc ($)	Annual Deprc ($)
1	Form – U/S	1410.9	km	2		3,210,154	3,146,206	63,948	3,210
2	Form - Sealed	722.1	km	2		6,676,148	6,542,625	133,523	6,676
3	Pave – U/S	1410.9	km	4.48		8,299,887	5,935,786	2,364,101	396,444
4	Pave - Sealed	722.1	km	3.46		62,084,519	44,802,059	17,282,459	682,785
5	Surf - Sealed	722.1	km	3.96	13.6	6,880,013	4,064,047	2,815,966	471,329
6	**Totals**	2,140				**87,130,721**	**64,490,723**	**22,659,997**	**1,560,444**

It is planned to upgrade the local roads network over a period of 4 years to meet the desired intervention levels. Link roads will be upgraded first, followed by Collector1 roads and Access roads. The estimated annual cost of these works is $600,000.00. This requirement will be reviewed annually to determine progress to achieving the required intervention level.

Maintenance:
The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	Road asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Formation – unsealed	66,613.41	52,800
2	Formation – sealed	23,873.32	32,500
3	Pavement – unsealed	494,873.46	492,800
4	Pavement – sealed	134,084.93	32,700
5	Surfaces - sealed	154,529.45	205,900
6	**Totals:**	**873,974.57**	**816,700**

Capital Renewal:
Typical examples of capital renewal when considering the road asset group are bitumen resealing a sealed road, or resheeting a gravelled road.

The capital renewal expenditure for the year 2002/2003, and the budgeted capital renewal expenditure for this year, 2003/2004, are given in the table below:

Item No:	Road asset group element:	Funding source:	2002/2003 actual expend:	2003/2004 budgeted expend:
1	Pavement – unsealed	Council	131,642.00	200,000.00
2		*Roads to Recovery*	245,289.00	0.00
3		*Better Roads Vic (TIRES)*	171,842.00	0.00
4	Pavement – sealed	Council	0.00	0.00
5		*Roads to Recovery*	36,852.00	0.00
6	Surfaces - sealed	Council	84,075.00	200,000.00
7		*Roads to Recovery*	177,137.00	0.00
8	**Totals:**		**846,837.00**	**400,000.00**

Capital Upgrade:
An example of capital upgrade expenditure in the road asset group would be sealing an existing gravel road.

In the current year, Council has no plans to upgrade the level of service of the roads group.

Capital Expansion:
An example of capital expansion in the road asset group would be extend a road network, eg a new subdivision.

In the current year, Council has no plans to expand the road asset network.

Disposal:
In the current year, Council has no plans to retire, or dispose of, any elements of the local road asset network.

Bridge Asset Group:

This section contains the lifecycle management plan for the bridge asset group. The major sub-groups, based on the estimated replacement value, are:

- Concrete / Composite Bridges (100 year life)
- Non Concrete Bridges (30 year life)
- Kirwans Bridge (25 year life)

The major sub-groups will be considered separately, and then an average overall group analysis prepared.

Separate condition analyses for the less significant elements of the bridge asset group have not been included.

The following table contains the unit rates used to prepare the valuations of the various sub-groups:

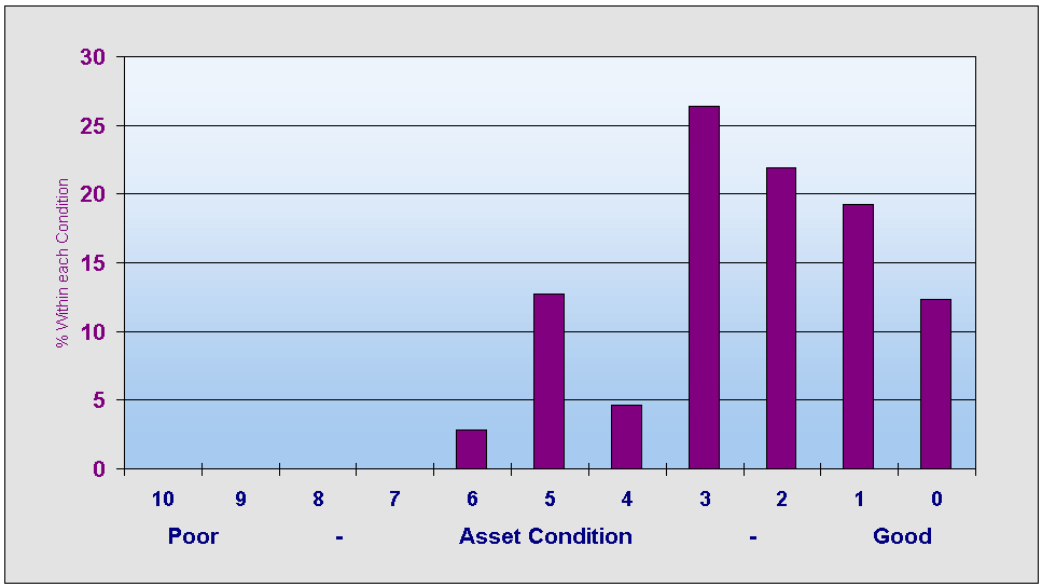
Bridge codes:

Item No:	Bridge asset sub-class:	No. in Sub-class:	Unit Rates Value: ($/sqm)	Percent of assets class: (%)
1	Timber Bridges	32	1100	13.3
2	No Timber Bridges	103	1100	79.3
3	Kirwans Bridge	1	1100	7.4
-	**Totals:**	**136**	**19,013,412.00**	**100.0**

Item No:	Code:	Code description:	Unit rates: $/sqm	Asset Life: (yrs)
1	T/RC	Timber bridge, RC deck	1100	30
2	ST/RC	Stone foundation, concrete deck	1100	100
3	S/T	Steel bridge, timber deck	1100	100
4	ST	Full stone bridge	1100	100
5	T/S	Timber bridge, steel beams	1100	30
6	S/RC	Steel bridge, RC deck	1100	100
7	T/S/RC	Timber found, steel beams, conc deck	1100	30
8	T	Full timber construction	1100	30
9	ST/S/RC	Stone foundation, steel and conc deck	1100	100
10	RC/S/T	RC bridge with steel beams, timber deck	1100	100
11	RC/S	RC bridge with steel beams	1100	100
12	RC	Full reinforced concrete	1100	100

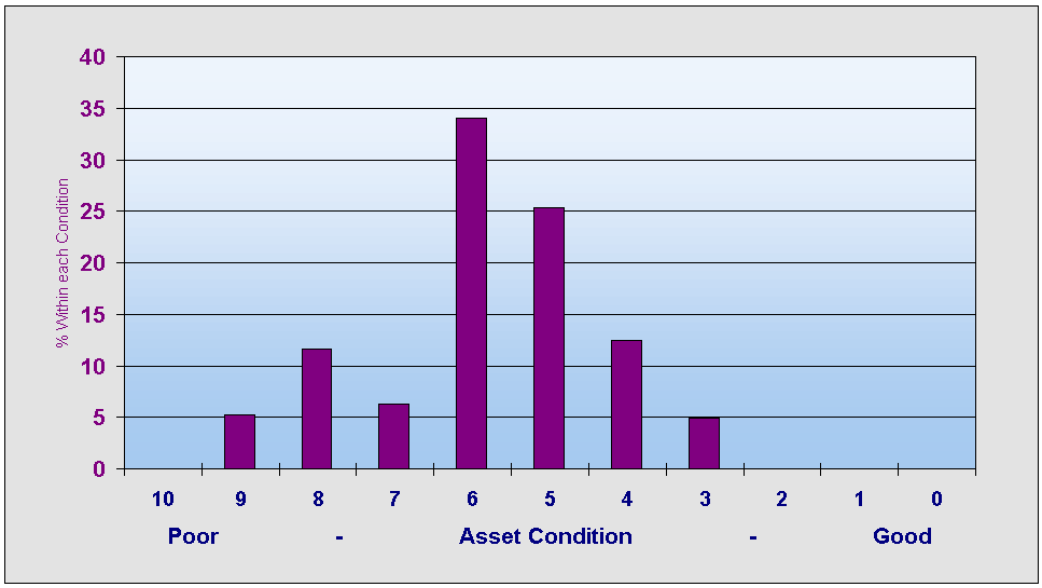
Present Condition Distribution For :- **** Concrete Bridges*** **Assets**

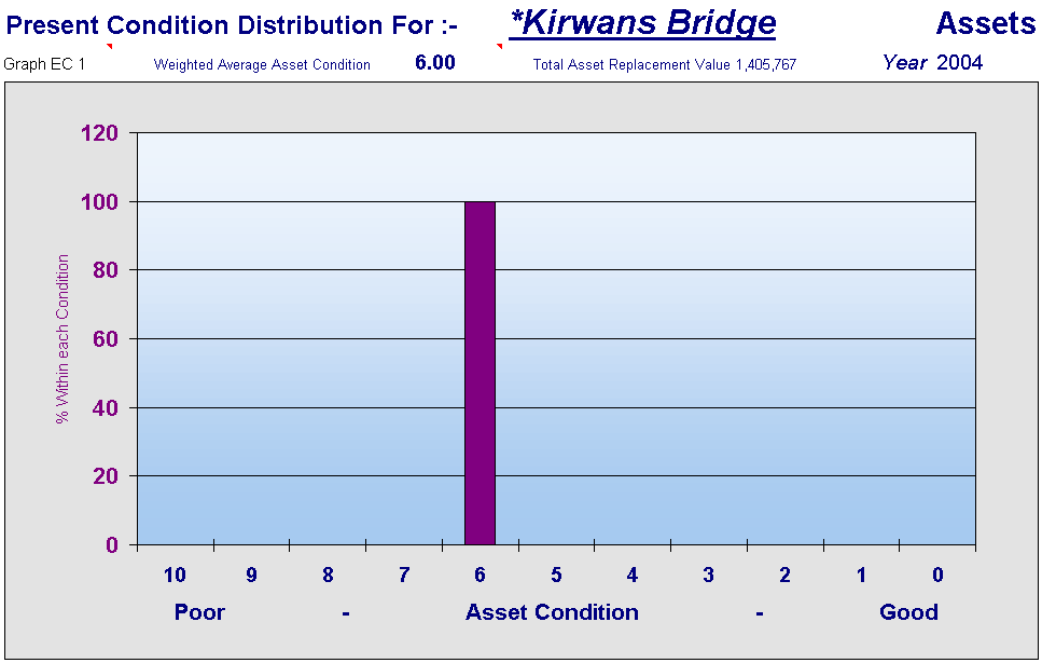
Graph EC 1 Weighted Average Asset Condition **2.41** Total Asset Replacement Value 15,084,690 *Year* 2004



Present Condition Distribution For :- **** Timber Bridges*** **Assets**

Graph EC 1 Weighted Average Asset Condition **5.80** Total Asset Replacement Value 2,522,955 *Year* 2004





The bridge replacement values are given in the table below:

Item No:	Bridge asset sub-class:	No. in Sub-class:	Est. Replacemt Value: ($)	Percent of assets class: (%)
1	Timber Bridges	32	2,522,955	13.3
2	Non Timber Bridges	103	15,084,690	79.3
3	Kirwans Bridge	1	1,405,767	7.4
-	**Totals:**	**136**	**19,013,412.00**	**100.0**

Maintenance:
The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	Asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Timber deck bridges	66,955	22,400
2	Concrete deck bridges	15,594	16,500
3	Steel and other decked bridges	878	2,100
4	Kirwans Bridge – special maint	2,057	0
4	**Totals:**	**85,484**	**41,000**

Capital Renewal:
A typical example of capital renewal when considering the bridge asset group is replacing a bridge with a bridge of the same load capacity.

The capital renewal expenditure for the year 2001/2002, and the budgetted capital renewal expenditure for this year, 2002/2003, are given in the table below:

Item No:	Asset group:	Funding source:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	bridges	Council funded	28,866.60	250,365.00
2		Roads to Recovery funded	0.00	1,058,579.00
3		Better Roads Victoria	0.00	200,000.00
4	**Totals:**		**28,866.60**	**1,508,944.00**

Capital Upgrade:
An example of capital upgrade expenditure in the bridge asset group would be replacing an existing bridge with one having a greater gross load capacity.

In the current year, a number of the bridge projects include a capital upgrade component, ie the bridge is replaced but will deliver a higher level of service through greater gross load capacity.

Item No:	Asset group:	Funding source:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	bridges	Council funded	12,371.40	165,299.00
2		Roads to Recovery funded	0.00	449,357.00
3	**Totals:**		**12,371.40**	**614,656.00**

Capital Expansion:
An example of capital expansion in the bridge asset group would be extend the bridge network.

In the current year, Council has no plans to expand the bridge asset network.

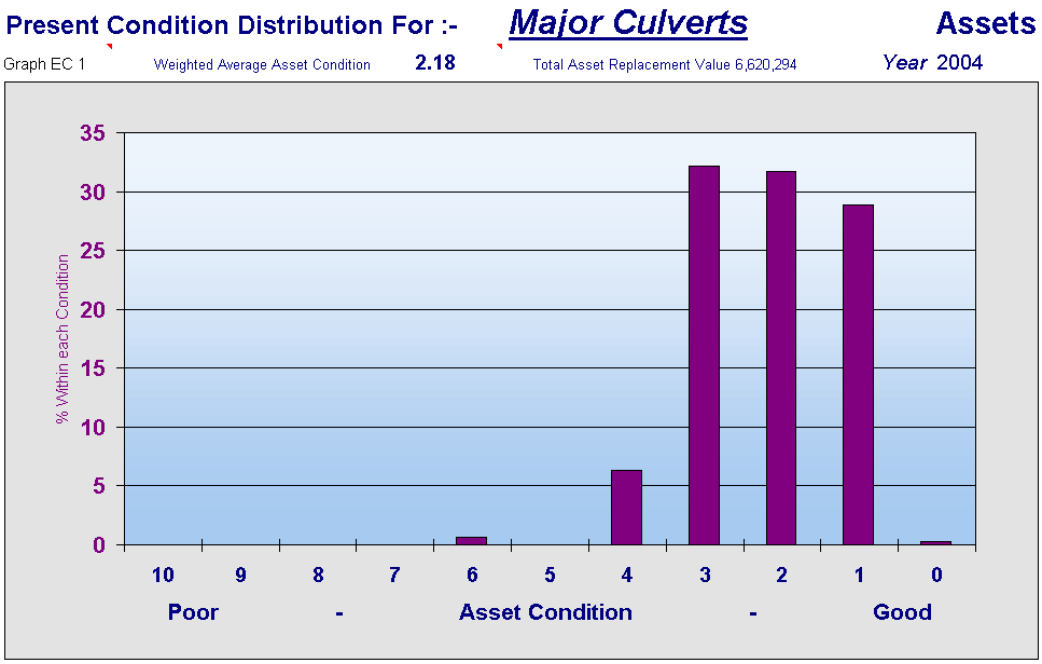
Disposal:
In the current year, Council has no plans to retire or dispose of any bridges.

Major Culverts Asset Group:

This section contains the lifecycle management plan for the major culverts asset group. The following table contains the unit rates used to prepare the valuations of the various sub-asset groups:

Major culverts:

Item No:	Code:	Code description:	Pipe val'n: $/lin m		Endwall val'n: $/each	
			Supply/lay:	Life:	Supply/place:	Life:
1	A2800	Cast in place 2800mm RC arch	3000.00	100	4000.00	100
2	B1200/300	1200 x 300 rcbc	433.35	100	800.00	100
3	B1200/450	1200 x 450 rcbc	441.91	100	850.00	100
4	B1200/600	1200 x 600 rcbc	454.75	100	900.00	100
5	B1200/900	1200 x 900 rcbc	479.36	100	1000.00	100
6	B600/450	600 x 450 rcbc	299.60	100	300.00	100
7	B750/600	750 x 600 rcbc	375.57	100	450.00	100
8	B900/450	900 x 450 rcbc	380.92	100	550.00	100
9	B900/600	900 x 600 rcbc	360.00	100	550.00	100
10	B900/750	900 x 750 rcbc	392.69	100	650.00	100
11	C1200/1200	1200 x 1200 crown unit	1300.00	100	1500.00	100
12	C1500/600	1500 x 600 crown unit	1498.00	100	1600.00	100
13	C1800/1200	1800 x 1200 crown unit	1669.20	100	2100.00	100
14	C2100/900	2100 x 900 crown unit	1824.35	100	2800.00	100
15	C2400/1200	2400 x 1200 crown unit	2033.00	100	3500.00	100
16	C2400/1500	2400 x 1500 crown unit	2086.50	100	3700.00	100
17	C2400/2100	2400 x 2100 crown unit	2188.15	100	3900.00	100
18	C2400/900	2400 x 900 crown unit	2033.00	100	3500.00	100
19	C3000/1200	3000 x 1200 crown unit	2605.45	100	4800.00	100
20	C3000/1500	3000 x 1500 crown unit	2685.70	100	5000.00	100
21	C3000/1800	3000 x 1800 crown unit	2771.30	100	5200.00	100
22	C3000/2400	3000 x 2400 crown unit	2905.05	100	5500.00	100
23	C3000/2700	3000 x 2700 crown unit	2969.25	100	5600.00	100
24	C3000/3000	3000 x 3000 crown unit	3022.75	100	5700.00	100
25	C3600/2100	3600 x 2100 crown unit	3226.05	100	6100.00	100
26	C3600/2700	3600 x 2700 crown unit	3370.50	100	6400.00	100
27	CSP2400	Corr steel plate culvert 2400mm dia	2050.00	100	4100.00	100
28	CSP3000	Corr steel plate culvert 3000mm dia	2400.00	100	5000.00	100
29	CSP4500	Corr steel plate culvert 4500mm dia	3000.00	100	8000.00	100
30	P1050	1050mm RCP	374.50	100	750.00	100
31	P1200	1200mm RCP	465.45	100	850.00	100
32	P1350	1350mm RCP	567.10	100	1160.00	100
33	P1425	1425mm RCP	652.70	100	1310.00	100
34	P1500	1500mm RCP	695.50	100	1500.00	100
35	P1800	1800mm RCP	956.58	100	1800.00	100
36	P1950	1950mm RCP	1241.20	100	2400.00	100
37	P2100	2100mm RCP	1498.00	100	2800.00	100
38	P3000	3000mm RCP	2500.00	100	3200.00	100
39	P450	450mm RCP	85.60	100	130.00	100
40	P600	600mm RCP	132.68	100	220.00	100
41	P750	750mm RCP	205.44	100	330.00	100
42	P825	825mm RCP	233.26	100	450.00	100
43	P900	900mm RCP	284.62	100	530.00	100
44	P975	975mm RCP	342.40	100	620.00	100
45	S1000	1000mm steel pipe	350.00	100	700.00	100
46	S1200	1200mm steel pipe	600.00	100	1200.00	100
47	S1350	1350mm steel pipe	750.00	100	1300.00	100
48	S1800	1800mm steel pipe	900.00	100	1500.00	100
49	S800	800mm steel pipe	270.00	100	450.00	100



The average condition, age and various valuations of the road asset group are provided in the table below:

Item No:	Asset Desc.	Qty (no.)	Culvert length (m)	Cell length (m)	Replcmt Value ($)	WDV ($)	Accum Deprc ($)	Annual Deprc ($)
1	Major culverts (whole group)	376	3,691	8,641	6,620,293	5,130,739	1,489,554	66,203
2	**Totals**	**376**	**3,691**	**8,641**	**6,620,293**	**5,130,739**	**1,489,554**	**66,203**

Maintenance:
The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	Major culvert asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Major culverts	1,432	5,900.00
2	**Totals:**	**1,432**	**5,900.00**

Capital Renewal:
In the current year, Council has no plans undertake capital renewal works on the major culvert network.

Capital Upgrade:
In the current year, Council has no plans to expand the upgrade the major culvert network.

Capital Expansion:
In the current year, Council has no plans to expand the major culvert network.

Disposal:
In the current year, Council has no plans to retire, or dispose of, any elements of the major culvert asset network.

