ESSENTIAL SERVICES COMMISSION
Local Government
Higher cap – Application (2016/17)

Ballarat City Council Rate Variation Application

Content

Overview of Variation

Proposed rate cap variation is in two parts:

1. Required funding to assist in closing Council's infrastructure renewal gap 0.53%

2. Additional funding to assist in the recalculation of Council's DCP scheme 0.67%

Total requested increase in the rate cap: 1.2% ($1,033,000)

Structure of 2015/16 Financial Strategy

The 2015/16 20 year financial strategy was based on the following paramters:

Assumptions:	
Inflation Rate:	**3.0%**
Rate Increase	**5.5%**
Fee Increase	**5.5%**
Employee Costs Increase:	**5.0%**
Material & Contracts increase:	**5.0%**
Other Expenses increase:	**3.0%**
Capital Growth (minimum)	**4.0%**

Borrowing Strategy

Outstanding Debt		Debt Reduction ($'000)	New Loans ($'000)	Excess Cash	Working Capital
48,147	Year 1	0	15,000	1,817	113%
48,147	Year 2	0	0	(557)	110%
57,147	Year 3	0	9,000	(73)	111%
62,147	Year 4	0	5,000	(292)	108%
64,147	Year 5	0	2,000	0	110%
70,147	Year 6	0	6,000	115	106%
70,147	Year 7	0	0	505	107%
75,147	Year 8	0	5,000	26	109%
72,147	Year 9	3,000	0	687	127%
70,147	Year 10	2,000	0	244	127%
68,147	Year 11	2,000	0	1,118	136%
54,204	Year 12	13,943	0	1,321	148%
45,204	Year 13	9,000	0	896	158%
37,204	Year 14	8,000	0	434	177%
41,204	Year 15	0	4,000	366	182%
30,566	Year 16	10,638	0	474	212%
22,653	Year 17	7,914	0	119	235%
16,389	Year 18	6,263	0	1,625	270%
11,585	Year 19	4,804	0	566	301%
8,541	Year 20	3,044	0	1,007	319%
			46,000		

Financial Risk Profile

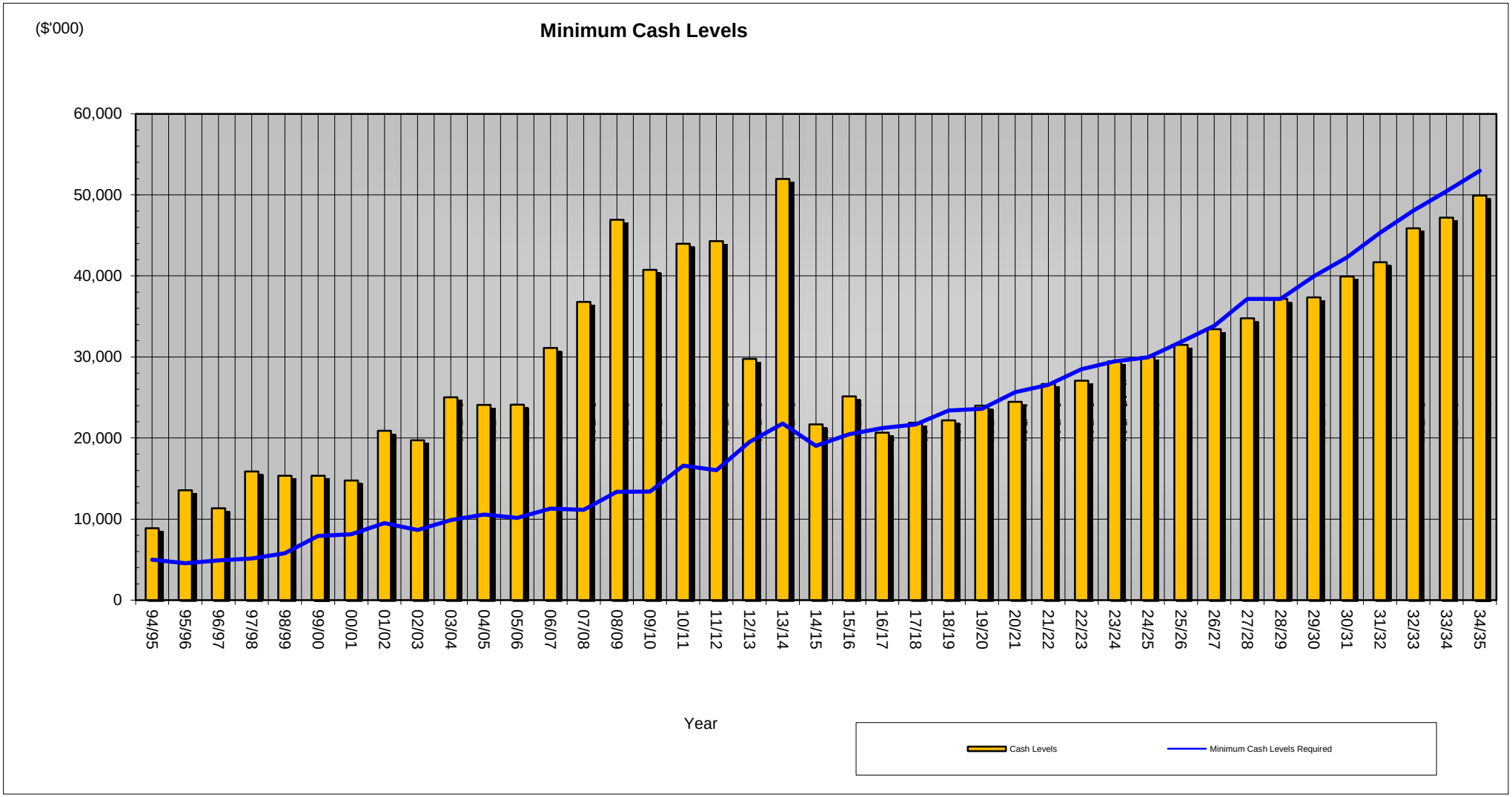
Long Term Financial Strategy Risk Profile

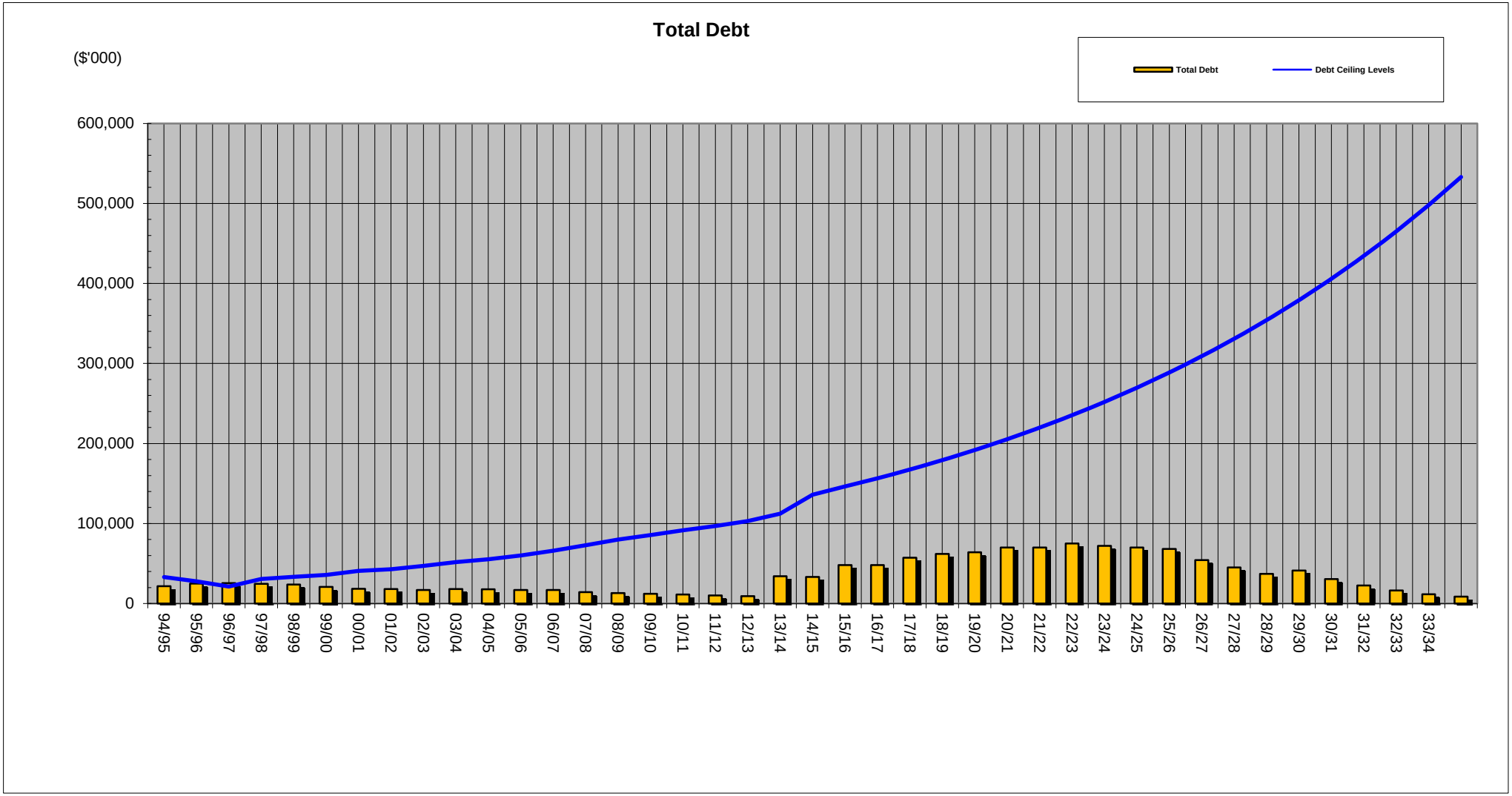
Year		Inflation	Rate %	Underlying Result %	Liquidity	Self Financing	Indebtedness	Investment Gap
	94/95	1.9%	0.00%	Low	Low	High	Medium	Low
	95/96	5.0%	-20.00%	Low	Low	Medium	Medium	Low
	96/97	3.6%	1.40%	Medium	Medium	High	High	Low
	97/98	0.4%	2.88%	Medium	Medium	Medium	Low	High
	98/99	0.8%	7.50%	Medium	Low	Medium	Low	High
	99/00	1.3%	7.00%	Medium	Low	Medium	Low	High
	00/01	3.9%	6.50%	Medium	Medium	Low	Low	Medium
	01/02	7.6%	3.00%	Medium	Low	Low	Low	Medium
	02/03	3.8%	6.00%	High	Medium	Low	Low	Medium
	03/04	3.0%	6.50%	Medium	Low	Low	Low	Low
	04/05	2.4%	3.00%	Medium	Low	Low	Low	Low
	05/06	2.4%	5.50%	High	Low	Low	Low	Medium
	06/07	3.5%	7.50%	Low	Low	Low	Low	Medium
	07/08	2.8%	7.50%	Low	Low	Low	Low	Low
	08/09	4.1%	5.50%	Low	Low	Low	Low	Medium
	09/10	2.9%	4.0%	Low	Low	Low	Low	Low
	10/11	3.0%	4.0%	Low	Low	Low	Low	Low
	11/12	3.3%	3.5%	Medium	Medium	Low	Low	Low
	12/13	3.1%	4.0%	Low	Low	Low	Low	Low
	13/14	2.1%	7.5%	Medium	Low	Low	Low	Low