Paved Footpath Asset Group:

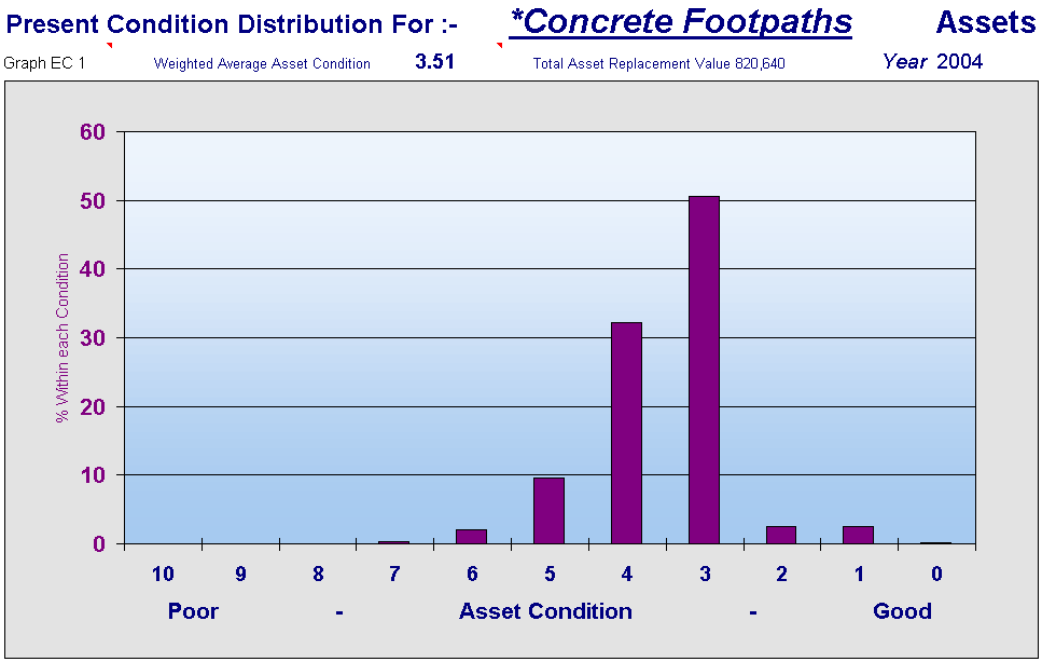
This section contains the lifecycle management plan for the following elements of the paved footpath asset group:

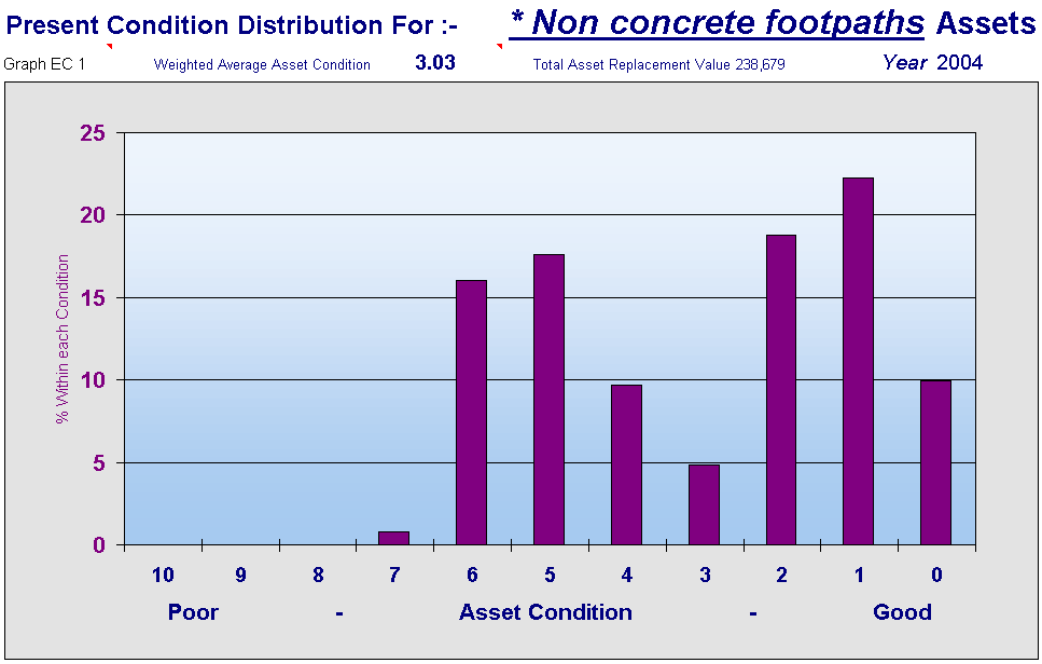
- Non-concrete footpaths
- Concrete footpaths

The following table contains the unit rates used to prepare the valuations of the various sub-asset groups:

Paved footpaths:

Item No:	Code:	Code description:	Unit rates: ($/sqm)		Asset Life: (yrs)
			Area>20sqm	Area<20sqm	
1	AS	Asphalt	25.00	45.00	20
2	BP	Brick pavers – conc or clay	50.00	90.00	45
3	C100	Concrete 100mm	55.00	90.00	60
4	C150	Concrete 150mm	70.00	120.00	60
5	C75	Concrete 75mm	34.54	62.17	60
6	CPS	Segmental concrete paving slabs	27.00	48.60	50
7	CR	Crushed rock footpath	2.00	4.00	15
8	GR	Gravel footpath	1.00	2.00	20
9	PC	Pattern paved concrete	40.00	72.00	50
10	S	Bituminous seal	15.00	27.00	18





The average condition, age and various valuations of the road asset group are provided in the table below:

Item No:	Asset Desc.	Qty (m)	Area (sq m)	Ave Cond.	Replcmt Value ($)	WDV ($)	Accum Deprc ($)	Annual Deprc ($)
1	Non-concrete footpaths	5,260	11,754	3.2	238,679.00	166,389.00	72,289.00	12,031.00
2	Concrete footpaths	15,558	23,888	3.4	820,639.00	523,623.00	288,017.00	13,922.00
3	**Totals:**	**20,818**	**35,642**		**1,059,318.00**	**690,012.00**	**360,306.00**	**25,953.00**

Maintenance:
The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	Paved footpath asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Non-concrete footpaths	4,626	9,750
2	Concrete footpaths	17,613	20,850
3	**Totals:**	**22,239**	**30,600**

Capital Renewal:
The capital renewal expenditure for the year 2002/2003, and the budgetted capital renewal expenditure for this year, 2003/2004, are given in the table below:

Item No:	Paved footpath asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Non-concrete footpaths	0	15,000
2	Concrete footpaths	0	14,000
3	**Totals:**	**0**	**29,000**

Capital Upgrade:
In the current year, Council has no plans to upgrade the paved footpath network.

Capital Expansion:
In the current year, Council has no plans to expand the paved footpath network. Any expansion of the network would be undertaken by developers, in conjunction with their subdivisions.

Disposal:
In the current year, Council has no plans to retire, or dispose of, any elements of the paved footpath network.

Urban Surface Drainage Asset Group:

This section contains the lifecycle management plan for the urban surface drainage asset group. The major sub-elements are:

- Kerb and Channel
- Urban open lined drains

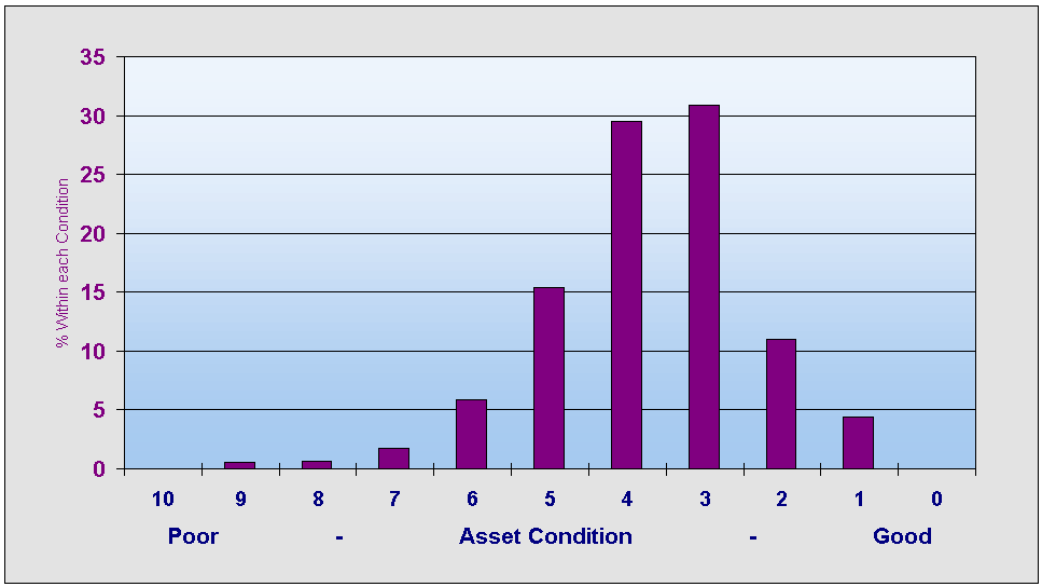
The following table contains the unit rates used to prepare the valuations of the various sub-asset groups:

Urban surface drainage codes:

Item No:	Code:	Code description:	Unit rates: ($/linear m)		Asset Life: (yrs)
			length>20m	length<20m	
1	BD3	Brick drain 300mm wide	70.00	126.00	60
2	BD6	Brick drain 600mm wide	90.00	162.00	60
3	BK	Barrier kerb - concrete	50.00	90.00	60
4	CD12	Concrete open drain 1200mm	120.00	126.00	60
5	CD3	Concrete open drain 300mm	50.00	117.00	60
6	CD4	Concrete open drain 400mm	55.00	99.00	60
7	K4	Concrete kerb & channel 450mm	60.00	108.00	60
8	K6	Concrete kerb & channel 600mm	65.00	117.00	60
9	KS	Precast concrete spiked kerb	45.00	72.00	60
10	KT	Kerb of timber construction	50.00	100.00	60
11	LB9	Laid back kerb 900mm wide	60.00	100.00	60
12	OD	Earthen open drained	5.00	9.00	60
13	PK	Plinth kerb concrete 150mm	50.00	90.00	60
14	SM3	Semi mountable kerb & channel 300mm	60.00	108.00	60
15	SM6	Semi mountable kerb & channel 600mm	65.00	117.00	60

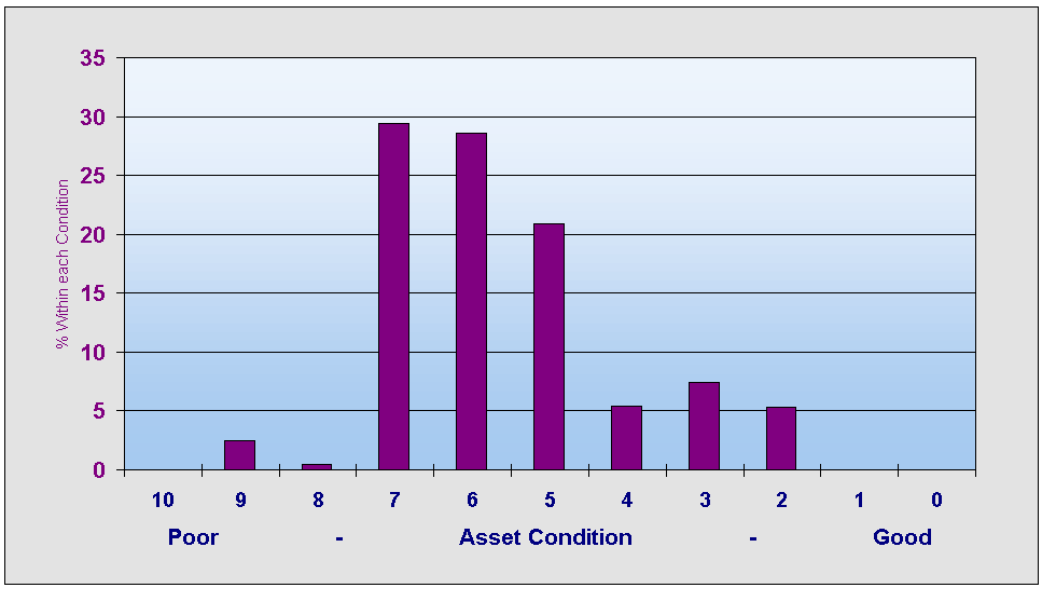
Present Condition Distribution For :- **** Concrete Kerb*** **Assets**

Graph EC 1 Weighted Average Asset Condition **3.72** Total Asset Replacement Value 3,648,205 *Year* 2004



Present Condition Distribution For :- ****Non Concrete Kerb*** **Assets**

Graph EC 1 Weighted Average Asset Condition **5.62** Total Asset Replacement Value 729,960 *Year* 2004



The average condition, age and various valuations of the road asset group are provided in the table below:

Item No:	Asset Desc.	qty	unit	Ave cond	Ave age	Replcmt Value ($)	WDV ($)	Accum Deprc ($)	Annual Deprc ($)
1	Kerb and channel	59,321	met	3.6		3,685,045.00	2,318,487.00	1,366,559.00	61,418.00
2	Brick lined drains	7,460	met	5.8		666,440.00	276,125.00	390,315.00	11,107.00
3	Concrete lined drains	198	met	3.8		14,610.00	9,223.00	5,387.00	243.00
4	Other lined drains	2,126	met	4.0		12,070.00	8,101.00	3,970.00	207.00
5	**Totals**	69,105				**4,378,165.00**	**2,611,936.00**	**1,766,231.00**	**72,975.00**

Maintenance:
The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	Urban surface drainage asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Kerb and channel	7,304	13,100
2	Brick lined drains	6,009	7,200
3	Concrete lined drains	0	0
4	Other lined drains	0	0
5	**Totals:**	**13,313**	**20,300**

Capital Renewal:
In the current year, Council has no plans to renew elements of the urban surface drainage asset base.

Capital Upgrade:
In the current year, Council has no plans to upgrade elements of the urban surface drainage asset base.

Capital Expansion:
In the current year, Council has no plans to expand the urban surface drainage asset base.

Disposal:
In the current year, Council has no plans to retire, or dispose of, any elements of the urban surface drainage network.

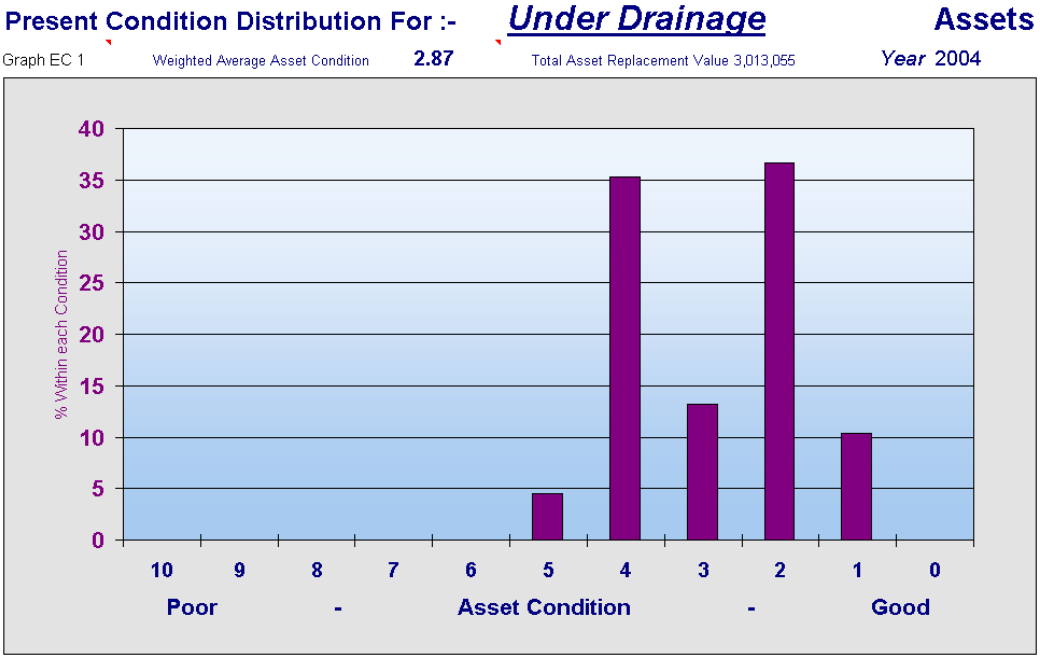
Underground Stormwater Drainage Asset Group:

This section contains the lifecycle management plan for the underground stormwater drainage asset group.

The following table contains the unit rates used to prepare the valuations of the various sub-asset groups:

Underground stormwater drainage system codes:

Item No:	Code:	Code description:	Unit rates: (supply only) $/lin m	Unit rates: (place in std conditions) $/lin m	Asset Life: (yrs)
1	C100	100mm dia RCP	10.00	30.00	80
2	C150	150mm dia RCP	15.00	35.00	80
3	C175	175mm dia RCP	25.00	35.00	80
4	C225	225mm dia RCP	25.00	40.00	80
5	C300	300mm dia RCP	32.00	53.00	80
6	C350	350mm dia RCP	25.00	55.00	80
7	C375	375mm dia RCP	45.00	55.00	80
8	C450	450mm dia RCP	60.00	70.00	80
9	C525	525mm dia RCP	70.00	80.00	80
10	C600	600mm dia RCP	80.00	80.00	80
11	C675	675mm dia RCP	90.00	85.00	80
12	C750	750mm dia RCP	95.00	85.00	80
13	C825	825mm dia RCP	90.00	90.00	80
14	C900	900mm dia RCP	100.00	110.00	80
15	C1000	1000mm dia RCP	105.00	120.00	80
16	C1050	1050mm dia RCP	120.00	120.00	80
17	C1200	1200mm dia RCP	180.00	170.00	80
18	B900/300	900 x 300 rcbc	120.00	110.00	80
19	B1200/450	1200 x 450 rcbc	150.00	120.00	80



The average condition, and various valuations of the underground drainage asset group are provided in the table below:

Item No:	Asset Description	Qty (m)	Ave cond	Replcmt Value ($)	WDV ($)	Accum Deprc ($)	Annual Deprc ($)
1	RCP – 100mm dia	267	2.4	10,680	8,295	2,385	134
2	RCP – 150mm dia	564	2.2	28,380	21,412	6,968	355
3	RCP – 225mm dia	3,269	2.4	212,485	156,972	55,513	2,656
4	RCP – 300mm dia	5,145	3.1	437,325	302,007	135,318	5,467
5	RCP – 375mm dia	4,49	3.0	490,900	349,073	141,827	6,136
6	RCP – 450mm dia	3,116	3.0	405,080	286,460	118,620	5,064
7	RCP – 525mm dia	955	3.3	143,250	84,752	58,498	1,791
8	RCP – 600mm dia	3,859	2.9	630,640	447,810	182,830	7,883
9	RCP – 750mm dia	340	1.2	61,200	53,595	7,605	765
10	RCP – 825mm dia	750	2.2	135,000	104,734	30,266	1,688
11	RCP – 900mm dia	1,340	3.6	281,400	169,939	111,461	3,518
12	RCP – 1050mm dia	343	3.8	81,075	56,812	24,263	1,013
13	RCP – 1200mm dia	160	2.7	56,000	42,308	13,692	700
14	RCBC – 900 x 300 box	8	3.6	1,840	1,175	665	23
15	RCBC – 1200 x 450 box	140	3.6	37,800	24,131	13,669	473
16	**Totals**	**25,205**	**3.0**	**3,013,055**	**2,109,476**	**903,579**	**37,663**

Maintenance:
The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	All elements	8,979.48	13,200
3	**Totals:**	**8,979.48**	**13,200.00**

Capital Renewal:
In the current year, Council has no plans for capital renewal of the underground stormwater asset base

Capital Upgrade:
In the current year, Council has no plans to upgrade the underground stormwater asset base.

Capital Expansion:
In the current year, Council has plans to expand the underground stormwater asset base with an extension to the outfall of the High Street Nagambie drain adjacent to the Nagambie Bakery. A provision of $12,000.00 has been allocated in the 2003/2004 budget, carried forward from the 2002/2003 budget.

Disposal:
In the current year, Council has no plans to retire, or dispose of, any elements of the underground stormwater asset base.

Note: Council is currently undertaking the development of a stormwater drainage masterplan for the townships of Euroa and Nagambie.. The Plan's development includes the development of an inventory of the underground drainage assets, including pipelines and pits. Changes to the asset base will be defined in the next version of the TAMP, when the project is completed.

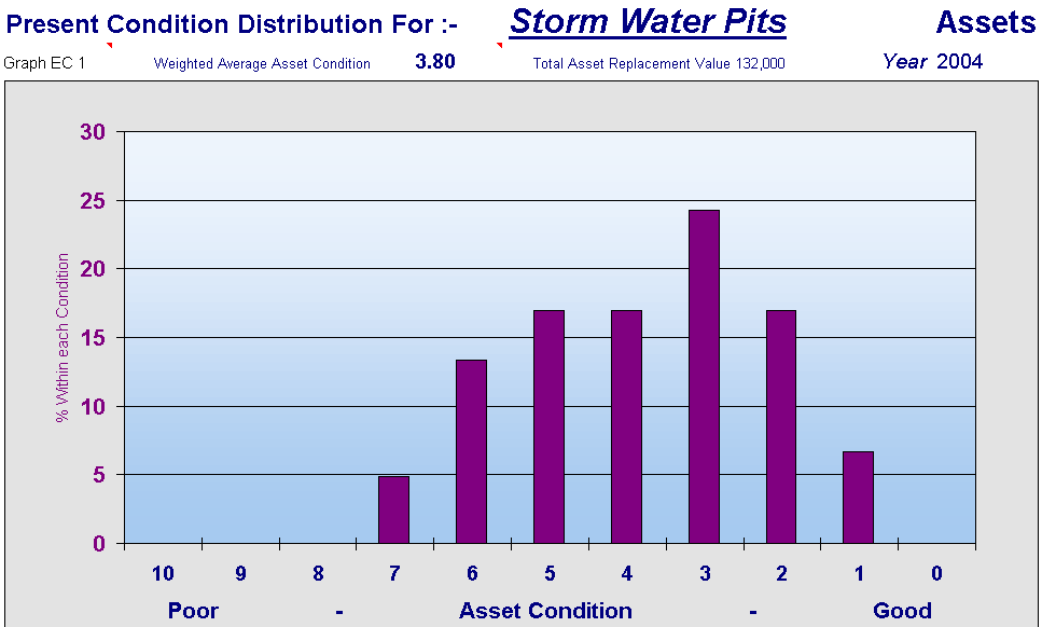
Stormwater Pits Asset Group:

This section contains the lifecycle management plan for the stormwater pits asset group.

The following table contains the unit rates used to prepare the valuations of the various sub-asset groups:

Stormwater pit codes:

Item No:	Code:	Code description:	Unit rates: $/each	Asset Life: (yrs)
1	P1	Standard average pit	800.00	60



The average condition, and various valuations of the stormwater pit asset group are provided in the table below:

Item No:	Asset Desc.	qty	Ave Cond.	Replcmt Value ($)	WDV ($)	Accum Deprc ($)	Annual Deprc ($)
1	Standard pit	165	3.8	132,000.00	81,536.00	50,464.00	2,200.00
2	**Totals**	**165**	**3.8**	**132,000.00**	**81,536.00**	**50,464.00**	**2,200.00**

Maintenance:

The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	All elements	11,900	8,400
2	**Totals:**	**11,900**	**8,400**

Capital Renewal:
In the current year, Council has no plans to undertake capital renewal works on the stormwater pit asset base.