Long Term Financial Strategy Risk Profile

Forecast	**14/15**	3.0%	5.5%	**Medium**	**Medium**	**Low**	**Low**	**Low**
1	**15/16**	3.0%	6.0%	**Low**	**Medium**	**Low**	**Low**	**Low**
2	**16/17**	3.0%	5.5%	**Medium**	**Medium**	**Low**	**Low**	**Low**
3	**17/18**	3.0%	5.5%	**Medium**	**Medium**	**Low**	**Low**	**Low**
4	**18/19**	3.0%	5.5%	**Medium**	**Medium**	**Low**	**Low**	**Low**
5	**19/20**	3.0%	5.5%	**Medium**	**Medium**	**Low**	**Low**	**Low**
6	**20/21**	3.0%	5.5%	**Medium**	**Medium**	**Low**	**Low**	**Low**
7	**21/22**	3.0%	5.5%	**Medium**	**Medium**	**Low**	**Low**	**Medium**
8	**22/23**	3.0%	5.5%	**Medium**	**Medium**	**Low**	**Low**	**Low**
9	**23/24**	3.0%	5.5%	**Medium**	**Medium**	**Low**	**Low**	**Medium**
10	**24/25**	3.0%	5.5%	**Medium**	**Medium**	**Low**	**Low**	**Low**
11	**25/26**	3.0%	5.5%	**Medium**	**Medium**	**Low**	**Low**	**Medium**
12	**26/27**	3.0%	5.5%	**Medium**	**Low**	**Low**	**Low**	**Medium**
13	**27/28**	3.0%	5.5%	**Low**	**Low**	**Low**	**Low**	**Medium**
14	**28/29**	3.0%	5.5%	**Low**	**Low**	**Low**	**Low**	**Medium**
15	**29/30**	3.0%	5.5%	**Low**	**Low**	**Low**	**Low**	**Low**
16	**30/31**	3.0%	5.5%	**Low**	**Low**	**Low**	**Low**	**Medium**
17	**31/32**	3.0%	5.5%	**Low**	**Low**	**Low**	**Low**	**Medium**
18	**32/33**	3.0%	5.5%	**Low**	**Low**	**Low**	**Low**	**Medium**
19	**33/34**	3.0%	5.5%	**Low**	**Low**	**Low**	**Low**	**Low**
20	**34/35**	3.0%	5.5%	**Low**	**Low**	**Low**	**Low**	**Low**

Ballarat City Council Key Financial Indicators




Total Debt
($'000)
Total Debt
Debt Ceiling Levels
600,000
500,000
400,000
300,000
200,000
100,000
0
94/95
95/96
96/97
97/98
98/99
99/00
00/01
01/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09
09/10
10/11
11/12
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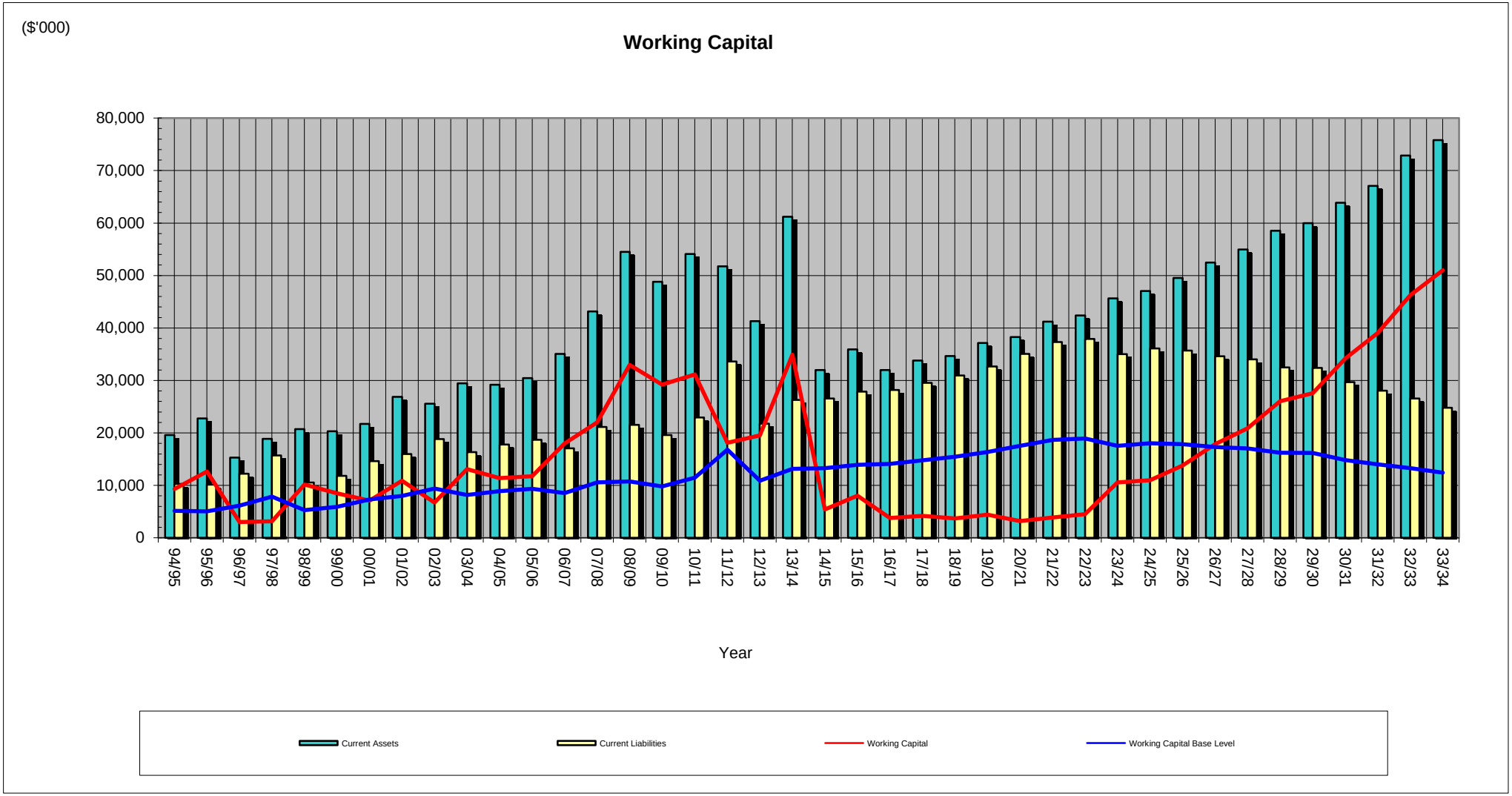
32/33
33/34