Capital Upgrade:
In the current year, Council has plans to upgrade the stormwater pit asset base. Council will be upgrading the stormwater pit in High Street Nagambie adjacent to the bakers.

The upgrade works will involve the installation of a gross pollutant trap (gpt) to remove coarse pollutants from the stormwater runoff, before it enters Lake Nagambie. A provision of $8,000.00 has been allocated.

Capital Expansion:
In the current year, Council has no plans to expand the stormwater pit asset base.

Disposal:
In the current year, Council has no plans to retire, or dispose of, any elements of the stormwater pit asset base.

Community facilities:

Buildings Asset Group:

This section contains the lifecycle management plan for the building asset group.

The average condition, age and various valuations of the building asset group are provided in the table below. The buildings were revalued as at 30 june 2002 which took into account replacement costs and depreciation.

Item No:	Asset Desc.	qty	Ave Cond	Asset life	Replcmt Val as at 30/06/02 ($)	WDV ($)	Accum Deprc ($)	Annual Deprc ($)
1	Halls	10	Good	80	1,535,000.00	0	0	19,190.00
2	Meeting rooms	13	Good	80	1,897,700.00			23,720.00
3	Offices	7	Good	60	2,985,900.00			49,765.00
4	Plant rooms	7	Good	50	1,200,500.00			24,010.00
5	Pre-schools	7	Good	40	944,000.00			23,600.00
6	Sports facilities	13	Good	60	2,194,800.00			36,580.00
7	Toilet/change rooms	14	Good	60	1,535,900.00			25,600.00
8	**Totals**	**71**			**12,293,800.00**			**202,465.00**

Maintenance:

The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	Building asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Halls	10,520	21,400
2	Meeting rooms	22,374	30,200
3	Offices	38,463	66,900
4	Toilet/change rooms	10,090	0
5	Preschools	687	0
6	**Totals:**	**82,134**	**118,500**

The Strathbogie Shire Council has no formal maintenance plan for the performance of maintenance on the building asset group.

The Council will develop new intervention levels and maintenance standards in a building maintenance plan which is part of an improved asset management process, and will be implementing a maintenance management system in 2004/2005 to ensure better, and targeted, maintenance operations.

This maintenance management system will feed information into the asset capital management system.

Capital Renewal:

The capital renewal expenditure for the year 2002/2003, and the budgetted capital renewal expenditure for this year, 2003/2004, are given in the table below:

Item No:	Building asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Halls	16,547	34,100
2	Offices	0	17,600
3	**Totals:**	**16,547**	**51,700**

Capital Upgrade:
In the current year, Council has allocated the following amount for the upgrading of the buildings asset base:

Item No:	Building asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Meeting rooms	86,220	0
2	Offices	10,212	13,000
3	Plant rooms	18,748	27,000
4	Sports facilities	0	15,200
5	Toilets/change rooms	0	12,000
6	**Totals:**	**115,180**	**67,200**

Capital Expansion:
In the current year, Council has no plans to expand the building asset base.

Disposal:
In the current year, Council has no plans to retire, or dispose of, any elements of the building asset base.

Waste Management Asset Group:

This section contains the lifecycle management plan for the waste management asset group.

The average condition, age and various valuations of elements of this asset group are provided in the table below:

Item No:	Asset Desc.	unit	Average condition	Design Life:	Ave Age	Replcmt Value ($)	WDV ($)	Accum Deprc ($)	Annual Deprc ($)
1	Violet Town landfill	ea	good	5	5	$346,000	207,600	138,400	69,200
2	Avenel transfer station	ea	V. good	100	5	$160,000	156,800	3,200	1,600
3	Euroa transfer station	ea	V. good	100	5	$179,500	175,910	3,590	1,795
4	Nagambie trans ststion	ea	V. good	100	5	170,000	166,600	3,400	1,700
5	Longwood mini transfer station	ea	V. good	20	5	$4,000	3,600	400	200
6	Ruffy mini transfer station	ea	good	20	5	$2,000	1,800	200	100
7	**Totals**					**$861,500**	**$712,310**	**$149,190**	**$74,595**

Note:
The Violet Town Landfill Stage 1 is currently in use. It has an estimated life of less than 12 months. Following completion of Stage 1, the Council will then move into Stage 2, which has an estimated life of 5 years. The actual life will depend on current and future waste management practices.

Maintenance:
The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	Waste mgmt asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	All Elements	Est'd 1,500	Est'd 1,500
2	**Totals:**	**1,500**	**1,500**

The Strathbogie Shire Council currently has no formal maintenance plan for the performance of maintenance on the waste management asset group.

The Council will develop new intervention levels and maintenance standards in a waste management asset maintenance plan. This is part of an improved asset management process, and the Council will be implementing a maintenance management system in 2004/2005 to ensure better, and targeted, maintenance operations.

This maintenance management system will feed information into the asset capital management system.

Capital Renewal:
The Council has no plans for capital renewal works in the waste management system in the current year, 2003/2004.

Capital Upgrade:
In the current year, Council will undertake the following capital upgrade expenditure on the waste management system:

Item No:	Waste mgmt asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Violet Town central landfill		168,500.00
2	**Totals:**		**168,500.00**

Capital Expansion:
In the current year, Council has no plans to expand the waste management asset base.

Disposal:
In the current year, Council has no plans to retire, or dispose of, any elements of the waste management asset base.

Swimming Pools Asset Group:

This section contains the lifecycle management plan for the swimming pools asset group:

- Swimming Pools
- Associated water treatment facilities

Swimming pools:

Item No:	Pool site:	Built:	Number of pool types at site:			
			wading	learners	main	diving
1	Avenel	1972	4.9 x 7.7m (d = 0.3m)	0	25 x 9.3m (d = 0.8 – 2.5m)	0
2	Euroa	1970	Octagoanl – 7.3m b/w sides (d = 0.25 – 0.3m)	11 x 7.3m (d = 0.6 – 0.9m)	50 x 13.4m (d = 0.9 – 1.5m)	12.2 x 11.6m (d = 3.05m)
3	Nagambie	1982	$17m^2$ (d = 0.3m)	$50m^2$ (d = 0.75m)	25 x 10m (d = 0.8 – 1.3m)	0
4	Violet Town	1957	Octagonal 9m b/w sides (d = 0.25 – 0.3m)	0	25 x 11m (d = 0.9 – 2.5m)	0

Water treatment facilities:

Item No:	Pool site:	Water filter system		Disinfection system:		Piping:
		Installed:	Type	Installed:	Type:	
1	Avenel	1972	Pressure	1995	"stingy sticks"	GI
2	Euroa	1970	Gravity	1992	"stingy sticks"	CICL
3	Nagambie	2002	Pressure	1995	"stingy sticks"	PVC
4	Violet Town	1987	pressure	1995	"stingy sticks"	GI

The average condition, age and various valuations of the swimming pool asset group are provided in the table below:

Item No:	Asset description:	Ave cond	Ave Age	Est. replcmt Value ($)	WDV ($)	Accum Deprc ($)	Annual Deprc ($)
1	**Swimming pools:**						
2	Avenel pool	Good	30	300,000.00			
3	Euroa pool	Good	32	880,000.00			
4	Nagambie pool	Good	20	325,000.00			
5	Violet Town pool	Good	45	340,000.00			
6	**Water treatment facilities:**						
7	Avenel pool treatment facil	Good	30	50,000.00			
8	Euroa pool treatment facil	Fair	32	120,000.00			
9	Nagambie pool trtmt facil	Excl	1	50,000.00			
10	Violet Town pool trtmt facil	V/good	14	50,000.00			
11	**Totals**			**2,115,000.00**			

Maintenance:
The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	Swimming Pool asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Avenel pools and plant	1,994.00	2,200.00
2	Euroa pools and plant	1,560.00	2,200.00
3	Nagambie pools and plant	641.00	1,500.00
4	Violet Town pools and plant	3,299.00	1,500.00
5	**Totals:**	**7,494.00**	**7,400.00**

The Strathbogie Shire Council currently has no formal maintenance plan for the performance of maintenance on the swimming pool asset group.

The Council will develop new intervention levels and maintenance standards in a swimming pool maintenance plan which is part of an improved asset management process, and will be implementing a maintenance management system in 2004/2005 to ensure better and targeted maintenance operations.

This maintenance management system will feed information into the asset capital management system.

Capital Renewal:
The capital renewal expenditure for the year 2002/2003, and the budgetted capital renewal expenditure for this year, 2003/2004, are given in the table below:

Item No:	Swimming Pool asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Violet Town pool (painting)	17,497	
2	Nagambie pool (painting)	16,497	
3	Avenel pool (painting)		21,300
4	Euroa pool (foot valve)		2,000
5	**Totals:**	**33,994**	**23,300**

Capital Upgrade:
In the current year, Council has allocated funding to the upgrading of the Avenel and Nagambie pools. This funding is to improve the performance of the skimmer boxes at both pools. The details are shown in the following table:

Item No:	Swimming Pool asset group element:	2002/2003 actual expend:	2003/2004 budgeted expend:
1	Nagambie pool (shade shelter)	3,320	
2	Euroa pool (shade shelter)	5,636	
3	Violet Town pool (shade shelter)	5,636	
4	Euroa pool (seating)		5,000
5	Euroa pool (fernery)		6,000
6	Violet Town pool (seating)		3,000
7	Nagambie pool (seating)		500
8	**Totals:**	**14,592**	**14,500.00**

Capital Expansion:
In the current year, Council has no plans to expand the swimming pool or water treatment facilities asset base.

Disposal:
In the current year, Council has no plans to retire, or dispose of, any elements of the swimming pool or water treatment facilities asset base.

Parks and Reserves Asset Group:

This section contains the life-cycle management plan for the parks and reserves asset base.

Maintenance:
The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	All elements	27,054	12,500
2	**Totals:**	**27,054**	**12,500**

Capital Renewal:
In the current year, Council has no plans to undertake capital renewal works on the parks and reserves asset base.

Capital Upgrade:
In the current year, Council has no plans to upgrade the parks and reserves asset base

Capital Expansion:
In the current year, Council has no plans to expand the parks and reserves asset base.

Disposal:
In the current year, Council has no plans to retire, or dispose of, any elements of the parks and reserves asset base.

Playground Asset Group:

This section contains the life cycle management plan for the playgrounds for that are the Council's responsibility.

The average condition, age and various valuations of the playground asset group are provided in the table below:

Item No:	Asset description:	Ave cond	Ave Age	Replcmt Value ($)	WDV ($)	Accum Deprc ($)	Annual Deprc ($)
1	playgrounds	Good		163,700			16,370
2	**Totals**			**163,700**			**16,370**

Maintenance:
The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	Playgrounds asset group:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Play equipment/softfall maint	16,287	12,500
5	**Totals:**	**16,287**	**12,500**

Capital Renewal:
The capital renewal expenditure for the year 2002/2003, and the budgetted capital renewal expenditure for this year, 2003/2004, are given in the table below:

Item No:	Playgrounds asset group:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	*Council funded:*		
2	Nagambie – River Street	3,500	
3	Euroa – Rotary Park	5,560	
4	Nagambie – Blayney Res		11,000
5	Nagambie – Recreation Res		4,000
6	*External grant funded:*		
7	Euroa – Rotary Park	10,000	
8	**Totals:**	**19,060**	**$15,000**

In the 2001/2002 financial year the Rotary Club of Euroa was successful in obtaining a grant from the State Government for $23,000.00 to renew and upgrade the playground at the Rotary Park Euroa. The grant money was spent in the 2002/2003 financial year, and the Council contributed $10,560 to the project.

Capital Upgrade:
In the current year, Council has allocated funding to the upgrading of the listed playgrounds in the following table:

Item No:	Playgrounds asset group:	2002/2003 actual expend:	2003/2004 budgeted expend:
1	*Council funded:*		
2	Nagambie – River Street	1,500	
3	Euroa – Rotary Park	5,000	
	Euroa – Lions Park		1,500
	Nagambie – Blayney Res		1,000
	Nagambie – Pre-school		2,500
	Externally funded:		
	Euroa – Rotary Park	13,000	
	Totals:	**19,500**	**5,000**

Capital Expansion:
In the current year, Council has no plans to expand the playground asset base.

Item No:	Playgrounds asset group:	2002/2003 actual expend:	2003/2004 budgeted expend:
1	*Council funded:*		
2	Violet Town - Lions Park	10,000	0
3	**Totals:**	**10,000**	**0**

Disposal:
In the current year, Council has no plans to retire, or dispose of, any elements of the playground asset base. However, the draft Playground Management Plan has identified seven of Council's current playgrounds that should be removed or retired.

Flood Warning System Asset Group:

This section contains the lifecycle management plan for the flood warning system asset group. The asset group consists of the following sub-groups:

- Base stations for the receiving and manipulation of data
- Field stations – structures for housing instrumentation
- Field stations - instrumentation for the collection and transmitting of rainfall and streamflow data

The average condition, age and various valuations of the road asset group are provided in the table below:

Item No:	Asset Desc.	Qty:	Asset life:	Ave Cond.	Ave Age	Replcmt Value ($)	WDV ($)	Accum Deprc ($)	Annual Deprc ($)
1	Base stations	3	5	good	5	27,000.00	2,000.00	25,000.00	5,000.00
2	Field stations - structure	7	30	Very good	5	120,000.00	100,000.00	20,000.00	4,000.00
3	Field stations - instruments	7	8	good	5	63,000.00	23,625.00	39,375.00	7,875.00
4	**Totals**					**210,000.00**	**125,625.00**	**84,375.00**	**16,875.00**

Maintenance:

The maintenance expenditure for the year 2002/2003, and the budgetted maintenance expenditure for this year, 2003/2004, are given in the table below:

Item No:	asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Flood warning system (whole)	7,927	10,000.00
2	**Totals:**	**7,927**	**10,000.00**

The Strathbogie Shire Council has a formal maintenance agreement for the performance of maintenance on the flood warning system. This maintenance agreement is with the Thiess Environmental Services.

Capital Renewal:

The capital renewal expenditure for the year 2002/2003, and the budgetted renewal expenditure for this year, 2003/2004, are given in the table below:

Item No:	asset group element:	2002/2003 actual expend:	2003/2004 budgetted expend:
1	Base stns - computers	0	6,000.00
2	**Totals:**	**0**	**6,000.00**

Capital Upgrade:

In the current year, Council has no plans to expand the flood warning system asset base.

Capital Expansion:

In the current year, Council has no plans to expand the flood warning system asset base.

Disposal:

In the current year, Council has no plans to retire, or dispose of, any elements of the flood warning system asset base.

Financial Modelling:

The Moloney Asset Management System contains a financial modelling unit that provides council with the opportunity and ability to predict future expenditure requirements and asset conditions based on adopted asset degradation or consumption curves.

This asset management plan considers current expenditures, both maintenance and capital, and existing levels of service, and using generic asset degradation curves models the consumption or degradation of the asset. Two modelling outcomes are available to Council from our asset management modelling software. The outcomes are:

- Given a fixed, or pre-determined, expenditure level the model predicts the overall average asset condition rating at a future date, and plots a bar-graph of asset condition versus asset amount,
- A desired minimum asset condition level is established, and the model determines the required annual expenditure to achieve the pre-determined asset condition level.

This plan makes a comparison between the budget-based expenditure approach (ie: here is $200,000.00 - do what you can with it!) and the asset-based approach (ie the resources that are needed to replace the consumed or ageing asset)

Roads:

In the case of the road asset group, the following assumptions have been made, to provide the basis for the output of the model:

Sealed surfaces:

The Council's sealed surface asset base is approximately 3,700,000 square metres. Council's recent annual expenditure on sealed surface renewal from it's own funds, ie from Council's own capital budget, of $200,000.00 has provided an annual renewal area of approximately 100,000 square metres.

This rate of renewal yields an asset life of 36 years. The accepted asset life of a sealed surface for sound asset management is 12 to 15 years. This means that if the current rate of expenditure on sealed surface capital renewal is maintained, Council's sealed surface asset base will progressively decline in condition, as shown in the following graphs, and Council will not be able to sustain the current network.

The following graphs also show the level of expenditure required to maintain the network in it's current condition.

Further, the sealed surface performs a number of functions, including:

- Provision of wearing course protecting underlying pavement and formation from abrasion and erosion
- Provision of waterproofing course protecting underlying pavement and formation from moisture intrusion and subsequent loss of strength
- Provision of non-dusting surface and improved road safety opportunities
- Provision of improved road safety opportunities and conditions

If the sealed surface network is not managed effectively it will have a serious negative consequential effect on the performance of the other sub-groups of the roads asset group, viz, pavements and formations.

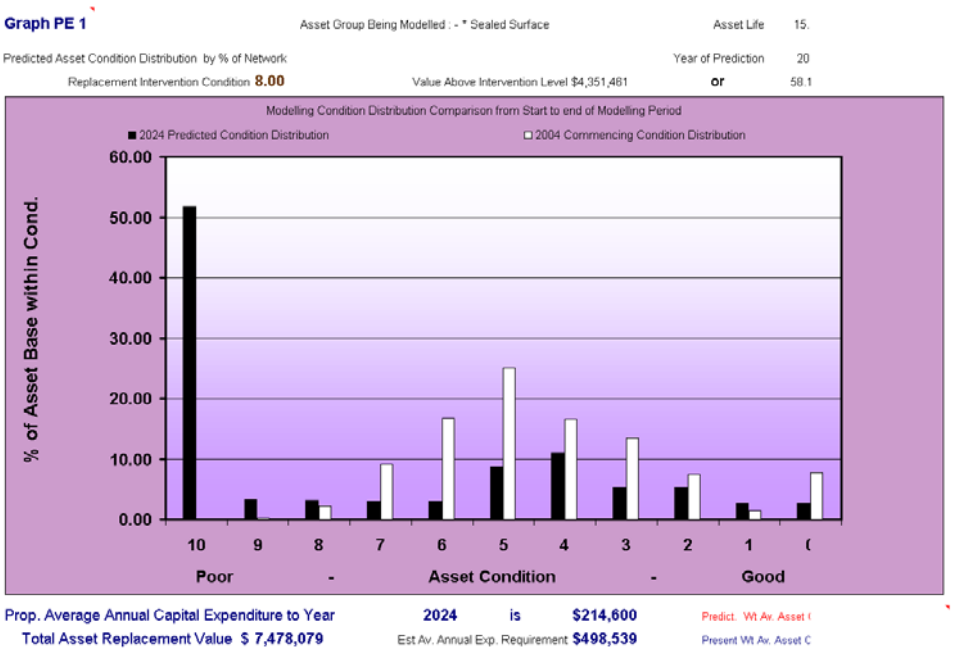
Failure to maintain the sealed surfaces will result in accelerated loss, or depreciation, of the whole roads asset group.

Current conditions :

- Maintenance Expenditure : $210,900
- Capital Renewal Expenditure : $200,000
- Total Annual Expenditure : $410,900
- Capital Renewal Intervention Level (IL) = 8.0
- Asset Life = 15years

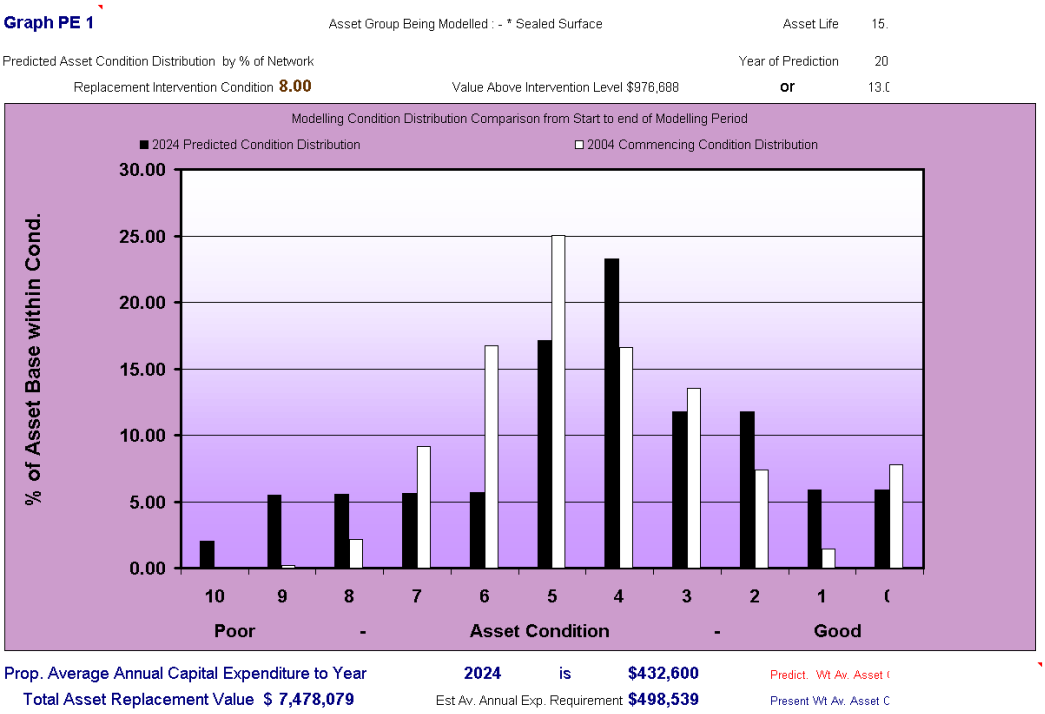
Option 1

The current average condition of our seals is **4.32**. At **current rates** of expenditure this average will be **7.29** by 2023 with **58%** of the network over the IL of 8.0



Option 2.