($'000)
Working Capital
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
94/95
95/96
96/97
97/98
98/99
99/00
00/01
01/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09
09/10
10/11
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22/23
23/24
24/25
25/26
26/27
27/28
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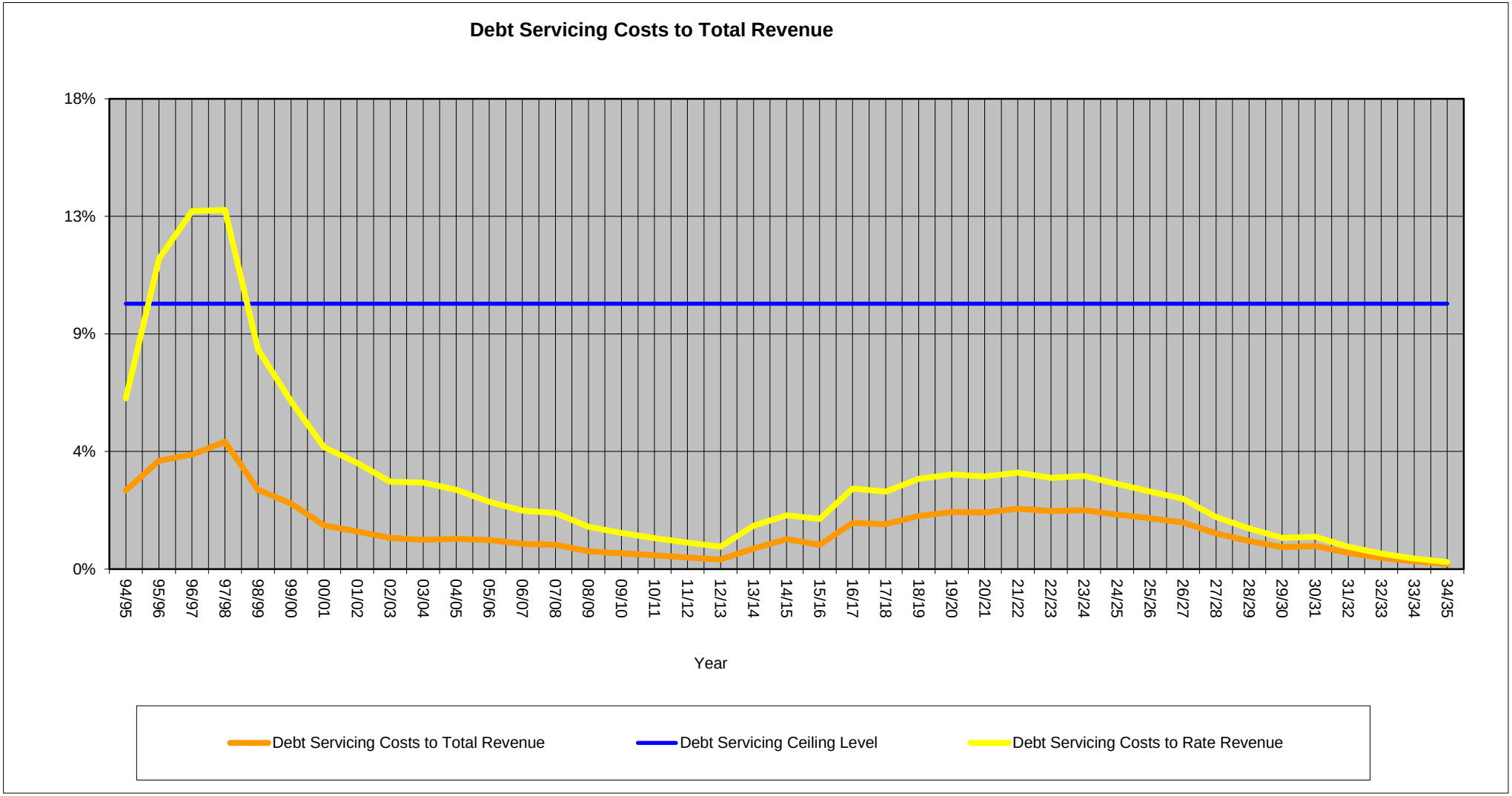
29/30
30/31
31/32
32/33
33/34
Year
Current Assets
Current Liabilities
Working Capital
Working Capital Base Level


Debt Servicing Costs to Total Revenue
18%
13%
9%
4%
0%
94/95
95/96
96/97
97/98
98/99
99/00
00/01
01/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09
09/10
10/11
11/12
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22/23
23/24
24/25
25/26
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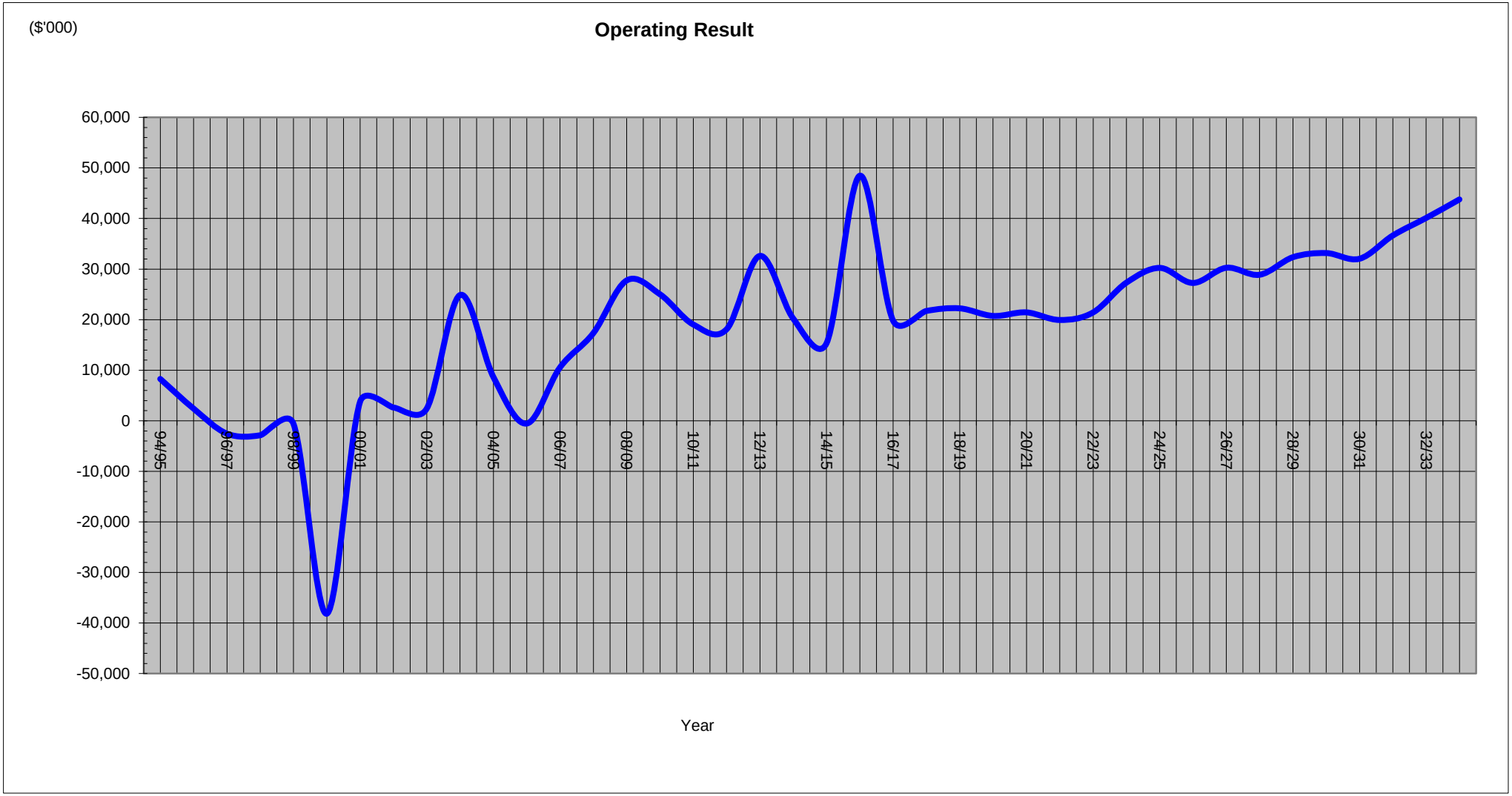
32/33
33/34
34/35
Year
Debt Servicing Costs to Total Revenue
Debt Servicing Ceiling Level
Debt Servicing Costs to Rate Revenue


($'000)
Operating Result
60,000
50,000
40,000
30,000
20,000
10,000
0
-10,000
-20,000
-30,000
-40,000
-50,000
94/95
96/97
98/99
00/01
02/03
04/05
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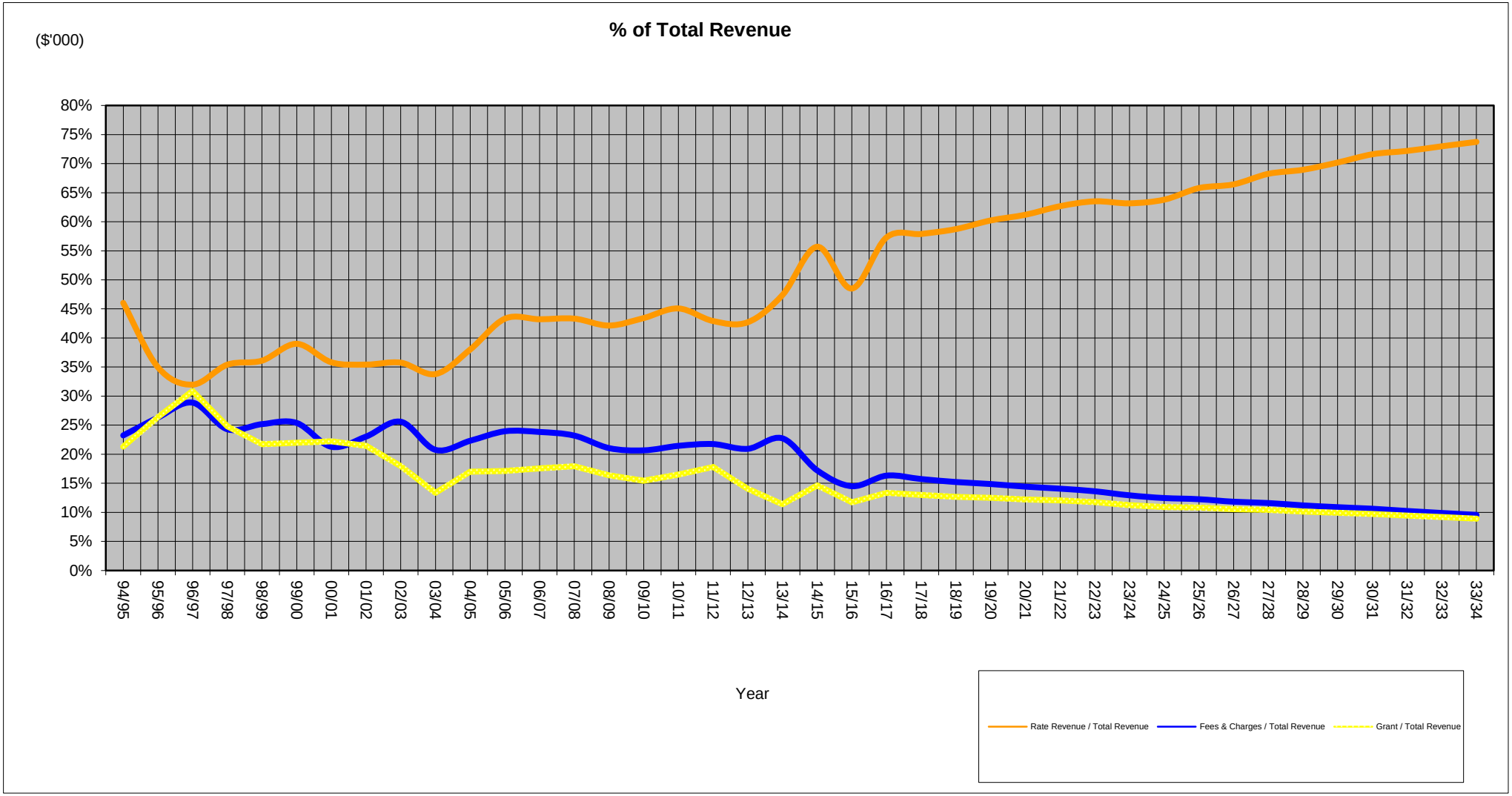
30/31
32/33
Year


% of Total Revenue
($'000)
80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
94/95
95/96
96/97
97/98
98/99
99/00
00/01
01/02
02/03
03/04
04/05
05/06
06/07
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23/24
24/25
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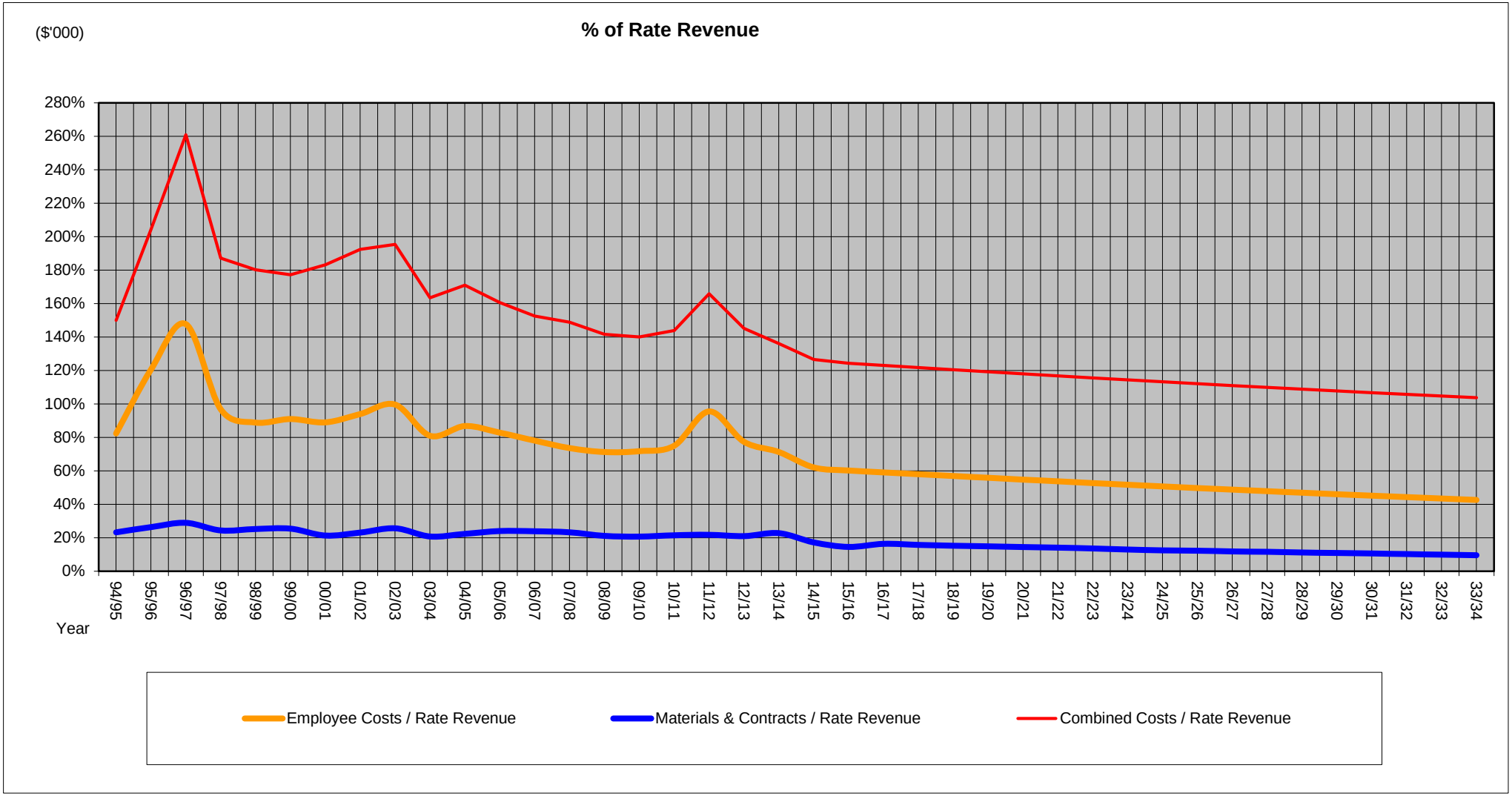
33/34
Year
Rate Revenue / Total Revenue
Fees & Charges / Total Revenue
Grant / Total Revenue


($'000)
% of Rate Revenue
280%
260%
240%
220%
200%
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
94/95
95/96
96/97
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22/23
23/24
24/25
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27/28
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31/32
32/33
33/34
Year
Employee Costs / Rate Revenue
Materials & Contracts / Rate Revenue
Combined Costs / Rate Revenue


($'000)
Debt to Rate Revenue Ratio
200%
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
94/95
95/96
96/97
97/98
98/99
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33/34
34/35
Year