To maintain the seals at the current average condition of **4.32**, given a maintenance expenditure of **$210,900** the capital expenditure would have to be lifted from the current $200,000 to $400,000 till 2009, then $440,000 till 2024 as shown below:



Recommendation

Option 2 – Capital Renewal Expenditure on the sealed surface asset subgroup be increased to the following levels :

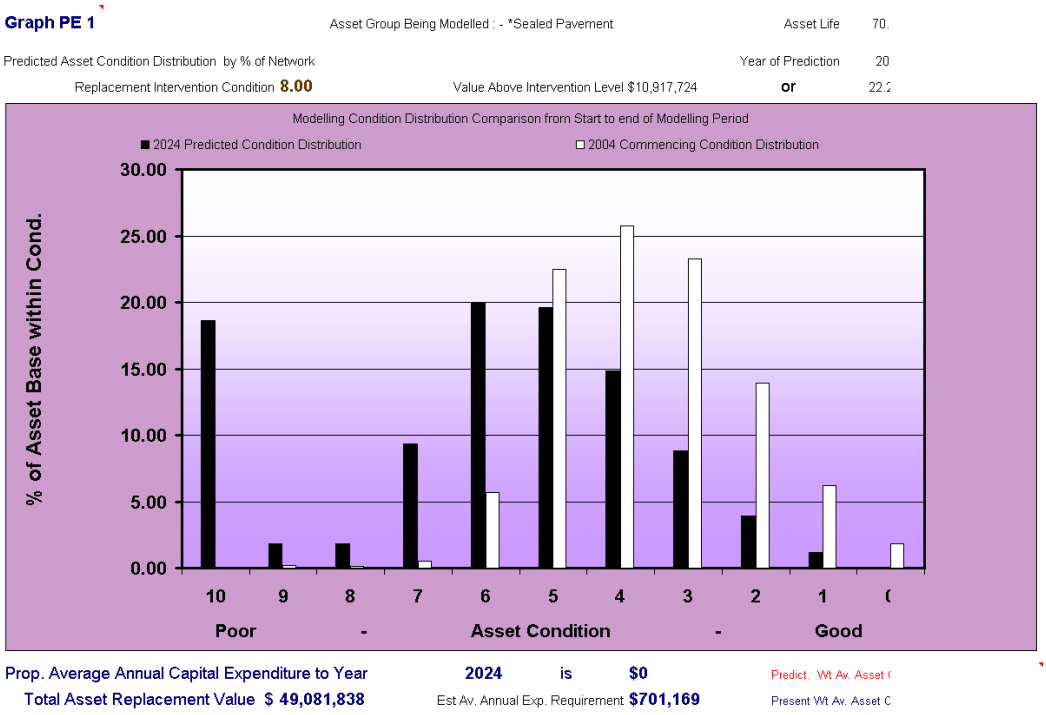
- **$400,000 in 2005 - 2009**
- **$440,000 in 2010 - 2024**

Sealed pavement:

Current conditions :

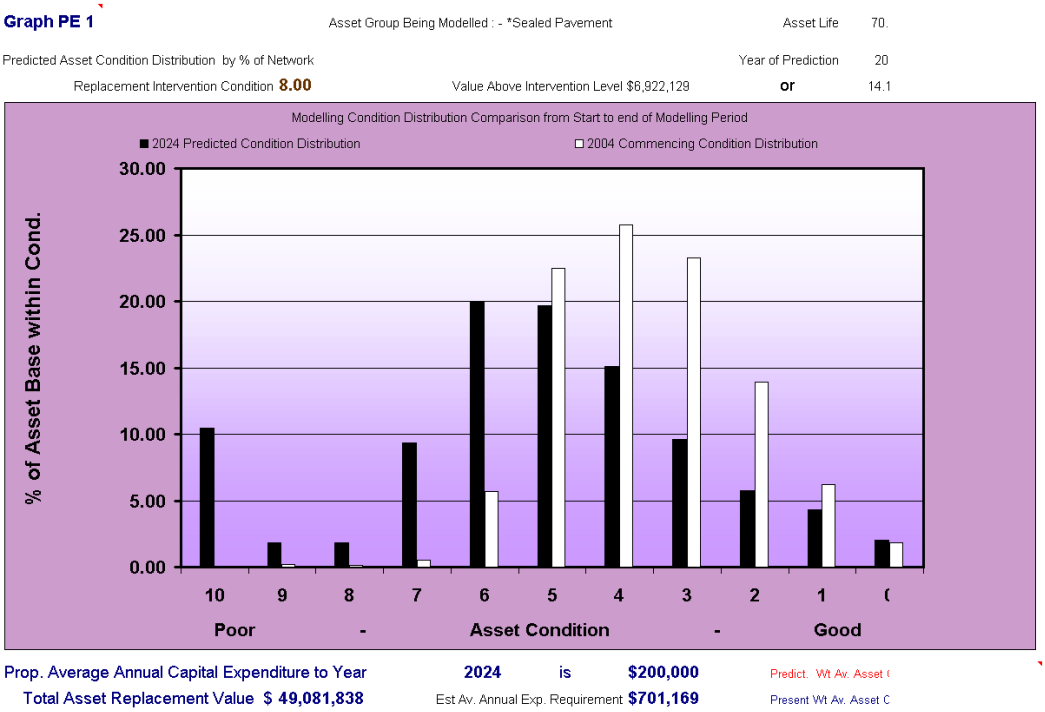
- Maintenance Expenditure : **$2,000**
- Capital Renewal Expenditure : $0
- Total Annual Expenditure : $2,000
- Capital Renewal Intervention Level (IL) = 8.0
- Asset Life = **70** years

Option 1.
The current average condition of our sealed pavements is **3.60.** At the present rates of expenditure, this will blow out to **6.0** by 2024, as shown in graph PE1 :



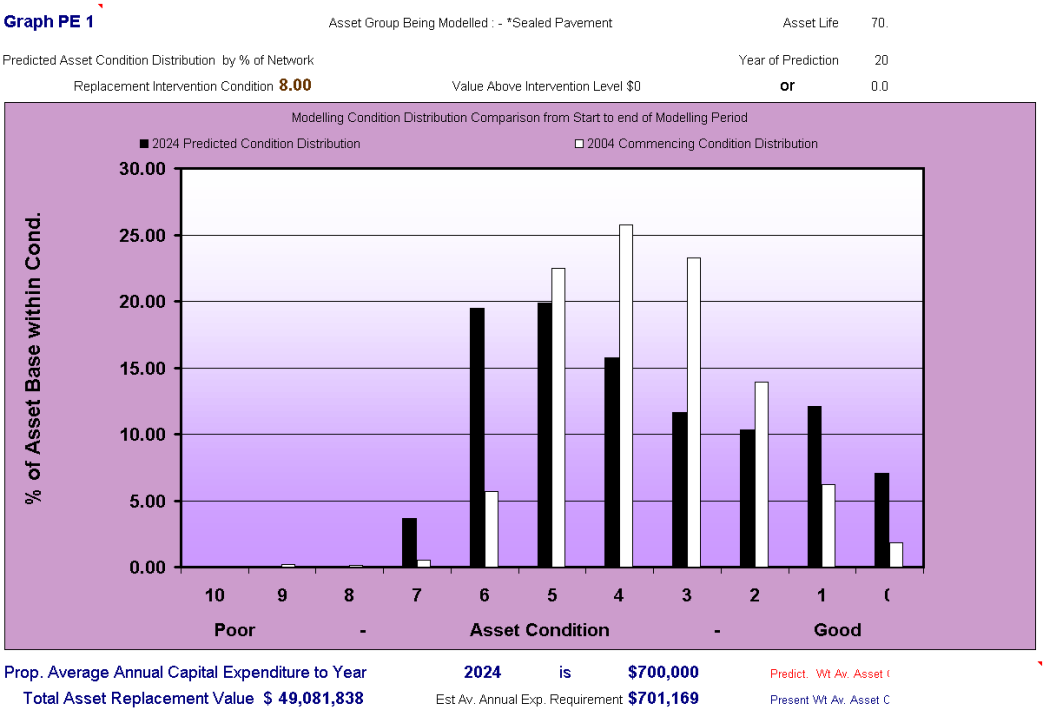
Option 2.

A Capital Expenditure of $200,000 gives an average condition of 5.25 in 2024 as shown below :



Option 3.

A Capital Expenditure of **$700,000** on sealed pavements :



Recommendation:

Option 3 - an average Capital Renewal Expenditure of $700,000 will result in the average condition of sealed pavements falling from 3.60 to 3.73 :

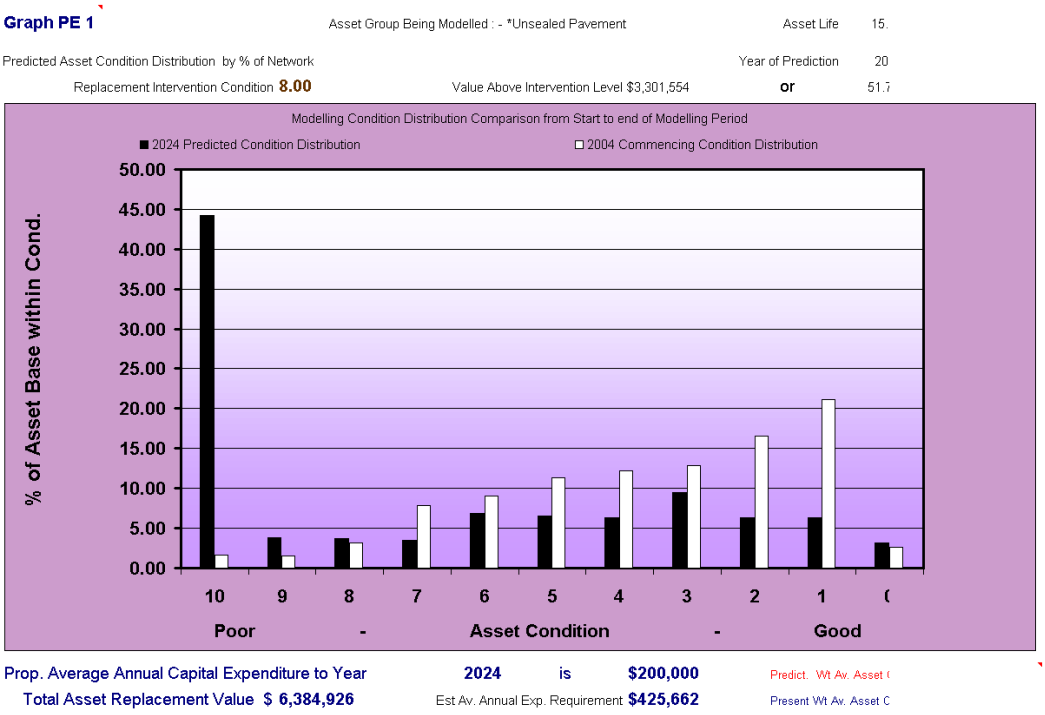
Unsealed pavement:

Current conditions :

- Maintenance Expenditure : $559,700
- Capital Renewal Expenditure : $200,000
- Total Annual Expenditure : $759,700
- Capital Renewal Intervention Level (IL) = 8.0
- Asset Life = 15 years

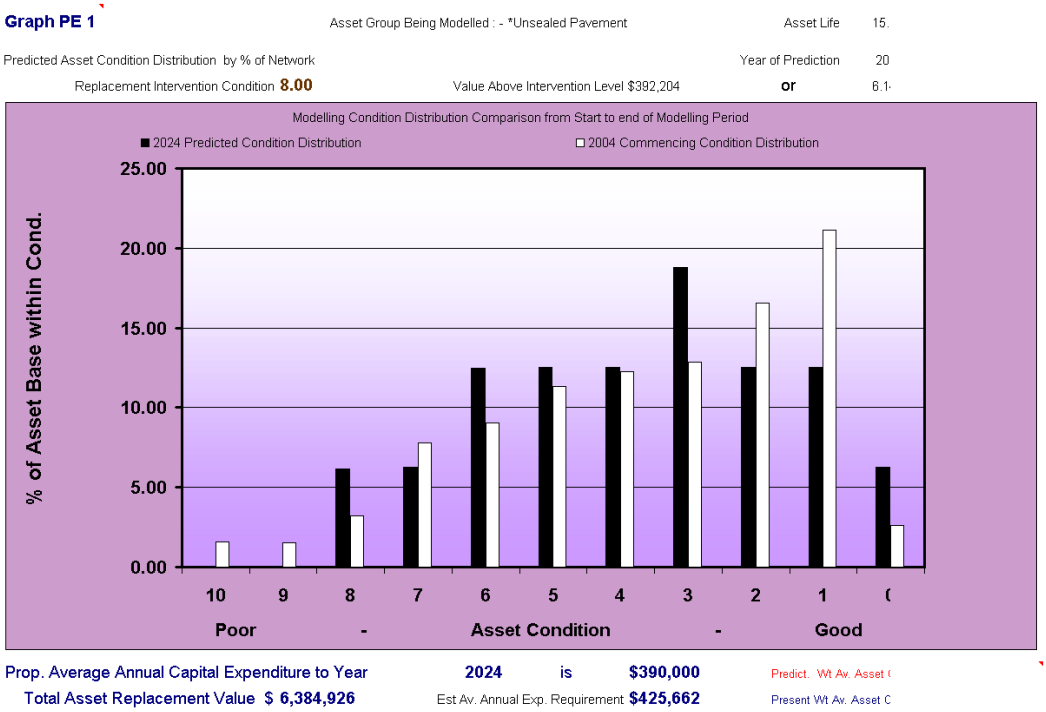
Option 1.

At current rates of expenditure, unsealed pavements will fall from 3.63 to 6.76 in the next 20 years – as shown below:



Option 2

A Capital Renewal Expenditure of $400,000 per annum from 2005 will result in unsealed pavements moving from a 3.63 to 3.74 average condition, as shown below :



Recommendation

Option 2 : $400,000 per year for unsealed road pavements

Bridges Asset Group:

Council is implementing, a bridgeworks program adopted in late 2001/2002. Implementation of the program began in 2002/2003.

The bridgeworks program began as a result of the detailed condition report developed as a part of the preparation of this Asset Management Plan. The bridgeworks program identifies the need to replace and/or rehabilitate a significant number of the Council's bridge asset base.

Funding for the program is coming from a number of sources. The major funding source is Council's allocation from the Roads to Recovery (R2R) funding program, together with an allocation of $196,000 from Vicroads, and $150,000 from Heritage Victoria. Council has resolved to allocate the next two year's R2R allocation to the bridgeworks program, an amount of $1,540,000.00.

Council has obtained it's full allocation of funding under the Federal Roads to Recovery Program. The next version of the Roads to Recovery program, R2R2, will operate differently, with less funds being available to Council. Until the rules and guidelines of "R2R2" are released, the Council cannot make decisions on allocation of resources. The figures used in the following modelling are based on current program expenditure, and Council's previous bridge asset group expenditure prior to the implementation of the current Roads to Recovery program.

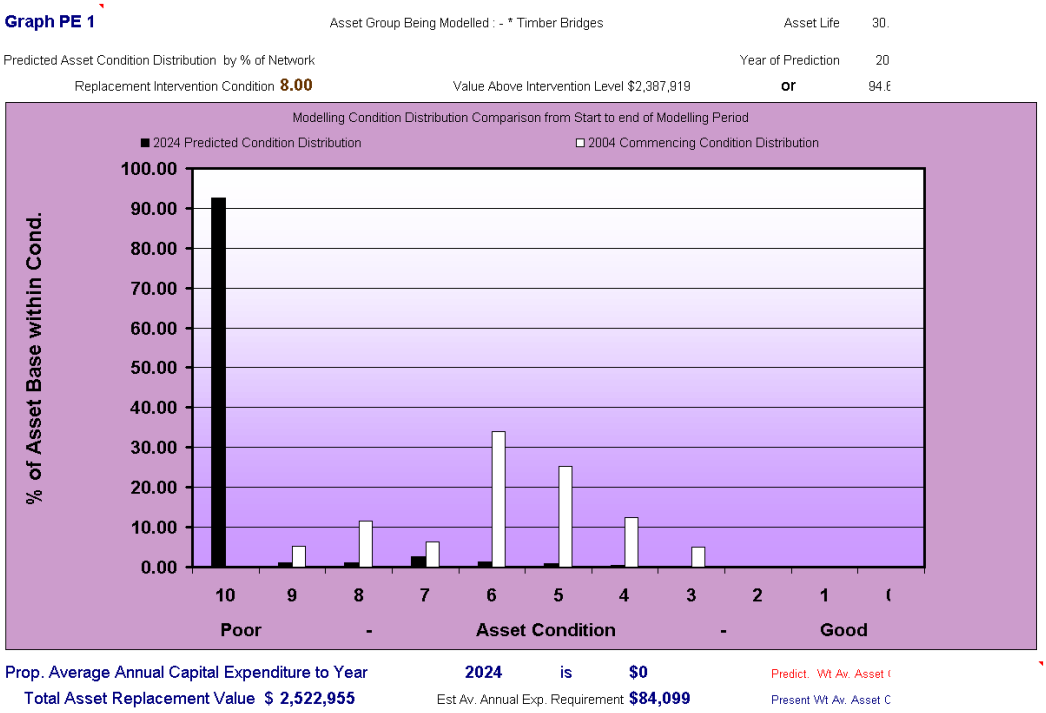
In the case of the bridge asset group, the following assumptions have been made, to provide the basis for the output of the model:

Timber Bridges:

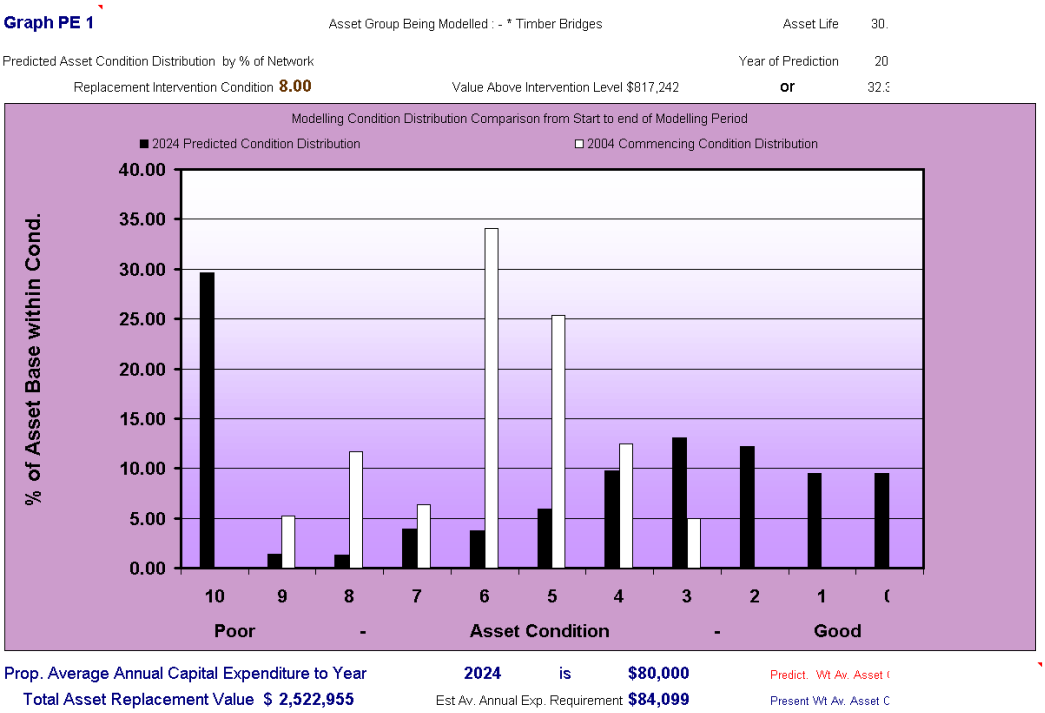
Current conditions :

- Maintenance Expenditure : $22,400
- Capital Renewal Expenditure : $0
- Capital Renewal Intervention Level (IL) = 8.0
- Asset Life = 30 years

At current rates of Capital Renewal ($0) for timber bridges, the average weighted condition for Timber Bridges will fall from their current weighted average of **5.80 to 9.75** in 2024:



Option 2
A capital renewal expenditure of $80,000 per annum will see the average move from **5.80 to 5.11,** as shown:



Recommendation

Option 2 - $80,000 per annum on timber bridges.

Kirwans Bridge

Current conditions :

- Maintenance Expenditure : $1,000
- Capital Renewal Expenditure : $100,000
- Capital Renewal Intervention Level (IL) = 8.0
- Asset Life = 25 years

At the completion of the current works in 2004/2005, Kirwans Bridge will have an assessed condition rating of **6.0**.