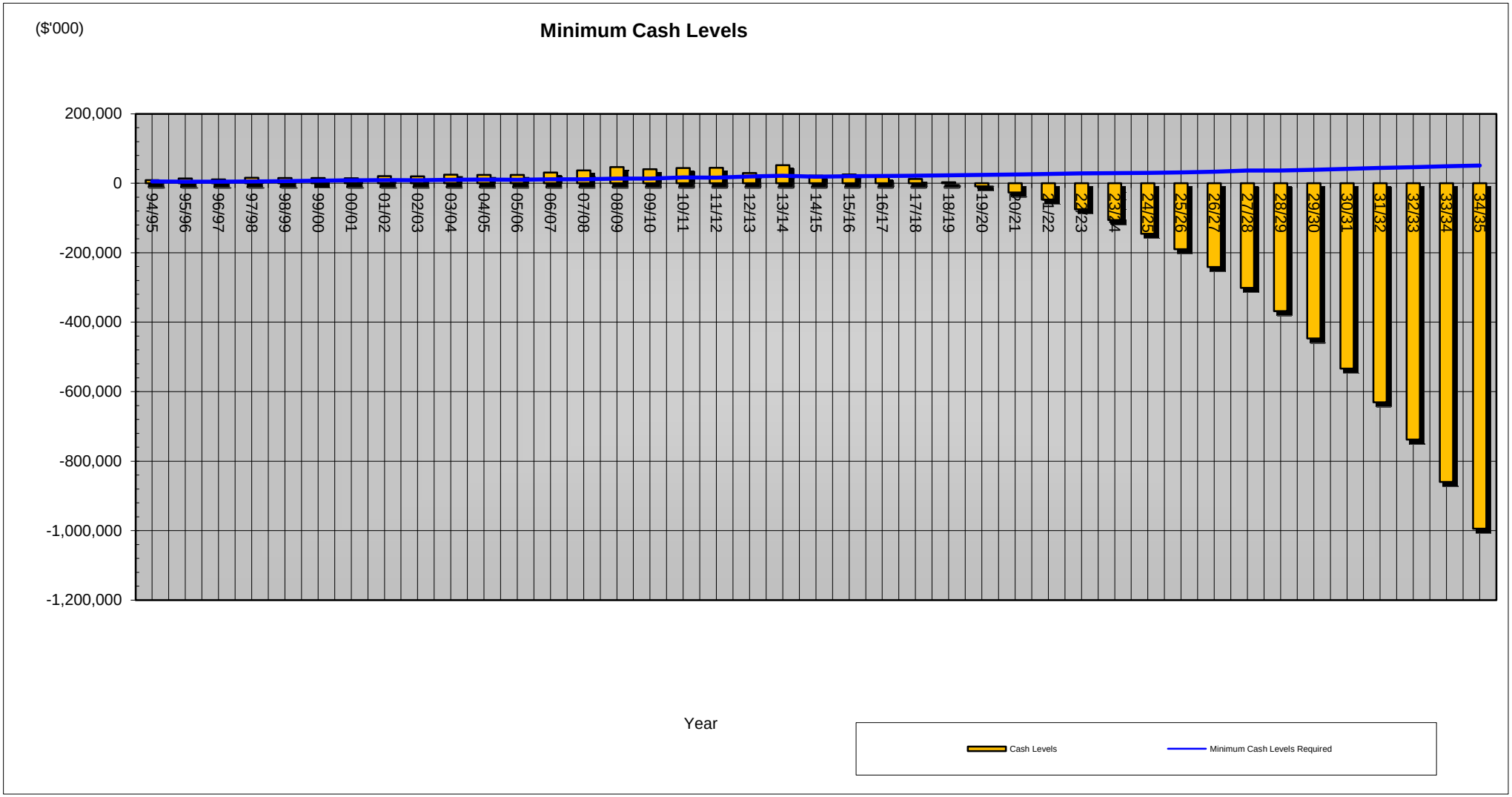
Preparation of 2016/17 Budget – Base rate of 2.5%

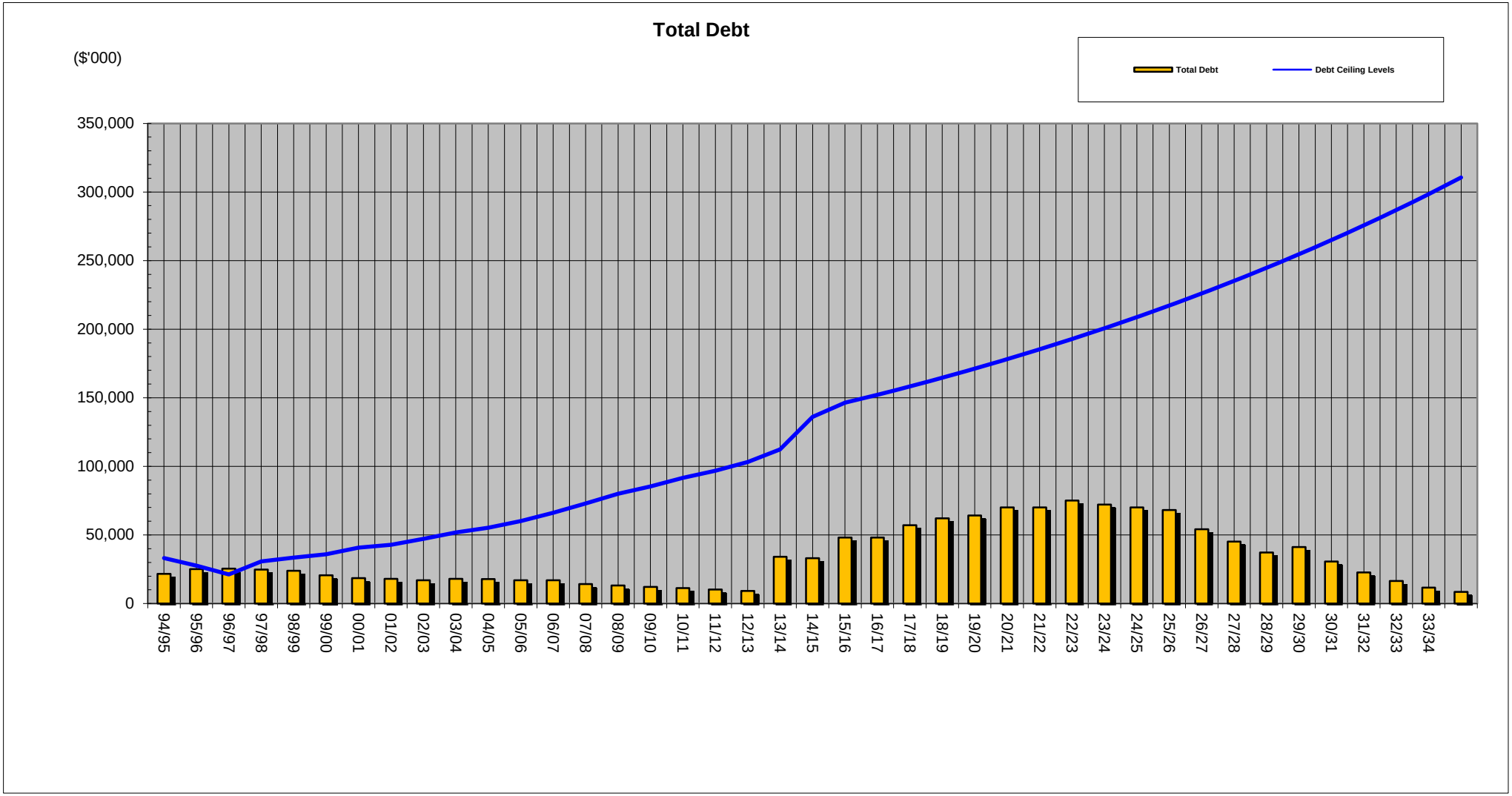
In preparation of the 2016/17 budget, following advice of the rate cap of 2.5%, the Council's strategy was altered in the first instance to adhere to the 2.5% rate cap. Fees and charges were also altered equivalent to the rate cap in line with Council's strategy of holding increases to fees and charges in line with rate increases.

The following graphs depict the financial effect of the implementing the rate cap without any other adjustments to the financial parameters formulating Councils financial strategy.

Outstanding Debt		Debt Reduction ($'000)	New Loans ($'000)	Excess Cash	Working Capital
48,147	Year 1	**0**	**15,000**	1,820	113%
48,147	Year 2	**0**	**0**	(3,539)	99%
57,147	Year 3	**0**	**9,000**	(9,321)	79%
62,147	Year 4	**0**	**5,000**	(19,404)	46%
64,147	Year 5	**0**	**2,000**	(32,914)	9%
70,147	Year 6	**0**	**6,000**	(50,909)	-40%
70,147	Year 7	**0**	**0**	(73,329)	-92%
75,147	Year 8	**0**	**5,000**	(101,747)	-161%
72,147	Year 9	**3,000**	**0**	(134,610)	-262%
70,147	Year 10	**2,000**	**0**	(174,653)	-360%
68,147	Year 11	**2,000**	**0**	(219,985)	-488%
54,204	Year 12	**13,943**	**0**	(273,157)	-650%
45,204	Year 13	**9,000**	**0**	(334,735)	-834%
37,204	Year 14	**8,000**	**0**	(404,780)	-1079%
41,204	Year 15	**0**	**4,000**	(483,559)	-1321%
30,566	Year 16	**10,638**	**0**	(572,040)	-1730%
22,653	Year 17	**7,914**	**0**	(671,665)	-2177%
16,389	Year 18	**6,263**	**0**	(780,973)	-2695%
11,585	Year 19	**4,804**	**0**	(905,312)	-3374%
8,541	Year 20	**3,044**	**0**	(1,041,746)	-3911%
			46,000		