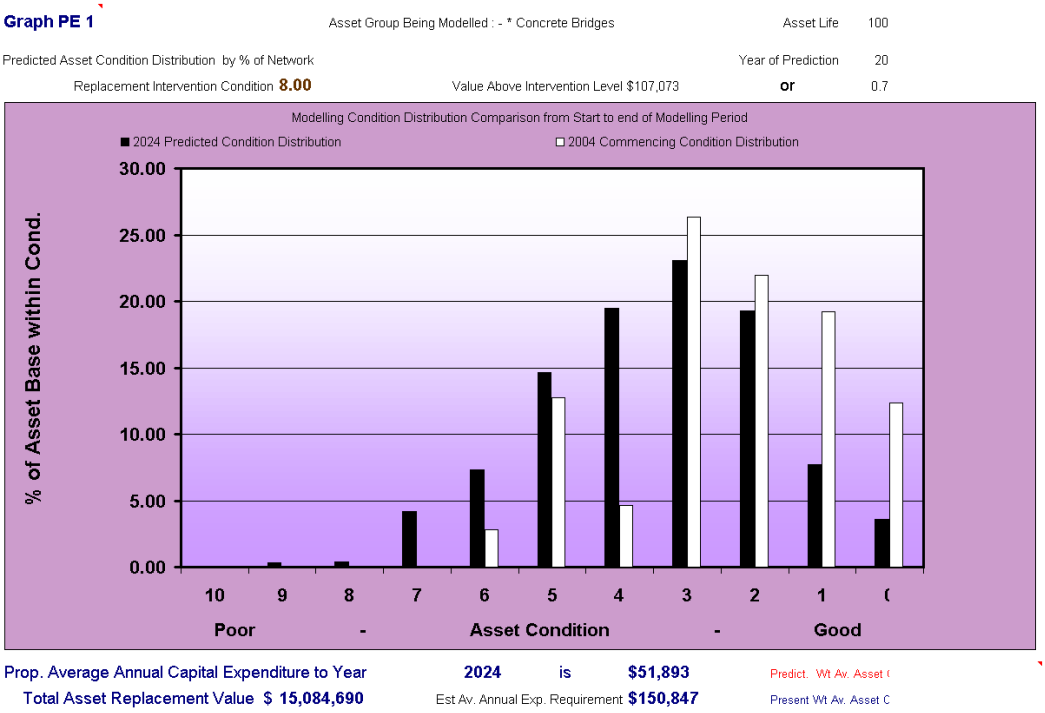
Note: Council engaged Connell Wagner P/L in October 2001 to prepare a detailed condition report on Kirwans Bridge together with a maintenance plan. Included in the report was the recommended life, and capital renewal expenditure used in this modelling process – asset life: 25 years, annual capital renewal: $100,000

Non-Timber Bridges (mainly Concrete or composite bridges)

Current conditions :

- Maintenance Expenditure : $18,600
- Capital Renewal Expenditure : $214,163 for 2004, $319,704 for 2005, then $28,000 per annum
- Capital Renewal Intervention Level (IL) = 8.0
- Asset Life = 100 years

At the current rates of expenditure, the weighted average for non timber bridges will fall from **2.41 to 3.46** as shown:



To maintain the current weighted average, an annual expenditure of **$150,000** is required :

Major Culverts Asset Group:

In the case of the bridge asset group, the following assumptions have been made, to provide the basis for the output of the model:

Major culverts:

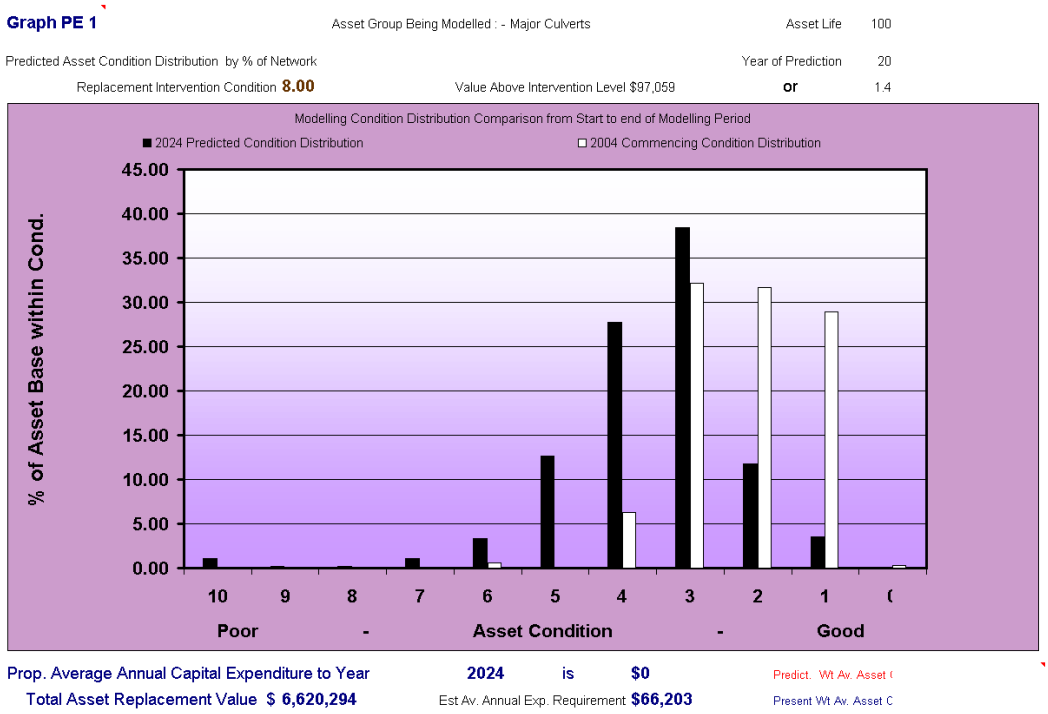
Current conditions :

- Maintenance Expenditure : $5,900
- Capital Renewal Expenditure : $0
- Total Annual Expenditure : $5,900
- Capital Renewal Intervention Level (IL) = 8.0
- Asset Life = 100 years

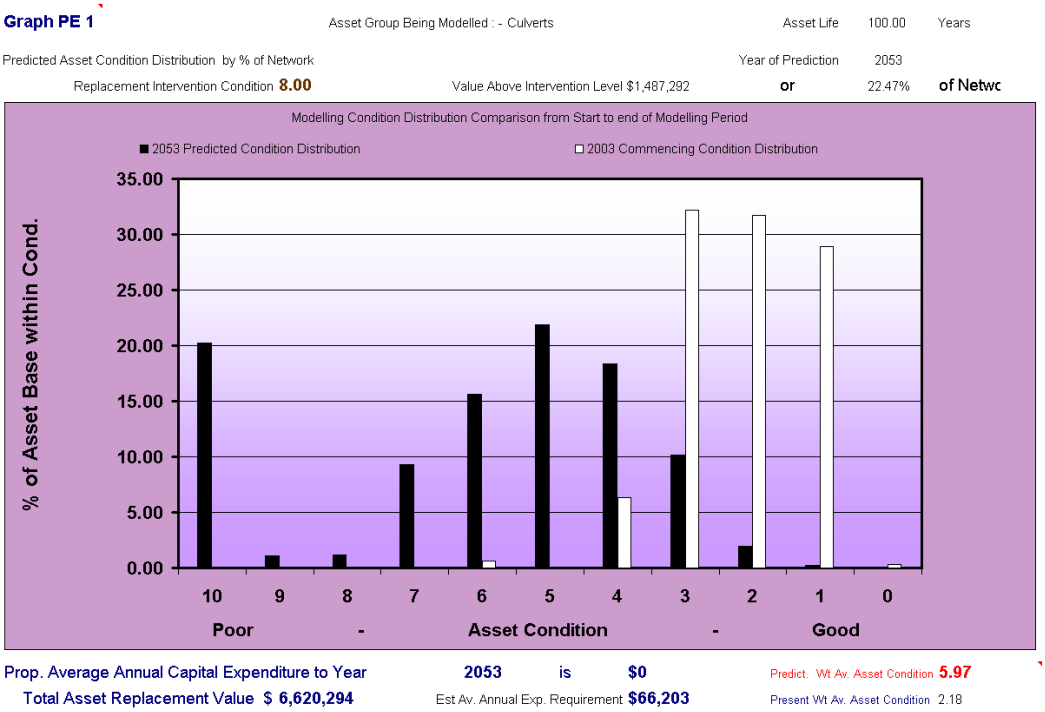
The current asset replacement cost of our culverts is $6,620,293
The present average asset condition of our culverts is **2.18**.

Option 1.

At current rates of capital expenditure, the average condition in 2023 will be **3.584**, with approximately 1.5% of the network above the Intervention Level of 8.0. See graph PE1 :

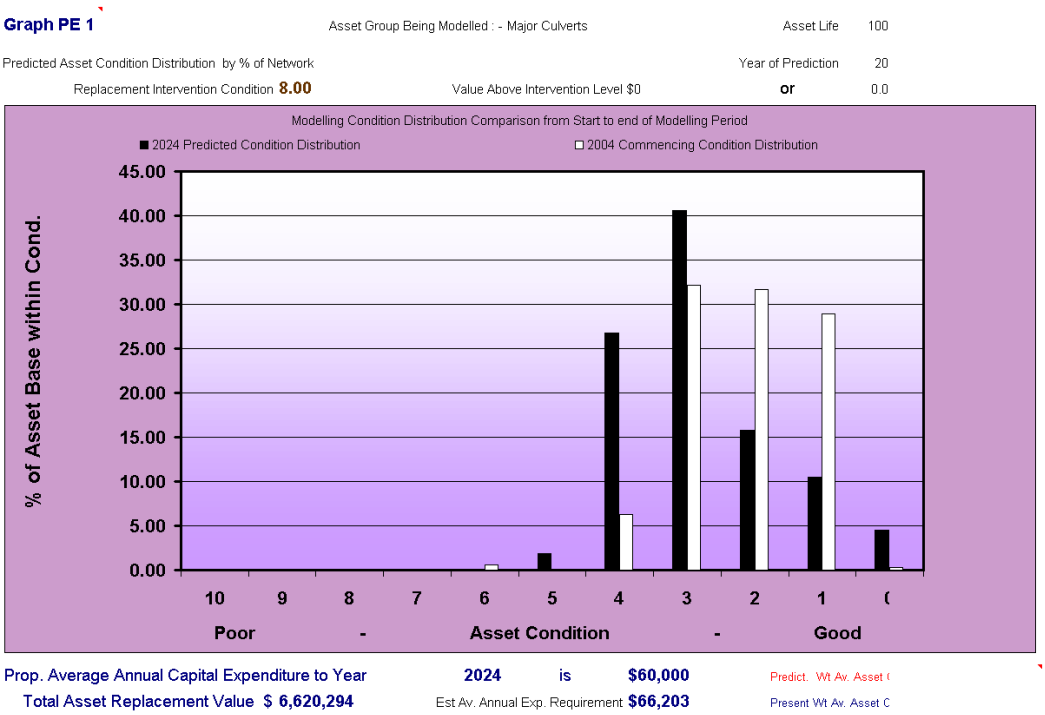


By 2053 the average will be **5.97** with **22%** of the network over the IL of 8.0:



Option 2.

A Capital Expenditure of $60,000 will result in the average moving from **2.18 to 2.80** over 20 years – graph below:



Recommendation

The Major Culverts are generally in sound condition. A Capital renewal amount of $60,000 per year is required to maintain the major culverts in their current overall condition.

Paved footpaths:

Concrete paths:

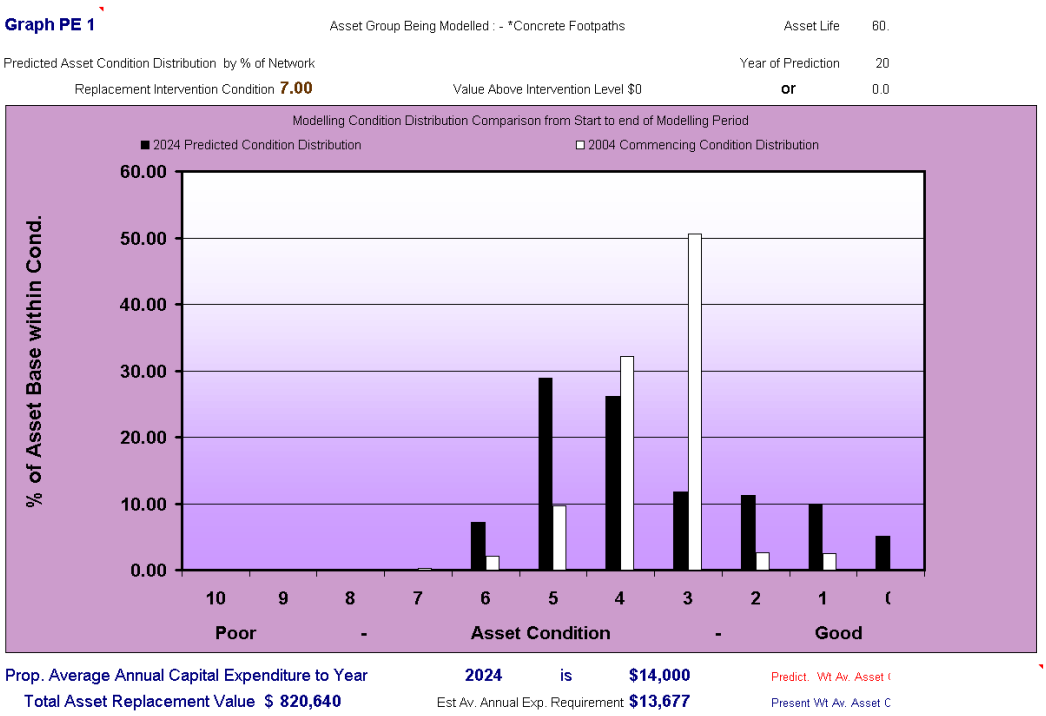
Current conditions:

Annual maintenance expenditure:	$ **20,850**
Budgetted annual capital renewal expenditure:	$ **14,000**
Total Expenditure	$ 34,850
Proposed asset intervention level:	7.0
Predicted life of asset, in years:	60

The current asset replacement cost of our concrete footpaths is $820,639

The present average asset condition of our concrete footpaths is **3.51**.

Option 1.
A Capital Renewal expenditure of $14,000 per annum results in the average footpath condition falling from **3.51** to **3.59** by 2024 :



Recommendation
Option 1 - $14,000 per annum Capital Renewal Expenditure.

Non-Concrete paths:

Current conditions:

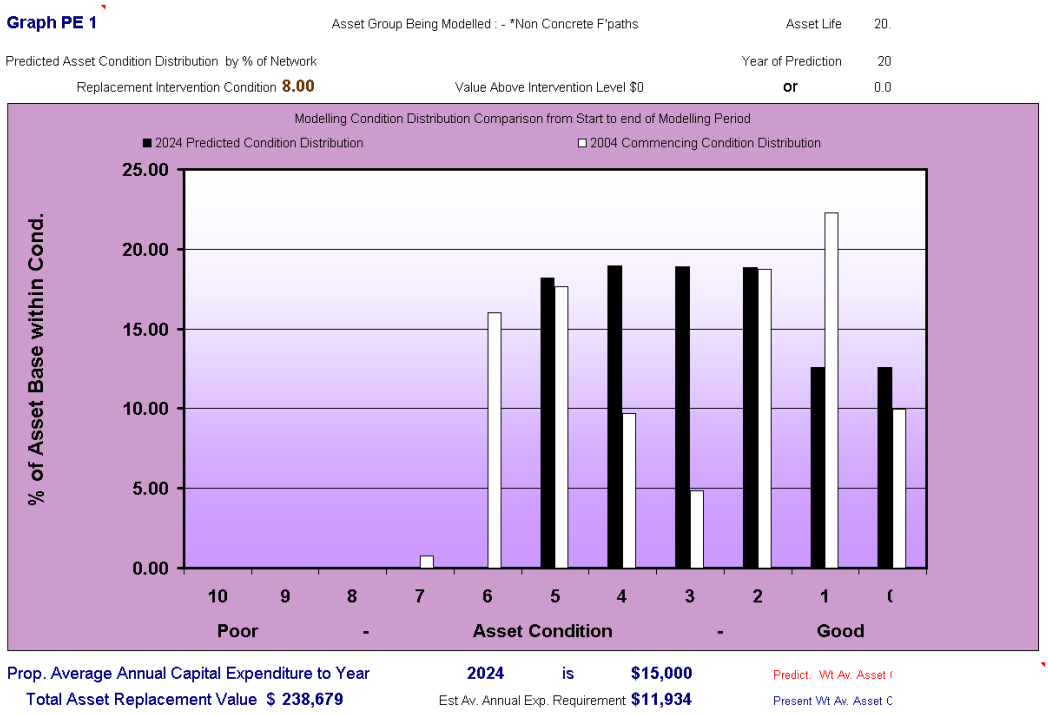
Annual maintenance expenditure:	**$ 9,750.00**
Annual capital renewal expenditure:	**$ 15,000.00**
Proposed asset intervention level:	7.0
Predicted life of asset, in years:	20

The current asset replacement of our non-concrete footpaths is $238,679.

The present average condition is **3.03.**

Option 1

At the annual current Capital Renewal Expenditure of $15,000, the average condition of non-concrete footpaths falls from **3.03** to **2.74** over 20 years, as shown below:



Recommendation

Option 1 is recommended – maintain a Capital Renewal Expenditure of $15,000 per annum for non-concrete footpaths.

Urban surface drainage:

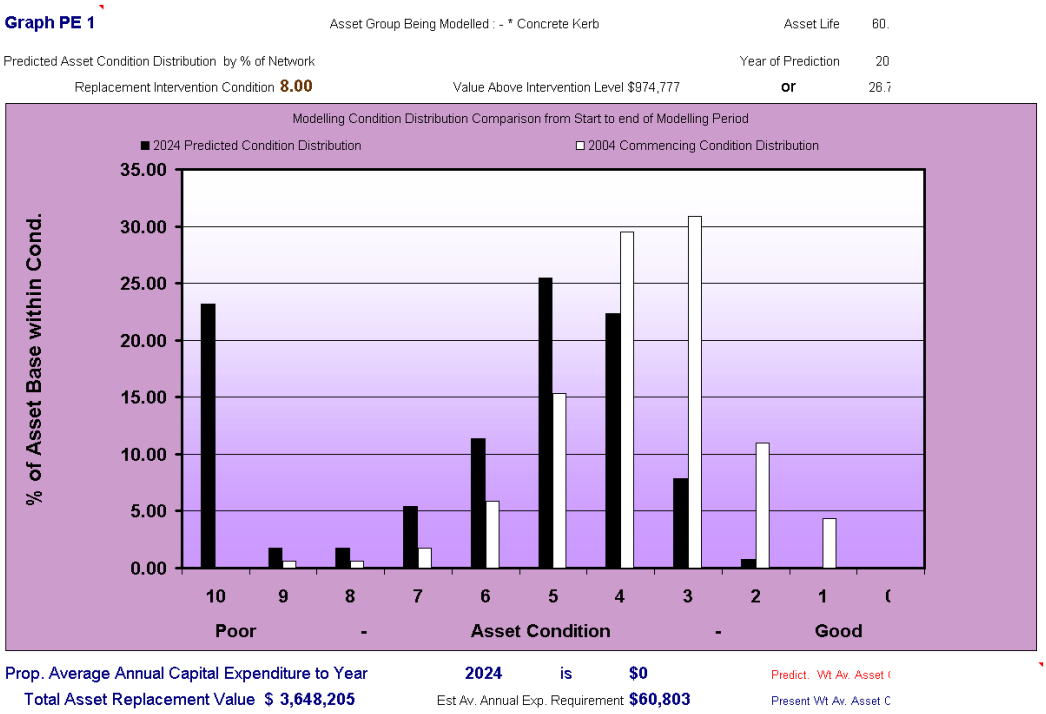
Concrete Kerb & Channel
Current Conditions:
Annual maintenance expenditure: **$ 13,100.00**
Annual capital renewal expenditure: **$0.00**
Proposed asset intervention level: 8.0
Predicted life of asset, in years: 60

The current asset replacement cost of our concrete kerb & channel is $3,676,930

The present average asset condition of our concrete kerb & channel is **3.72.**

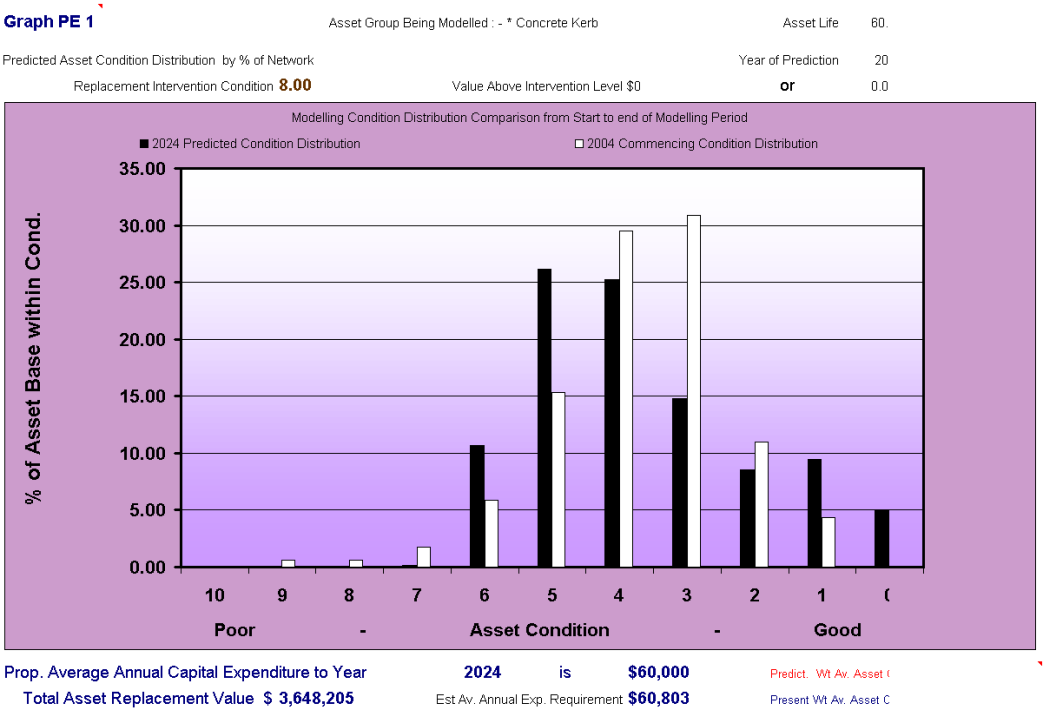
Option 1.