2016/16 Financial Strategy incorporating 2.5% Rate Cap




Total Debt
($'000)
Total Debt
Debt Ceiling Levels
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
94/95
95/96
96/97
97/98
98/99
99/00
00/01
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07/08
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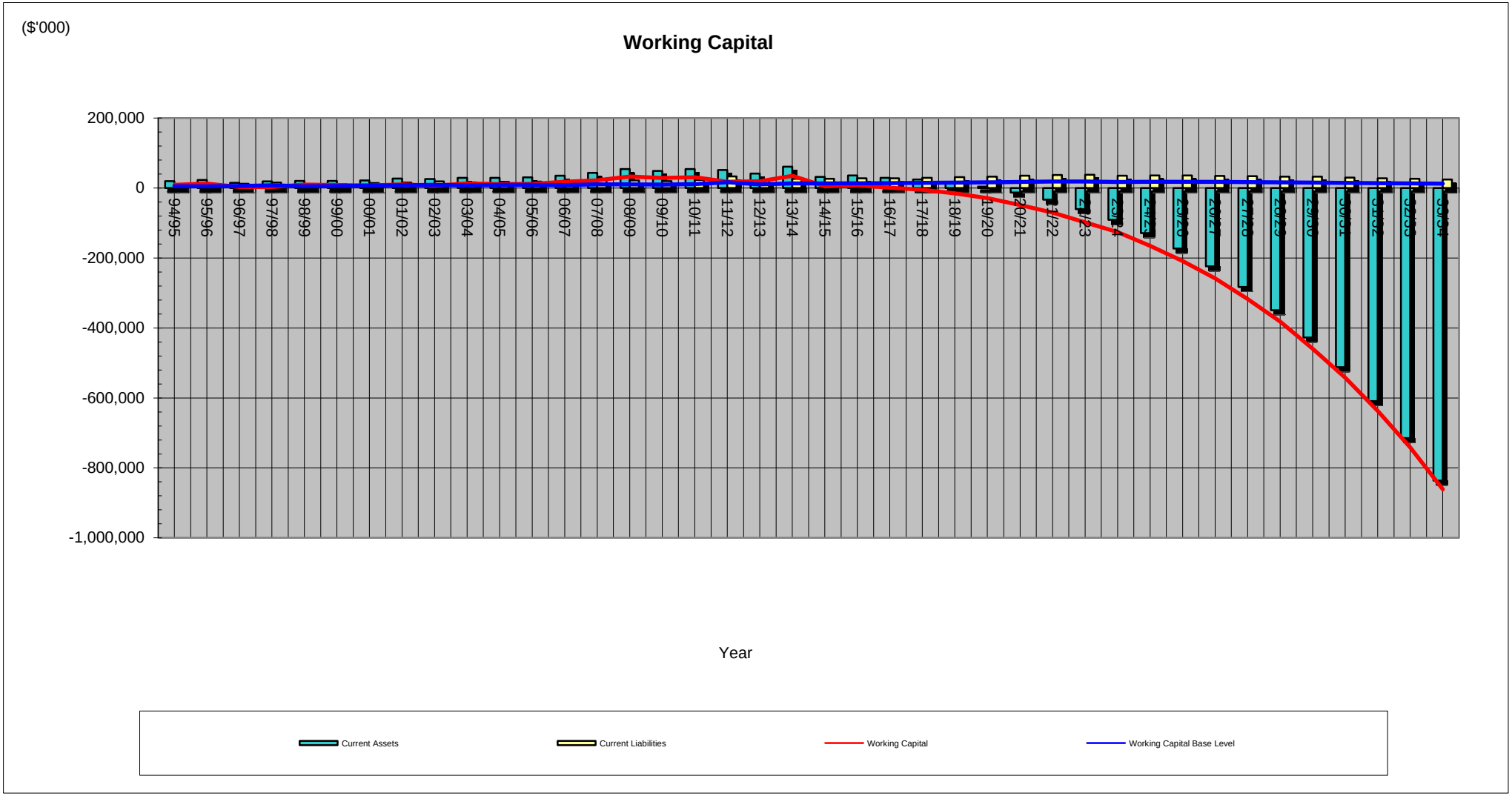
($'000)
Working Capital
200,000
0
-200,000
-400,000
-600,000
-800,000
-1,000,000
94/95
95/96
96/97
97/98
98/99
99/00
00/01
01/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09
09/10
10/11
11/12
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21/22
22/23
23/24
24/25
25/26
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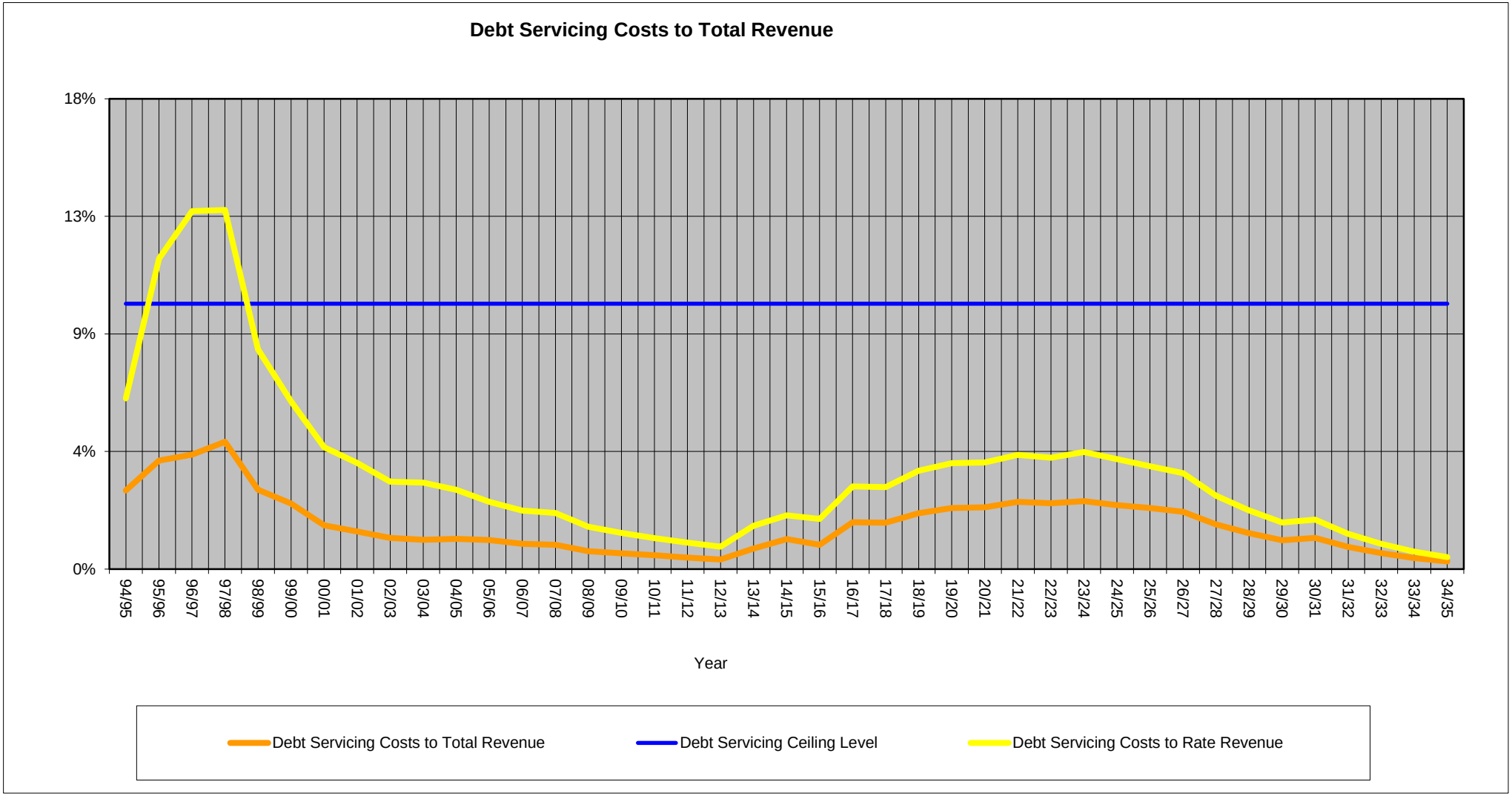
32/33
33/34
Year
Current Assets
Current Liabilities
Working Capital
Working Capital Base Level