At current rates of capital expenditure, the average condition in 2024 will be **6.10**, with approximately 27 % of the network above the Intervention Level of 8.0. See graph PE1 :



Option 2

Maintaining concrete kerb & channel at an average condition of 3.68, requires an expenditure of $60,000



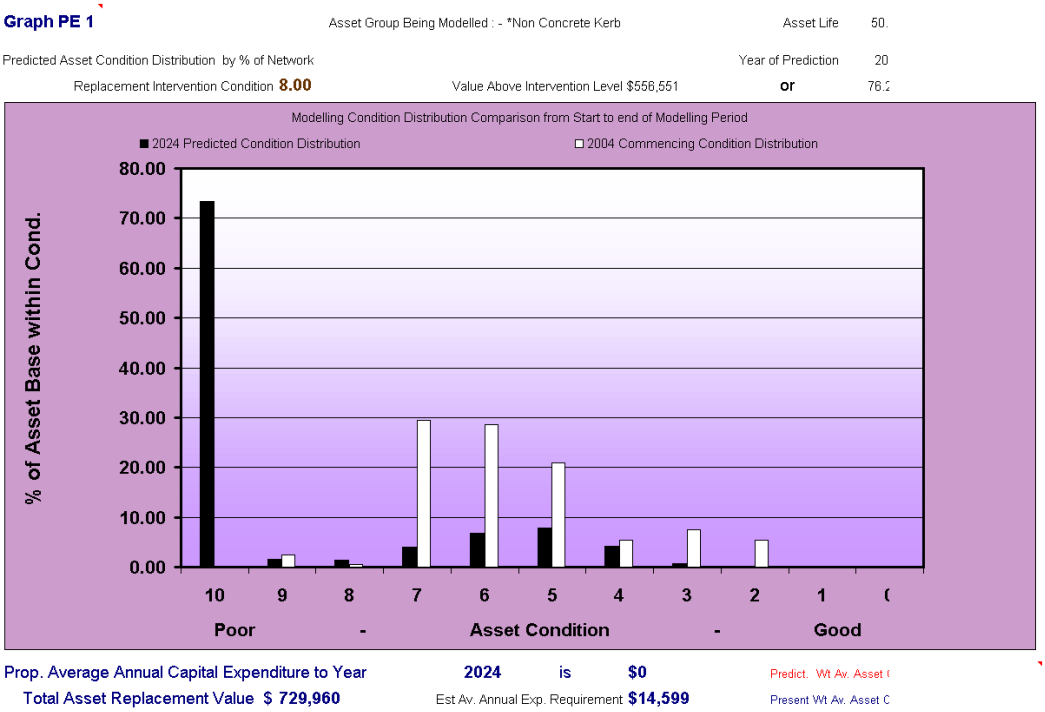
Recommendation:
Option 2 – An annual Capital Renewal Expenditure of $60,000 for concrete kerb & channel.

Non Concrete Kerb & Channel

Current Conditions:
Annual maintenance expenditure: **$ 7,200**
Annual capital renewal expenditure: $0.00
Proposed asset intervention level: 8.0
Predicted life of asset, in years: 50

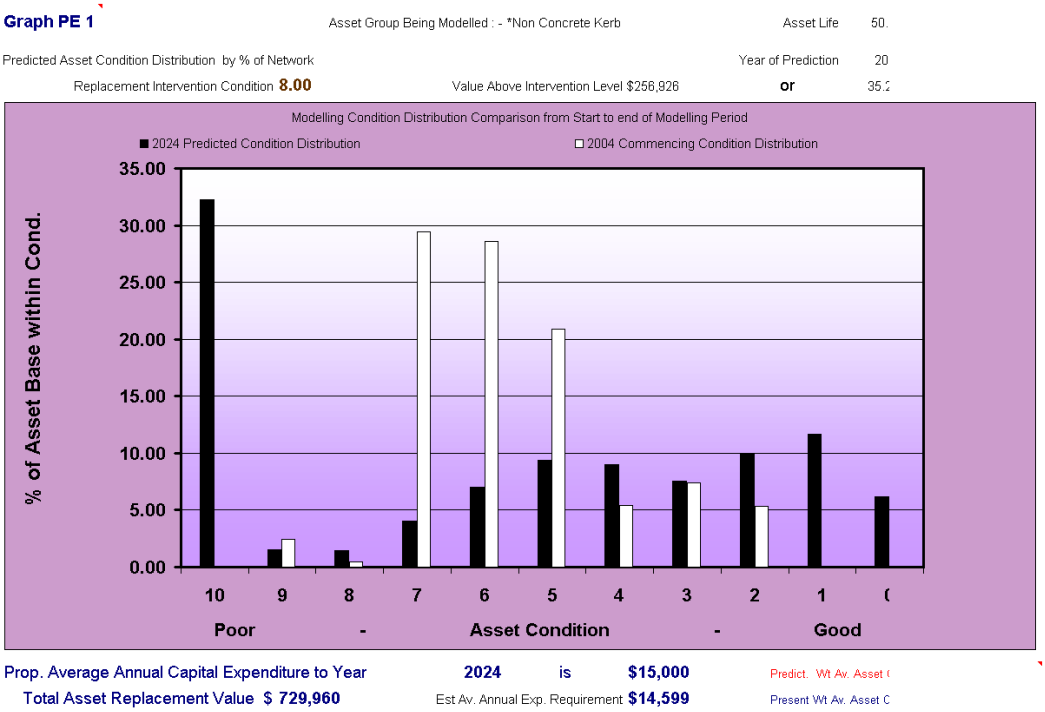
Option 1

At current rates of capital expenditure (ie $0.00), the average condition will fall from 5.67 to 8.85 by 2024 - with approximately 76 % of the network above the Intervention Level of 8.0. See graph PE1 :



Option 2

An annual Capital Renewal Expenditure of $15,000 will result in the average condition of non concrete kerb and channel Moving from 5.62 to 5.55 over 20 years as shown below:



Recommendation:

Option 2 – an expenditure of $15,000 per annum on non-concrete kerb and channel.

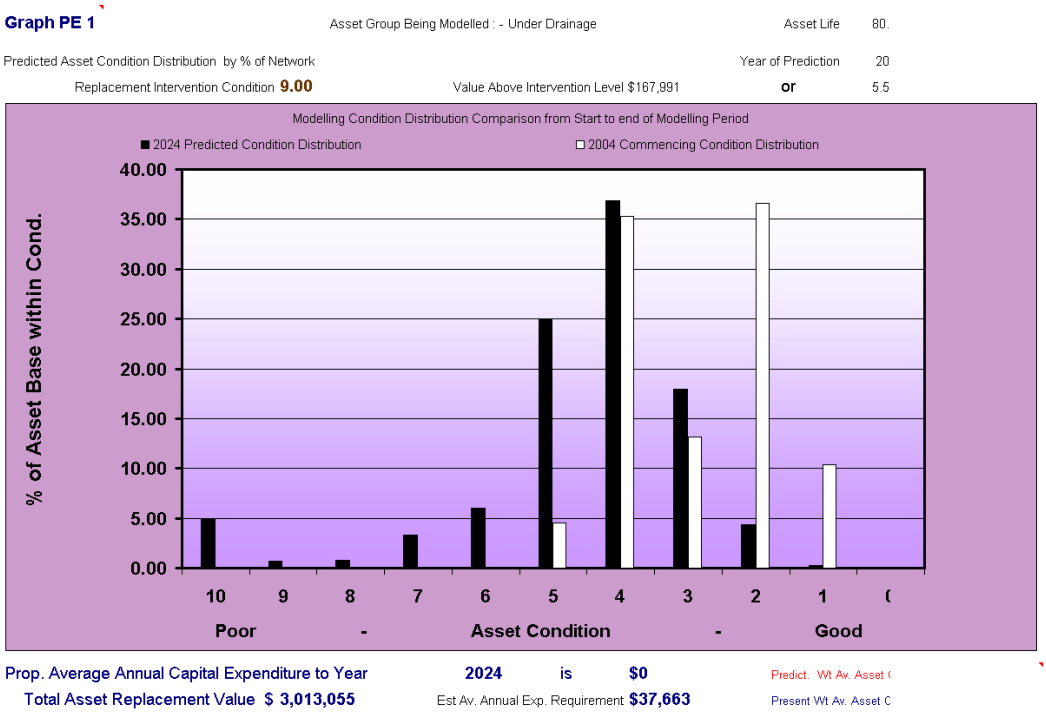
Underground Stormwater Drainage Asset Group:

Current conditions :

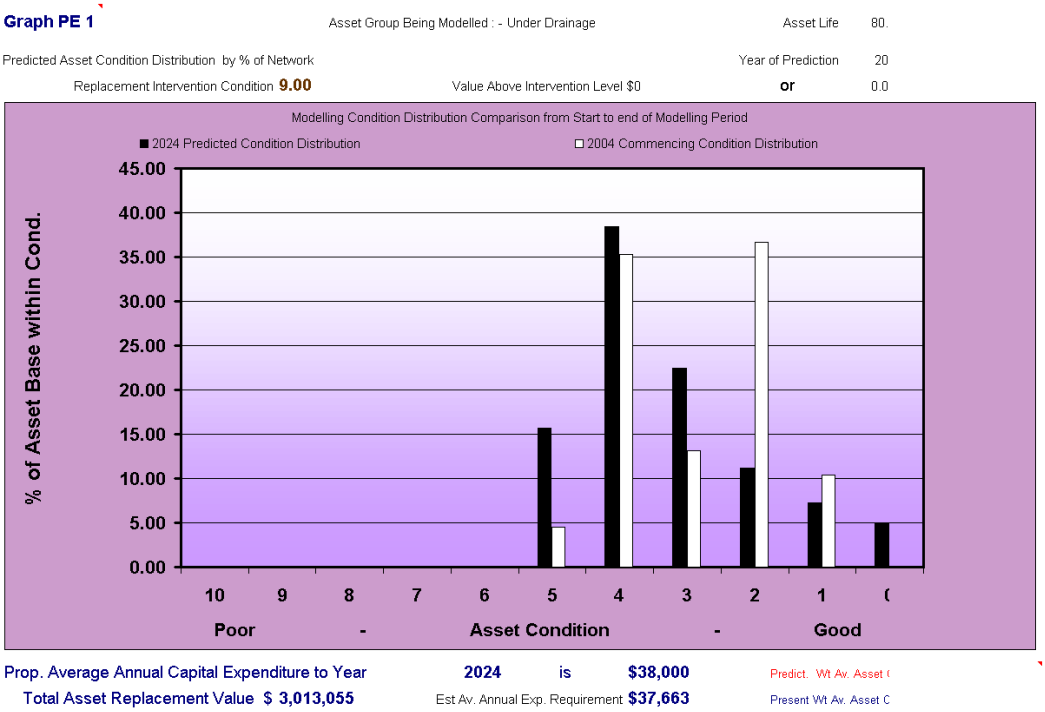
- Maintenance Expenditure : **$13,200**
- Capital Renewal Expenditure : $0
- Capital Renewal Intervention Level (IL) = 9.0
- Asset Life = 80 years

Option 1.

At current rates of expenditure - $13,200 for Maintenance and $0 on Capital the average condition will fall from **2.87** at present to **4.55** by 2024, as shown in graph PE1 :



Option 2.
A Capital Renewal Expenditure of $38,000 per annum will give an average weighted condition in 2024 of 3.29 :



Recommendation:
Option 2 - $38,000 Capital Renewal Expenditure per annum

Stormwater Pits Asset Group:

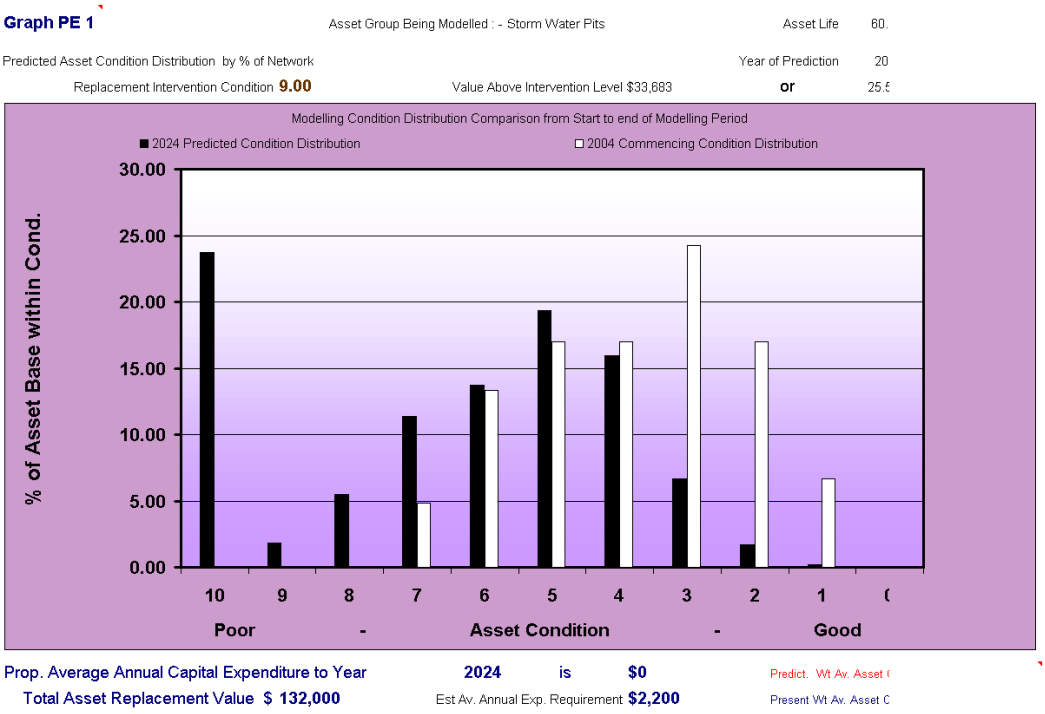
Current conditions :

- Maintenance Expenditure : **$8,400**
- Capital Renewal Expenditure : $0
- Capital Expansion Expenditure : $0
- Capital Renewal Intervention Level (IL) = 9.0
- Asset Life = 60 years

The current replacement cost for Stormwater pits is $132,000.

Option 1.

The present average condition is **3.80** will fall to **6.44** by 2024 at current rates of expenditure:**.**



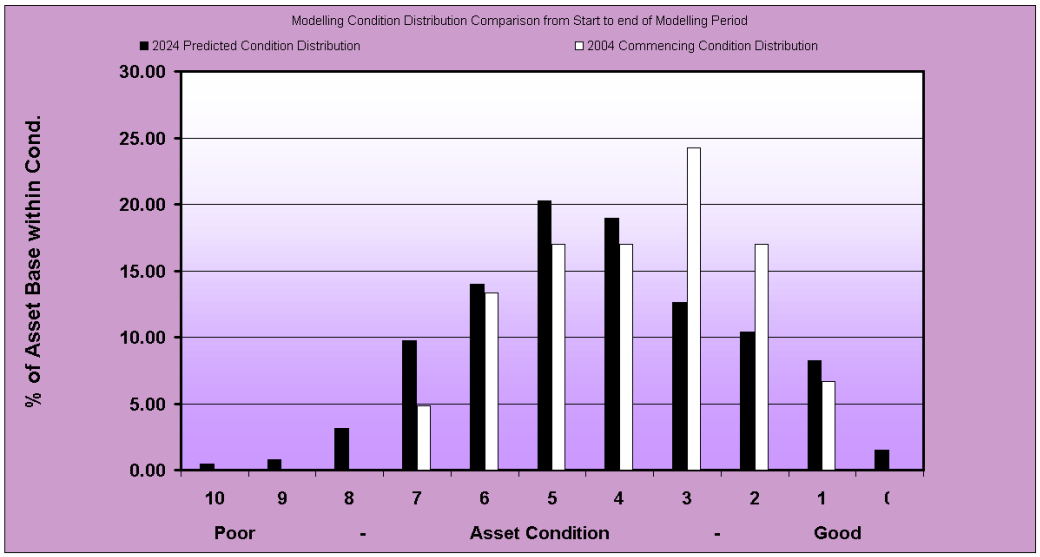
Option 2.

A Capital Renewal Expenditure of $2,200 per annum, the average asset condition will move from 3.80 to 4.32 as shown below:

Graph PE 1 Asset Group Being Modelled : - Storm Water Pits Asset Life 60.

Predicted Asset Condition Distribution by % of Network Year of Prediction 20

Replacement Intervention Condition **9.00** Value Above Intervention Level $1,642 **or** 1.2



Prop. Average Annual Capital Expenditure to Year **2024** is **$1,870** Predict. Wt Av. Asset

Total Asset Replacement Value **$ 132,000** Est Av. Annual Exp. Requirement **$2,200** Present Wt Av. Asset C

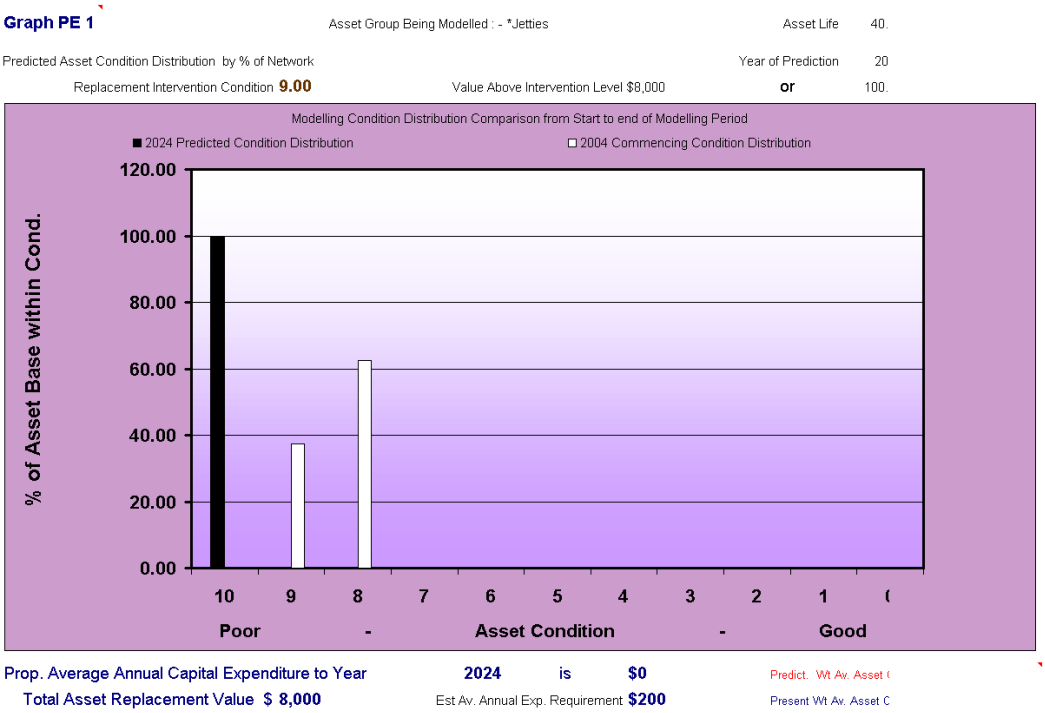
Recommendation

Option 2 – A Capital Renewal Expenditure of $2,500 per annum.

Jetties Asset Group:

Current conditions:

Annual maintenance expenditure:	$ 1,000
Annual capital renewal expenditure:	$ 0.00
Budgetted annual capital renewal expenditure:	$ 0.00
Proposed asset intervention level:	8.0
Predicted life of asset, in years:	40



Community Facilities:

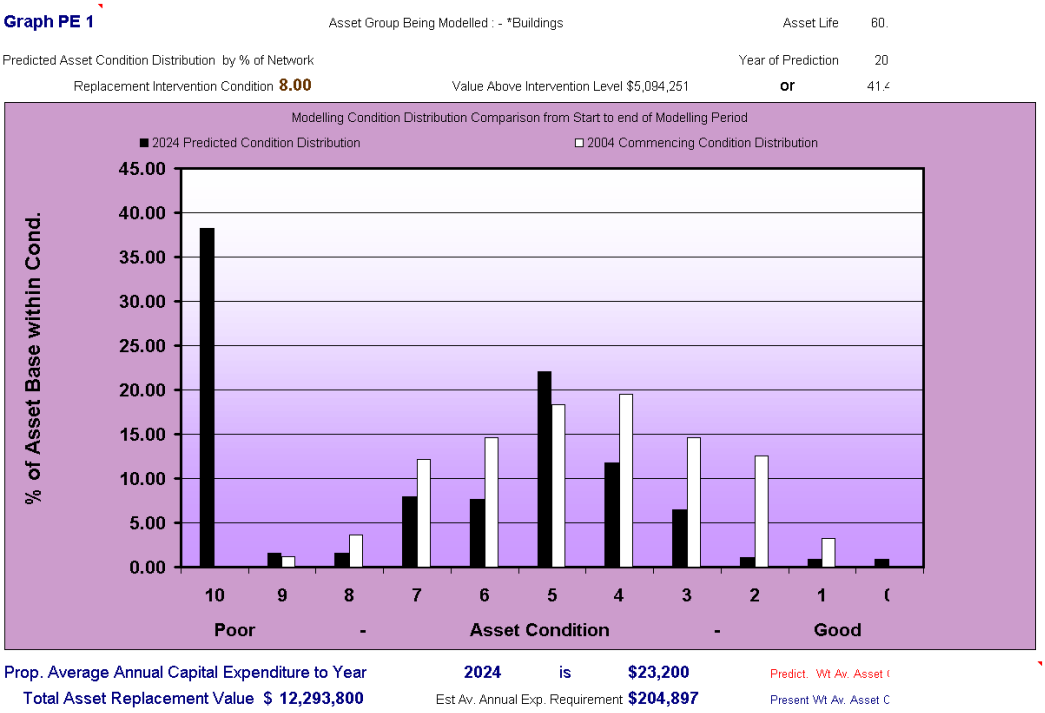
Buildings Asset Group:

Current conditions:

Annual maintenance expenditure:	**$123,000**
Annual capital renewal expenditure:	**$51,700**
Budgetted annual capital renewal expenditure:	**$25,000**
Proposed asset intervention level:	8.0
Predicted life of asset, in years:	60

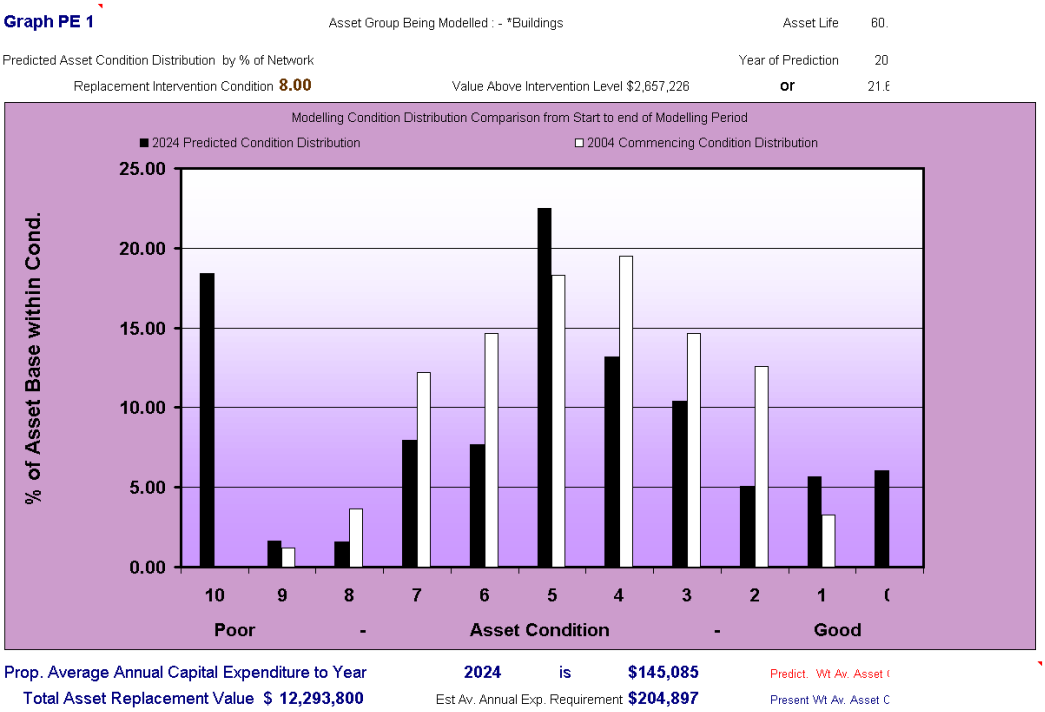
Option 1

At the current rates of Capital Expenditure - $25,000 per annum, our buildings average condition will fall from **4.55** to **6.86** show the following:



Option 2

A Capital Renewal Expenditure of $150,000 per annum will result in the average condition falling from **4.55 to 5.25 in 2024**, as shown below :



Waste Management Asset Group:

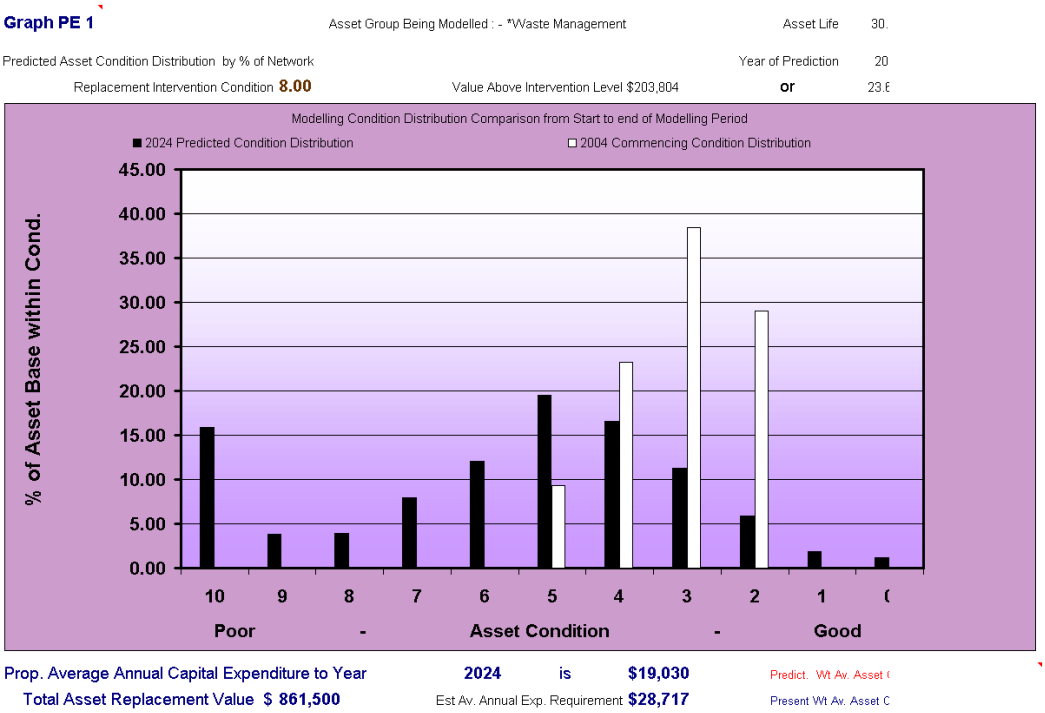
In the case of the waste management asset group, the following assumptions have been made, to provide the basis for the output of the model:

Transfer stations:

Current conditions:	
Annual maintenance expenditure	**$10,000**
Annual capital renewal expenditure 2004:	$0
Annual capital renewal expenditure 2005 onwards:	$5,000
Proposed capital injection to construct	
VT transfer station in 2006:	$290,000
Proposed asset intervention level:	8.0
Predicted life of asset, in years:	30

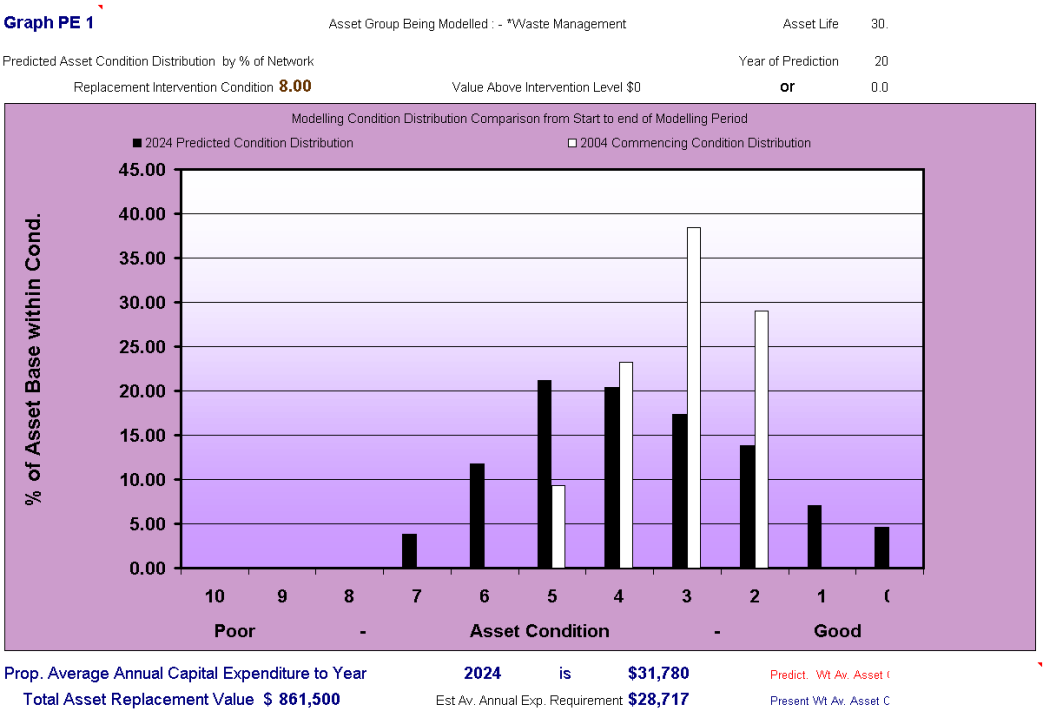
Option 1

At the current rate of Capital Renewal Expenditure ($0), the average condition falls from **3.13 to 5.65** over 20 years.



Option 2

A Capital Expenditure Renewal of $20,000 pre 2006 will result in the average condition falling from **3.13 to 3.71**, as shown below:



Swimming Pools Asset Group:

Current conditions:
Annual maintenance expenditure: $ **7,400.00**
Annual capital renewal expenditure: $23,300 2004, then $30,000 per annum
Proposed asset intervention level: 8.0

Assumptions used in the preparation of this analysis:

Pool shell:
Asset life: 50 years
Repaint every 3 years
Minor renewal works every 2 years
Major renewal works every 10 years

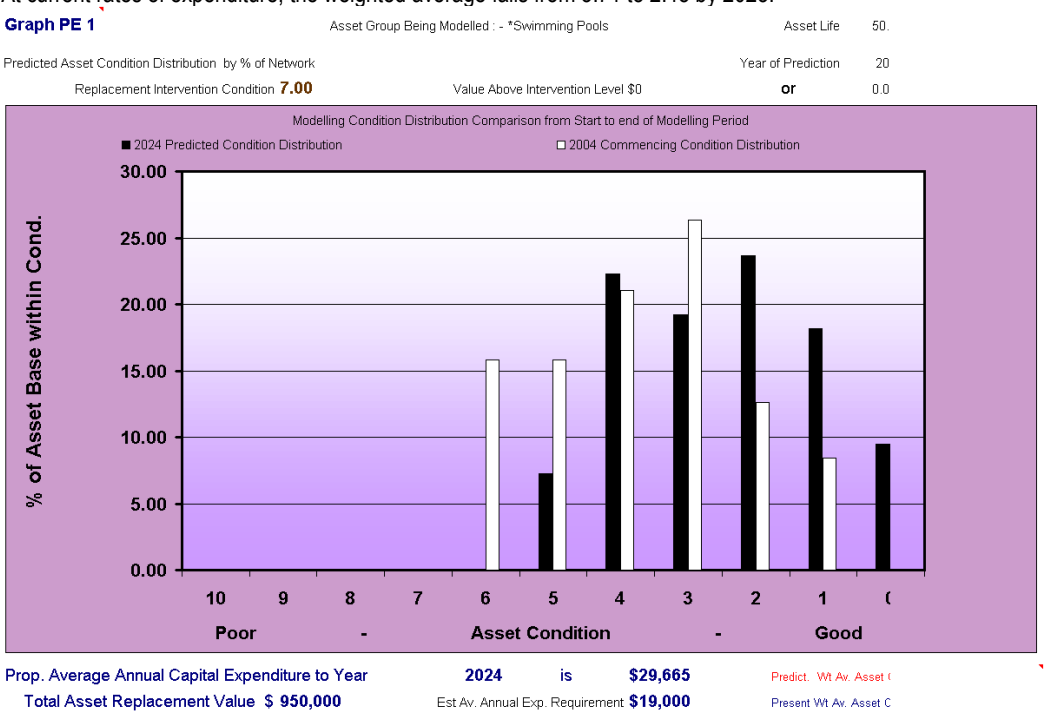
Water treatment filter system:
Asset life: 30 years
Minor renewal works every 3 years
Major renewal works: every 9 years

Pumps:
Asset life: 25 years
Minor renewal works: every 2 years
Major renewal works: every 4 years

Pipework:
Asset life: 30 years
Major renewal works: every 5years

Disinfection system:
Asset life: 12 years
Minor renewal works: every 2 years
Major renewal works: every 4 years

At current rates of expenditure, the weighted average falls from 3.71 to 2.48 by 2023:



Parks and Reserves:

A majority of Strathbogie Shire Council's passive open space areas are generally established on Crown Land, with little improvement to open space surface areas other than manual watering points or irrigation systems. Fencing has been undertaken to provide boundary definition. Gardens have been developed over the years as primary high profile decorative assets at strategic locations in the major townships. The existing condition of all assets in this group is considered to be in good to fair condition, based on age and current use.

A majority of fencing consists of post and wire, chain mesh, and post and rail.

Watering systems provide for the day-to-day maintenance of all passive open space and gardens and some replacement of irrigation systems and watering points have been programmed into this asset model.

Strathbogie have allocated $12,500 in 2003/2004 to maintain these assets. As part of the maintenance program, some minor asset renewal has taken place to ensure the function of the particular asset, for example replacement of some irrigation equipment or fencing components.

Passive Open Space Areas PG1-
Primary parks are Seven Creeks Parks Euroa, Buckley Park Nagambie, Lions Park Violet Town.

Passive Open Space Areas PG2 & PG3-
Balance of parks and reserves maintained by Council within the Shire

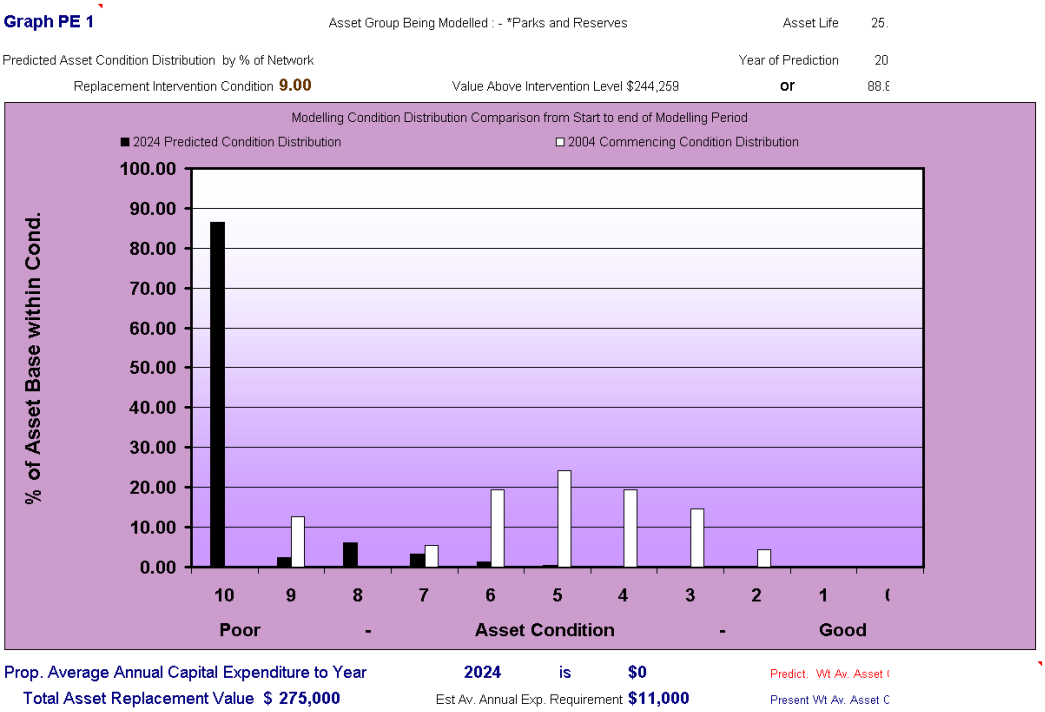
Gardens
Gardens are managed as primary profile and primary location within townships and passive open space areas. Replanting of annuals does not constitute capital expenditure. The major refurbishment of soils, irrigation systems, garden dimensions and features are considered to be capital expenditure.

Parks and Reserves Group:

Current conditions:	
Annual maintenance expenditure:	**$12,500**
Annual capital renewal expenditure:	**$0**
Budgetted annual capital renewal expenditure:	**$0**
Proposed asset intervention level:	8.0
Predicted life of asset, in years:	25

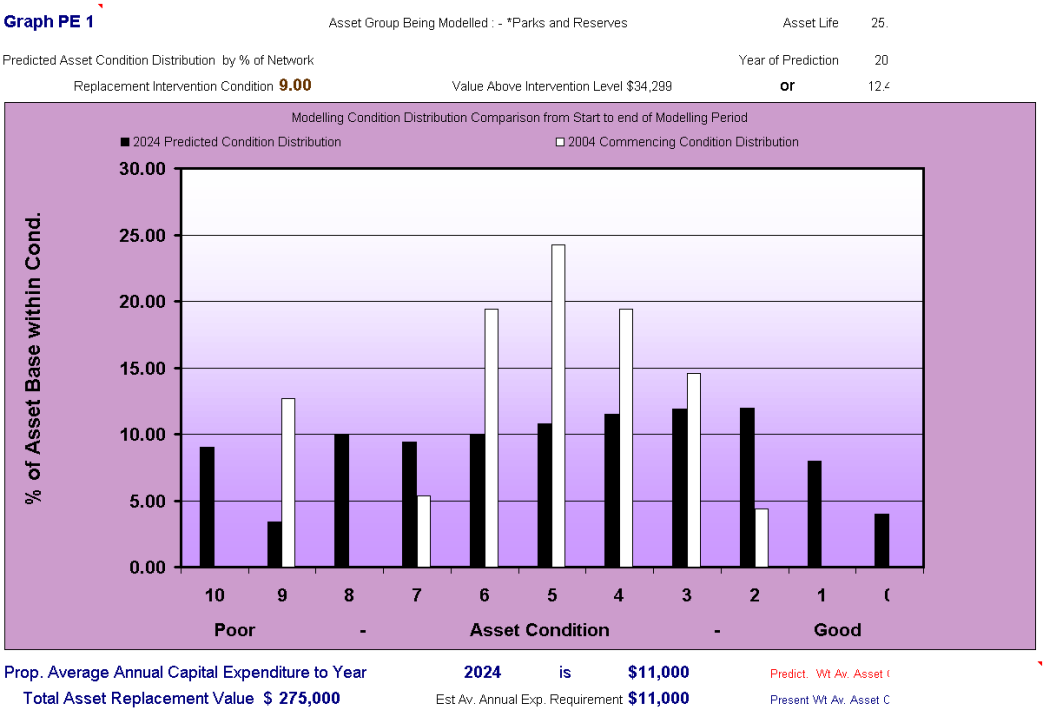
Option 1

With the current Maintenance Expenditure of $12,500 per annum, and a Capital Renewal of $0 – the weighted average falling from 5.19 to 9.67, as shown below:



Option 2

A Capital Renewal Expenditure of $11,000 per annum will result in the average condition moving falling from 5.19 to 4.94 as shown below:



Recommendation : Allocate $11,000 per annum for Capital Renewal Expenditure.