Debt Servicing Costs to Total Revenue
18%
13%
9%
4%
0%
94/95
95/96
96/97
97/98
98/99
99/00
00/01
01/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09
09/10
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23/24
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25/26
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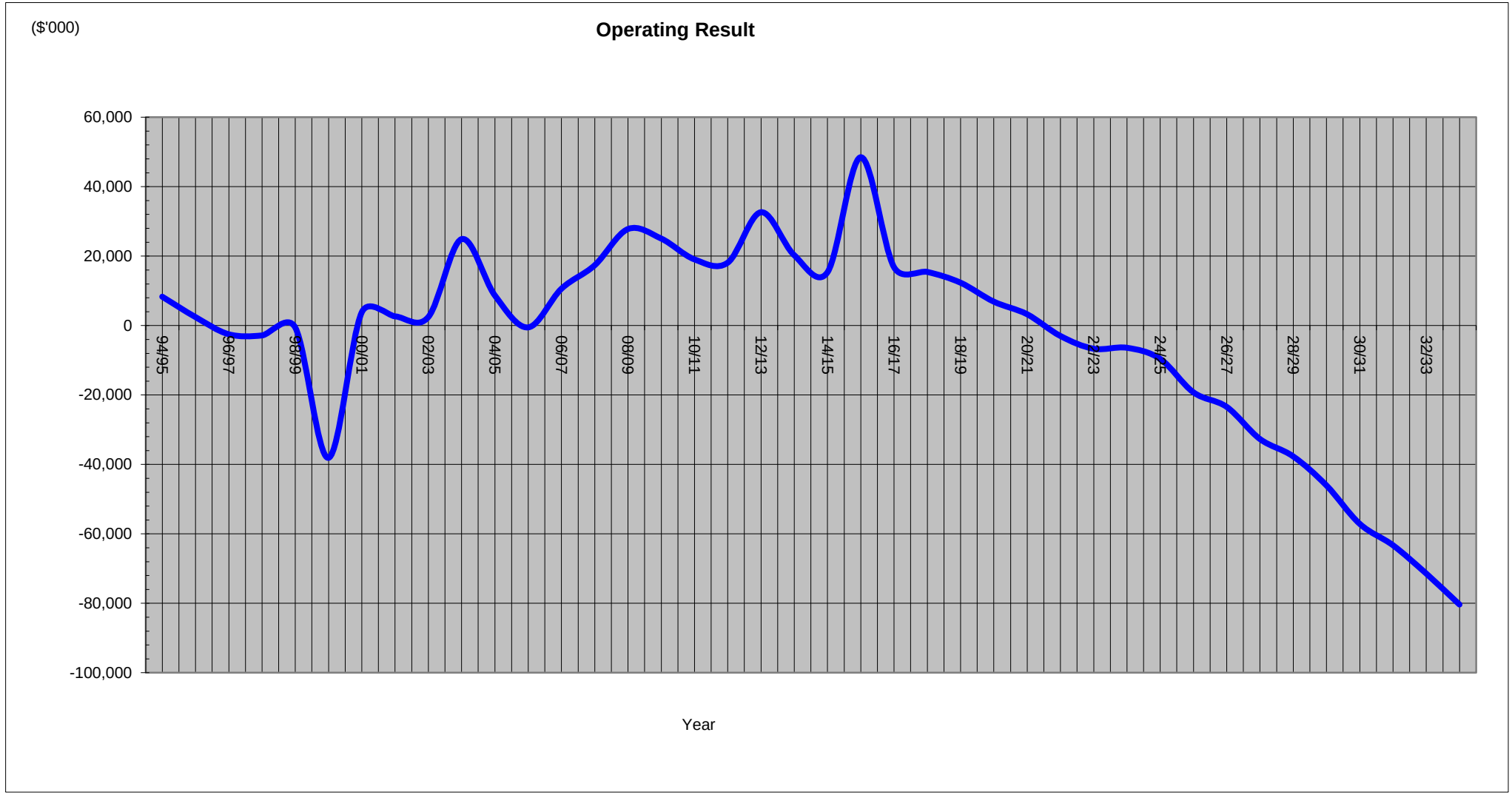
34/35
Year
Debt Servicing Costs to Total Revenue
Debt Servicing Ceiling Level
Debt Servicing Costs to Rate Revenue


($'000)
Operating Result
60,000
40,000
20,000
0
-20,000
-40,000
-60,000
-80,000
-100,000
94/95
96/97
98/99
00/01
02/03
04/05
06/07
08/09
10/11
12/13
14/15
16/17
18/19
20/21
22/23
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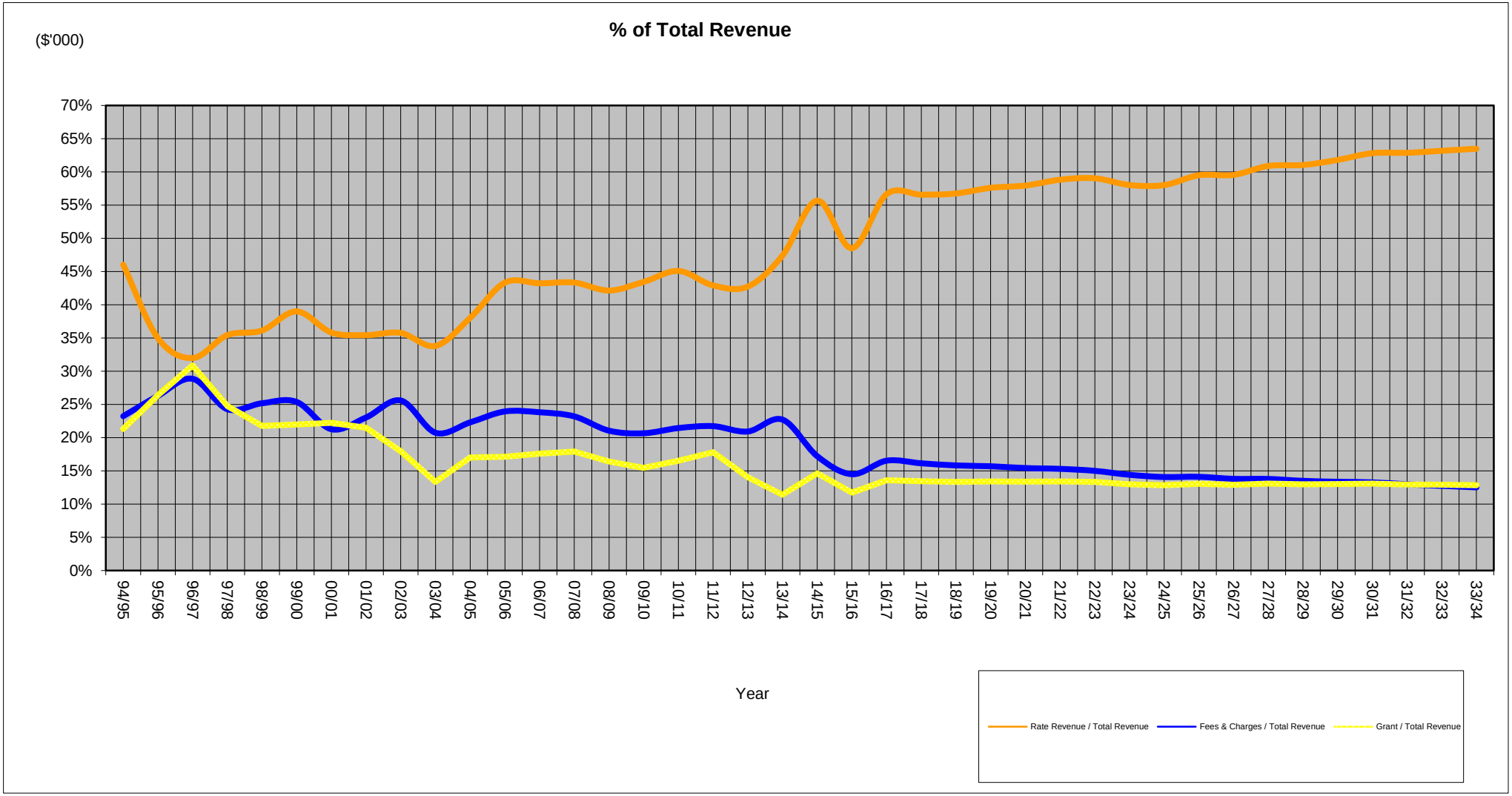
26/27
28/29
30/31
32/33
Year