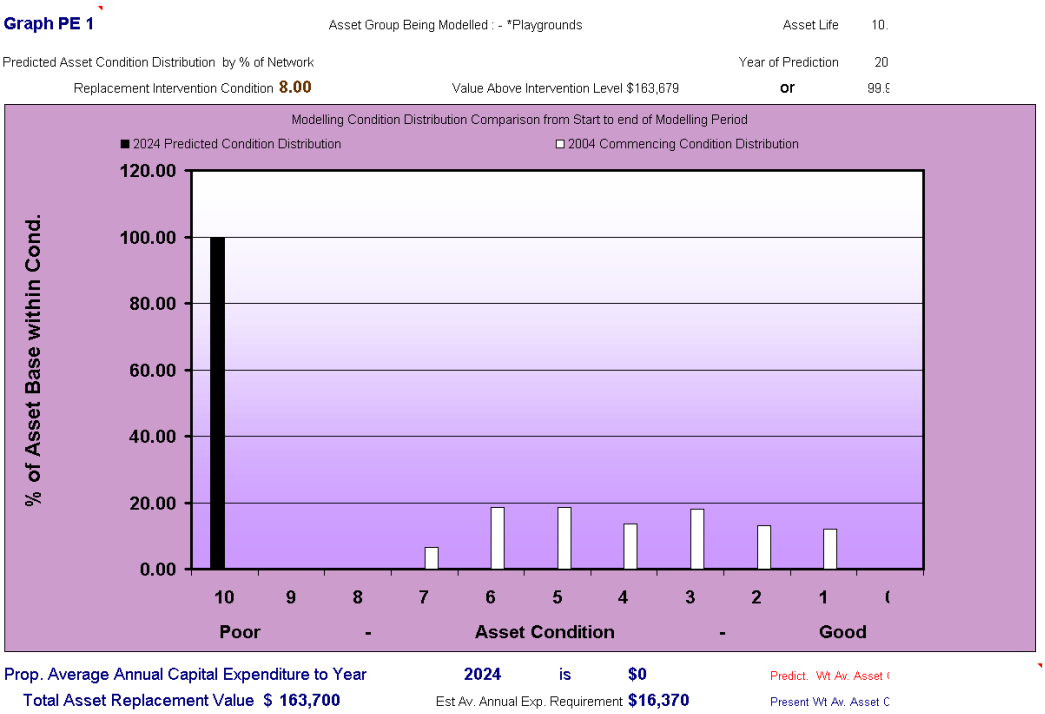
Playgrounds Asset Group:

Current conditions:

Annual maintenance expenditure:	**$12,500**
Annual capital renewal expenditure:	**$20,000**
Proposed asset intervention level:	8.0
Predicted life of asset, in years:	10

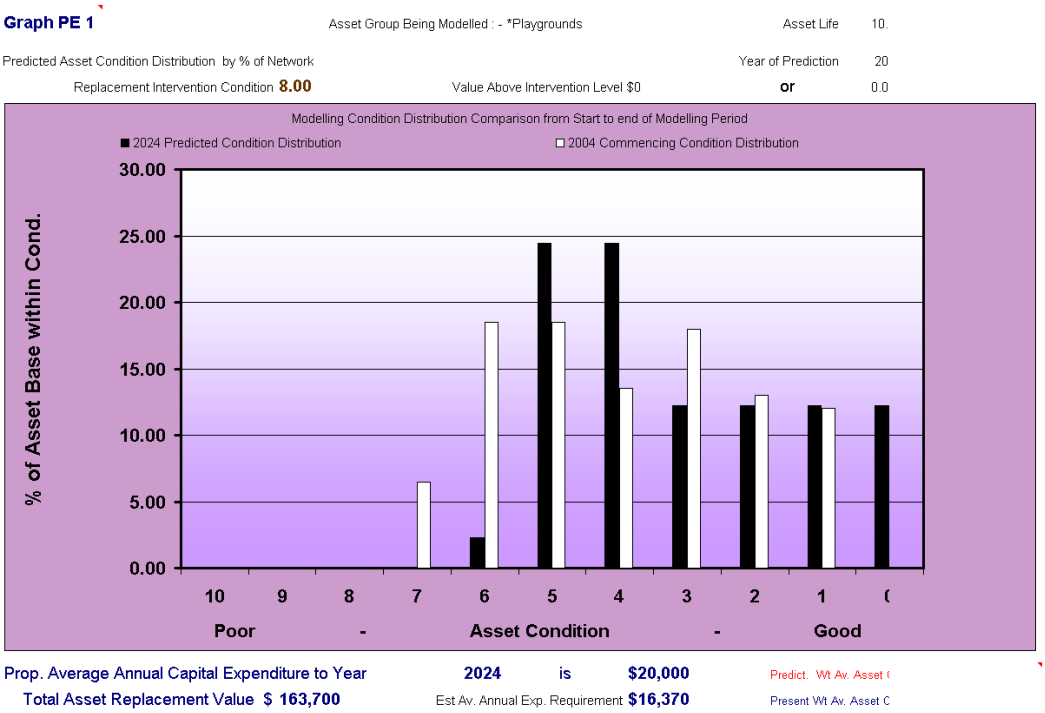
Option 1

With $0 Capital Renewal Expenditure, the WAC falls from 3.95 to 10 over 20 years:



Option 2

With a Capital Renewal Expenditure of $20,000 per annum, the WAC falls from **3.95 to 3.07**, as shown below:



Recommendation: That capital renewal funding of $20,000 per annum be allocated.

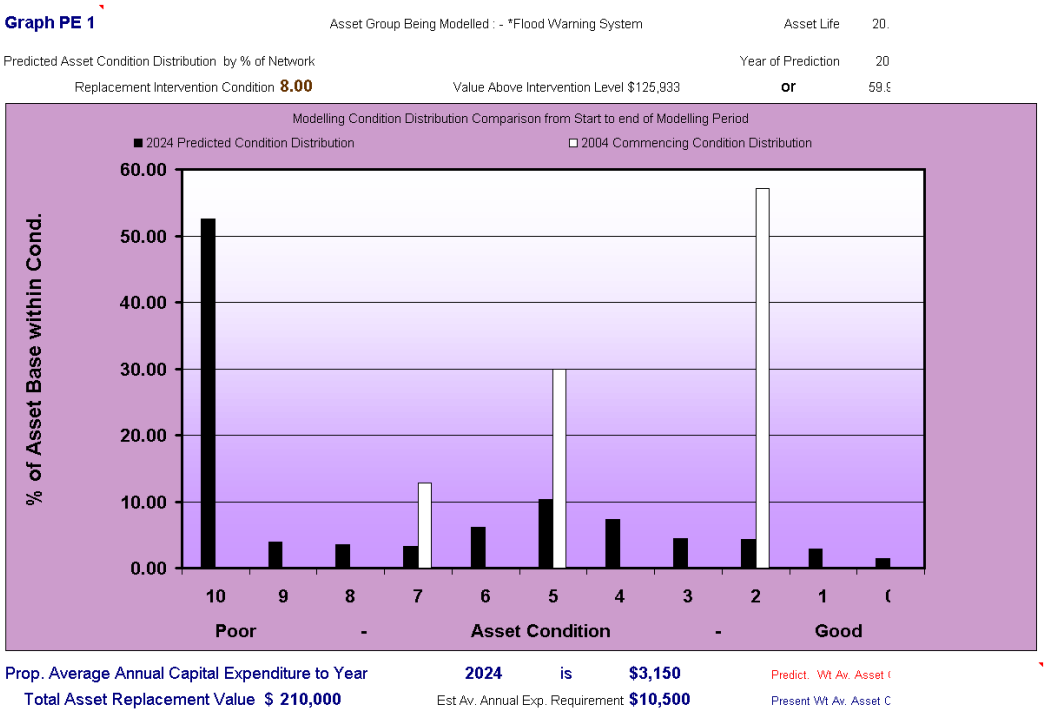
Flood Warning System Asset Group:

Current conditions:

Annual maintenance expenditure:	**$10,000**
Annual capital renewal expenditure:	**$6,000 in 2004 then $3,000**
Proposed asset intervention level:	8.0
Predicted life of asset, in years:	varies from 5 to 30

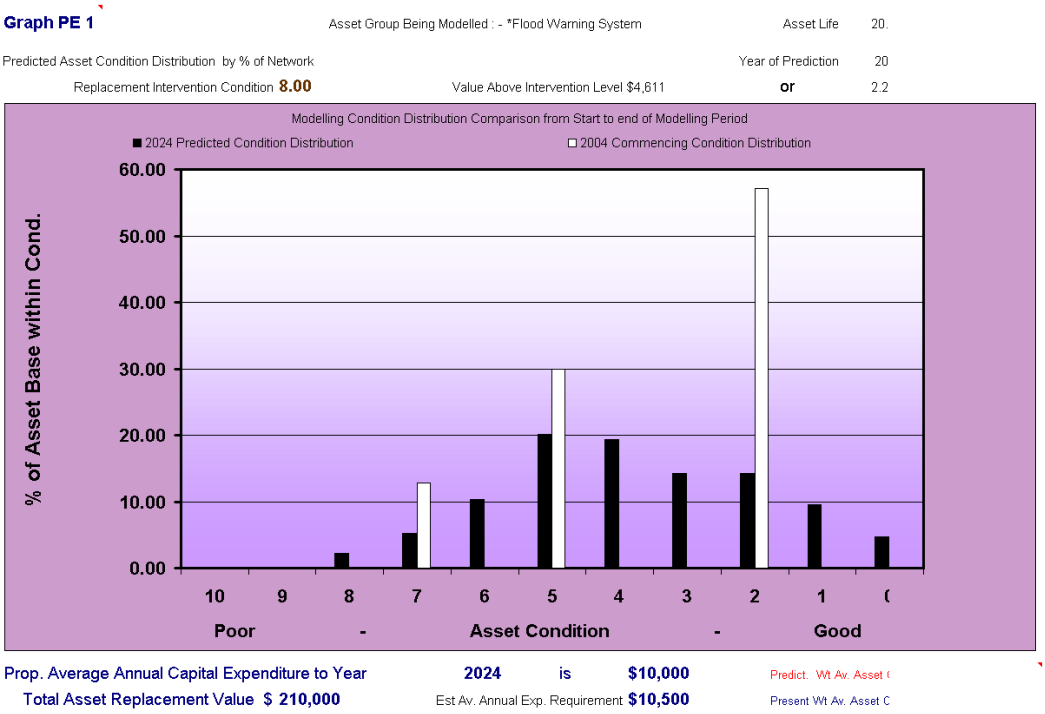
Option 1

At the projected rates of Capital Renewal Expenditure, the WAC falls from **3.54 to 7.54** over 20 years as shown below:



Option2

A Capital Renewal Expenditure of $10,000 per year results in the average condition falling from **3.54 to 3.75** over 20 years, as shown below:

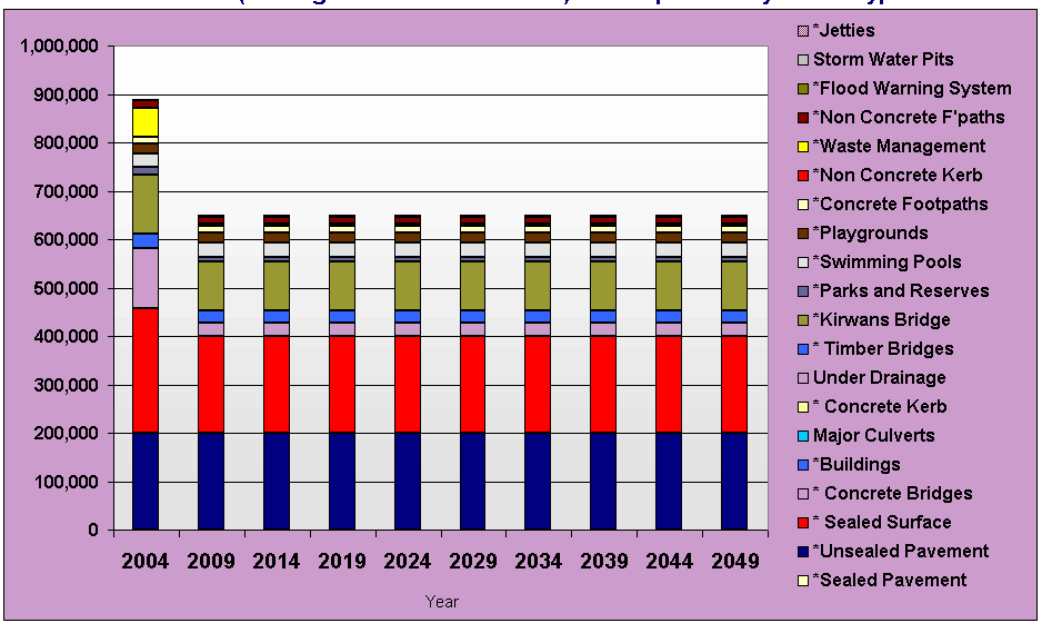


Recommendation: That capital renewal funding of $10,000 per annum be allocated.

Aggregation of Individual Asset Groups

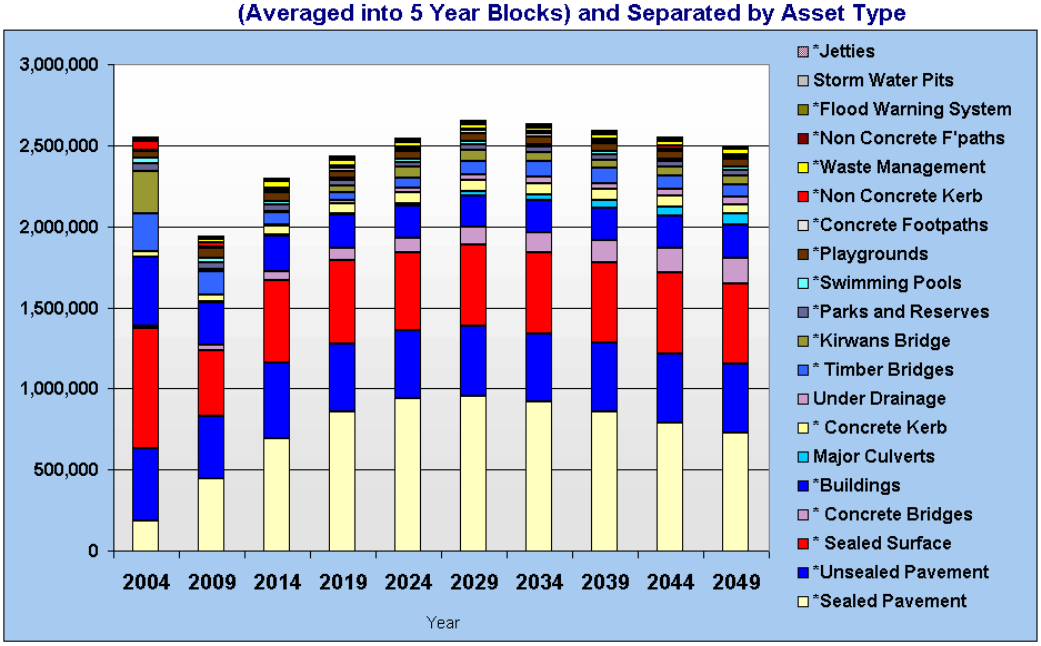
The 50 year **Aggregate Proposed Capital Expenditure** is shown below:

Graph APE 1 **50 Year Aggregate Proposed Capital Expenditure (Averaged into 5 Year Blocks) and Separated by Asset Type**



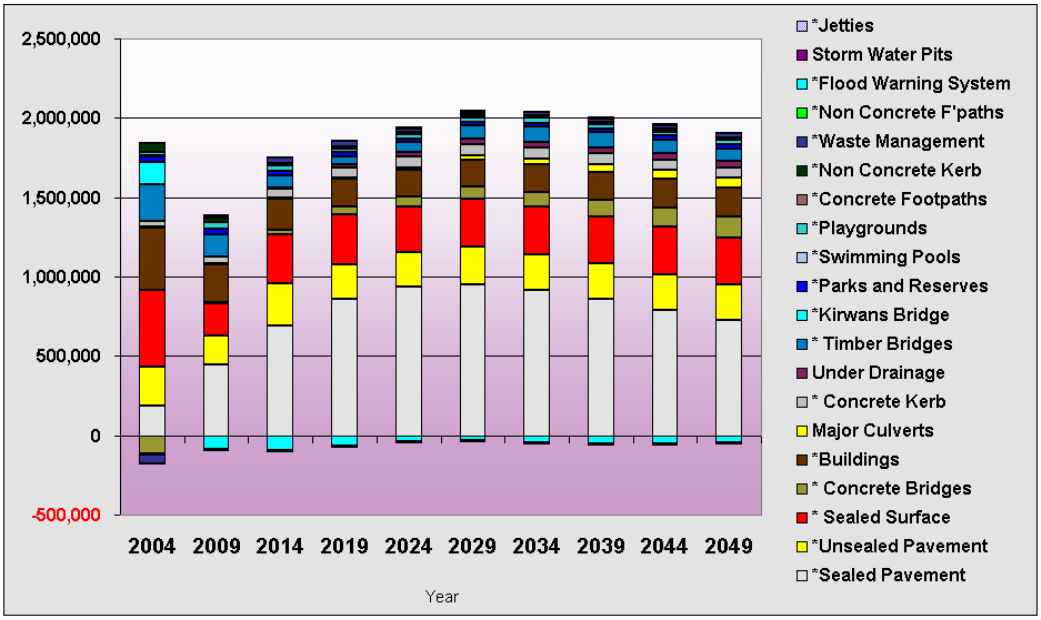
The 50 year **Aggregate Required Capital Requirement** is shown below:

Graph ACR 1 **50 Year Aggregate Required Capital Expenditure (Averaged into 5 Year Blocks) and Separated by Asset Type**



The 50 year **Aggregate Capital Funding Gap** is shown below:

Graph AFG 1 **50 Year Aggregate Capital Funding Gap. (Required less Proposed Cap.) Averaged into 5 Year Blocks and Separated by Asset Type**



Confidence Levels:

The following tables show the assessed confidence rating for each asset sub-group, and explain, in qualitative terms, the ratings:

Confidence ratings for each asset group, and/or sub-group:

Item no:	Asset group or Sub-group:	Confidence rating:							
		Qty:	Cond:	Age:	Service Levels:	Demand Forec:	Lifecycle Perform:	Financial Forec:	**Overall Rating:**
Physical infrastructure:									
1	Sealed surfaces	A	A	D	C	D	C	C	**C**
2	Sealed pavements	A	A	D	C	D	C	C	**C**
3	Unsealed pavements	B	B	D	C	D	C	C	**C**
4	Bridges	A	A	D	C	D	C	C	**C**
5	Major culverts	B	C	D	C	D	C	C	**C**
6	Paved footpaths	C	C	D	C	D	C	C	**C**
7	Kerb and Channel	C	C	D	C	D	C	C	**C**
8	Lined urban drains	C	C	D	C	D	C	C	**C**
9	Underground drains	C	C	D	C	D	C	D	**D**
10	Stormwater pits	C	C	D	C	D	C	D	**D**
11	Jetties	A	B	C	C	D	D	D	**C**
Community facilities:									
12	Buildings	C	C	D	C	D	C	D	**D**
13	Waste management	B	B	A	C	D	C	C	**C**
14	Swimming pools	A	B	C	C	D	C	D	**C**
15	Parks and Reserves	B	B	C	C	D	C	C	**C**
16	Playgrounds	B	B	D	C	D	C	C	**C**
17	Flood warning system	A	B	A	B	B	B	B	**B**

Confidence ratings and estimates of uncertainty values:

Item No:	Confidence rating:		Estimate of Uncertainty:
1	A	Highly reliable	< 2%
2	B	Reliable	± 2 – 10%
3	C	Reasonably reliable	± 10 – 25%
4	D	Uncertain	± 25 – 50%
5	E	Very uncertain	> 50%

Confidence ratings descriptions:

Item No:	Confidence rating:		General description:
1	A	Highly reliable	Data based on sound records, procedures, investigations and analysis which is properly documented and recognized as the best method of assessment
2	B	Reliable	Data based on sound records, procedures, investigations and analysis which is properly documented but has minor shortcomings eg: the data is old, some is missing, and reliance is placed on unconfirmed reports or some extrapolation
3	C	Reasonably reliable	Data based on reasonable records, procedures, investigations and analysis which is documented but has some shortcomings eg: the data is old, some is missing, and reliance is placed on unconfirmed reports or significant extrapolation
4	D	Uncertain	Data is based on uncertain records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolation from a limited sample for which grade “A” or “B” data is available
5	E	Very uncertain	Data based on unconfirmed verbal reports and/or cursory inspection and analysis

Improvement Plan:

Asset management current and desired practices are given below in the table.

Item No:	Process:	Current practice:	Desired practice:
1	Level of service	Minimal performance measures in place Some community consultation undertaken	Established service level reviews Greater community consultation
2	Knowledge of assets	Various databases contain data for most assets. Minimal data on some assets	One database, or all databases linked Process for the collection and updating of databases in place Formal data auditting program in place
3	Condition of assets	Site inspections and tests are taken where performance is outside targetted level of service	Established program for condition assessment of critical areas of asset
4	Risk management	Risk management is practiced informally, based on knowledge of experienced staff	Critical assets monitored, and failure modes and lifecycles understood Processes documented
5	Asset accounting	Broad costs recorded against assets Valuations based on different depreciation models No account taken of deferred works	Established maintenance management system accurately forecast required maintenance Maintenance expenditure allocated to relevant asset Affect of deferred maintenance identified
6	Operations	Based mostly on knowledge of experienced staff	Documented operational procedures and processes
7	Maintenance	No service delivery agreement in place Informal performance monitoring	Service delivery agreement in place Emphasis on performance outcomes
8	Performance monitoring	Performance monitoring partly in place	Plan and undertake performance monitoring on all assets Established performance standards Improved performance outcome
9	Life cycle strategy	Minimal work being done in this area	Monitor performance of asset, including condition vs age, and asset life Monitor performance of asset maintenance/renewal treatments
10	Asset utilization	Asset capacity informally assessed	Developed model of asset utilization used for all planning and treatment works
11	QA/Continuous improvement	No formal process of quality assurance	Established quality assurance system Regular audits of system performance Required improvements implemented
12	Design & Project Management	Limited life-cycle costing assessed Some contract mgmt procedures in place	Established life-cycle procedures Established project mgmt procedures Regular review of project mgmt procedures

Item no:	Asset group:	Identified opportunity for improvement:
	General:	Establish improved chart of accounts to allow improved asset management costings for all asset groups
		Training of staff in condition rating of assets to provide regular and reliable input to asset management and maintenance systems. Increase staff awareness of asset management practices
		Implementation of Asset Management Policy, in particular asset life-cycle costing practices
	Roads:	Completion of development of functional roads hierarchy, and associated road construction standards
		Implementation of Maintenance Management System to ensure active feedback into the capital asset management system
	Bridges:	Complete the bridge hierarchy and establish development and upgrade standards for the bridge network.
		Implementation of Maintenance Management System to ensure active feedback into the capital asset management system
	Buildings:	Examination of buildings group as to ownership and responsibility for the management and maintenance of the buildings
		Establish one comprehensive database for all of the building assets
		Establish standard system for segmentation of building assets – capture data (inventory and condition) of assets
		Perform Disability Access Audit of all Council owned and/or managed buildings to determine compliance with disabled access legislation
	Swimming Pools:	Establish appropriate accounts so that maintenance, operations, contract operators fees, and capital expenditure are separated to provide for improved asset management
	Parks and Reserves:	Implement Urban Tree Management Plan
		Complete development of Parks and Reserves Management Plan
		Complete development of Park Furniture Management Plan
		Complete collection of tree data in parks, reserves and towns
	Playgrounds:	Complete development of Playgrounds Management Plan
		Implement Playgrounds Management Plan
		Training for Council staff in playgrounds inspection and management
		Development and implementation of safety plans for all playgrounds
	Waste Management Facilities	Establish appropriate accounts so that maintenance, operations, contract operators fees, and capital expenditure are separated to provide for improved asset management