% of Total Revenue
($'000)
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
94/95
95/96
96/97
97/98
98/99
99/00
00/01
01/02
02/03
03/04
04/05
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23/24
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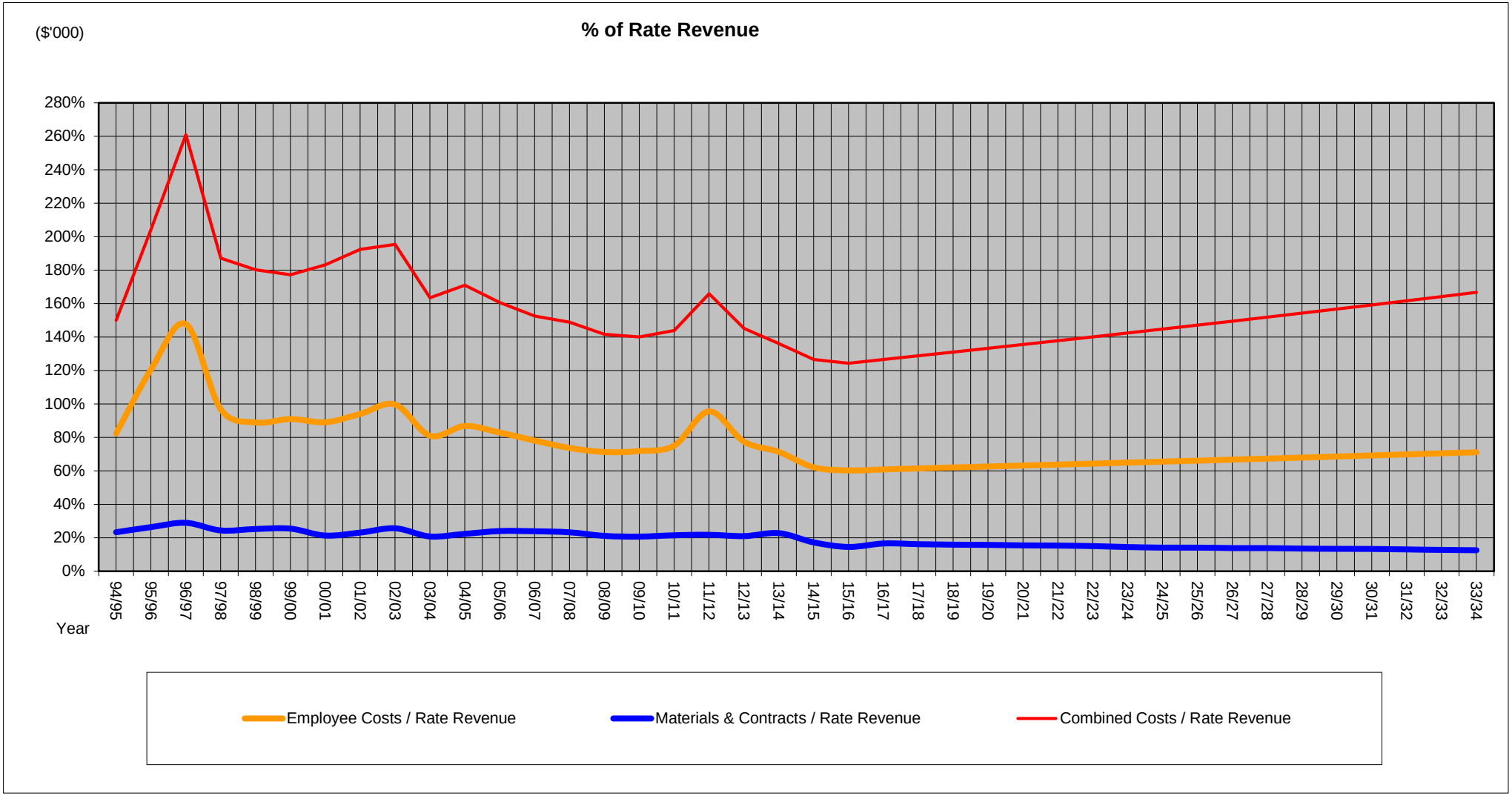
33/34
Year
Rate Revenue / Total Revenue
Fees & Charges / Total Revenue
Grant / Total Revenue


($'000)
% of Rate Revenue
280%
260%
240%
220%
200%
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
94/95
95/96
96/97
97/98
98/99
99/00
00/01
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06/07
07/08
08/09
09/10
10/11
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13/14
14/15
15/16
16/17
17/18
18/19
19/20
20/21
21/22
22/23
23/24
24/25
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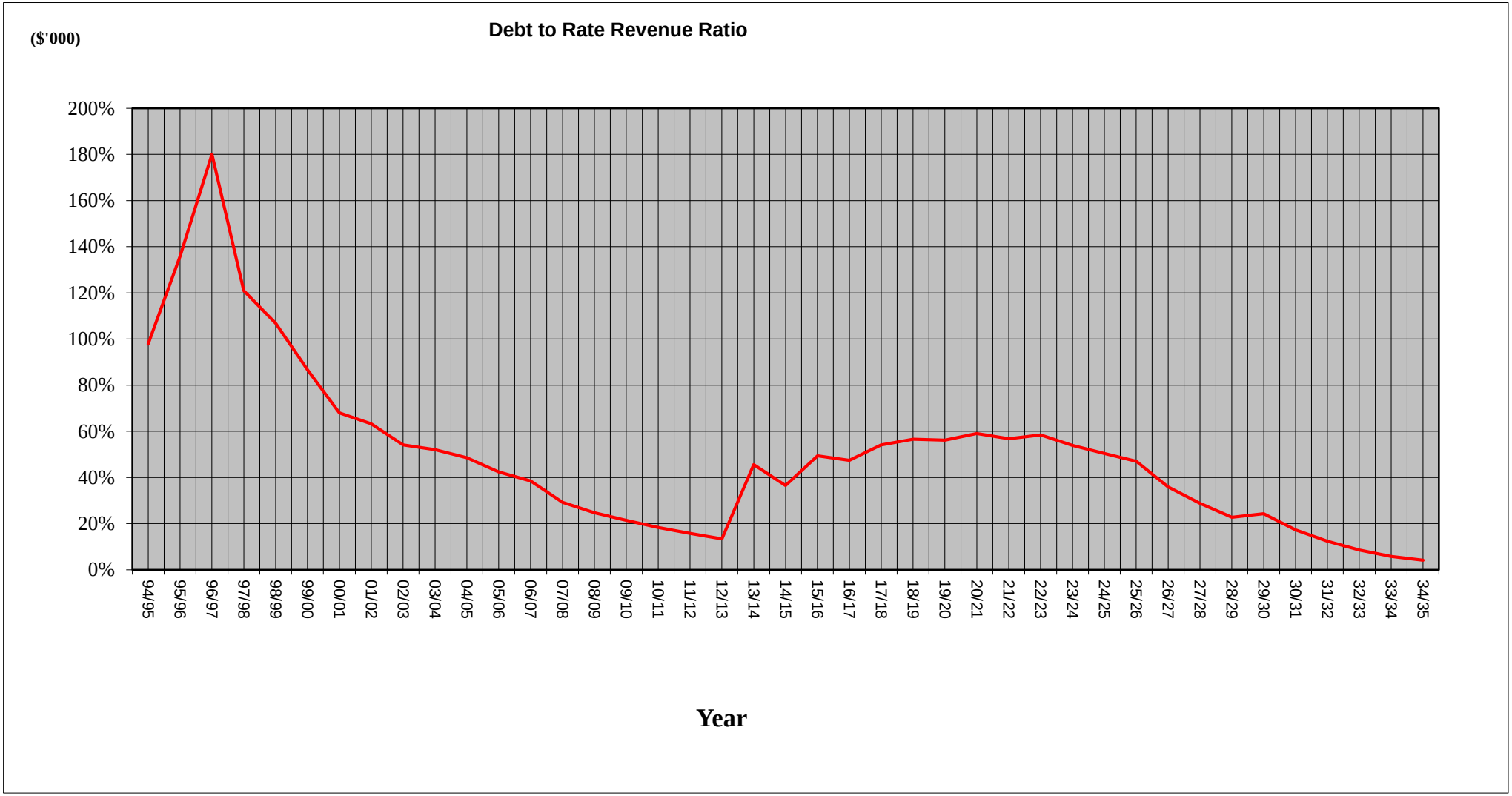
32/33
33/34
Year
Employee Costs / Rate Revenue
Materials & Contracts / Rate Revenue
Combined Costs / Rate Revenue


($'000)
Debt to Rate Revenue Ratio
200%
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
94/95
95/96
96/97
97/98
98/99
99/00
00/01
01/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09
09/10
10/11
11/12
12/13
13/14
14/15
15/16
16/17
17/18
18/19
19/20
20/21
21/22
22/23
23/24
24/25
25/26
26/27
27/28
28/29
29/30
30/31
31/32
32/33
33/34
34/35
Year

Analysis of 2016/16 Budget

Incorporating a 2.5 rate increase with all other parameters remaining constant, produced financial results which clearly indicated that the Council could not continue to operate as had been planned when formulating the 2015/16 budget.

The parameters were reviewed, it was decided that the operational budget would be restricted to operate within the rate cap of 2.5%. At this stage it has not been determined how the reductions will occur however, Council has commenced service reviews for all services, these will be carried out over the next 12 months. The results of the reviews will assist in the required cost savings for the 2016/17 budget but will also assist in the determination of which services Council can continue with in the medium to long term.

An obvious area Council where reduced expenditure will occur into the future will be the next Enterprise Bargaining Agreement (EBA). The last EBA was set at 3.6%. Including "Band creep" this effectively had employee costs increase by a minimum 4.6%. It is clear that this is not possible under the rate cap and employee costs have been limited as a result. The revised employee costs are expected to achieve reductions of $1.4 million.

Forced savings within the area of materials and contracts has been set at $974,000 for 2016/17. Through Councils borrowing strategy and a change in strategy for the timing of borrowings have saved Council $821,000 in the 2016/17 financial year. These savings amount to $3.195 million for 2016/17. This equates to a rate rise of 3.7%, without these savings, as displayed in the initial financial modelling, clearly sets out that Council would not be financially sustainable.

Savings required for future years to enable Council to remain within the rate cap will be determined through planned service reviews.

It has been a long term strategy of Council to allocate any savings achieved operationally and any rate income received above the indicated inflation rate, to provide funding for essential capital works and for the increase in funding for infrastructure works.

Since amalgamations, Council was unable to provide sufficient funding in the the area of infrastructure renewal whilst the rate base was low. In the formulation of the 2006/07 budget Council recognised the need to increase revenue in order to deliver more funds for essential infrastructure renewal/upgrades etc.

This has been one of the main pillars of the budget since that time, the current Council putting a greater emphasis on infrastructure funding.

In summary, in order for Council to operate within the rate cap set Council will implement the following strategies:

- Service reviews – Not only to review whether the current range of services are relevant but to review the cost structures of each of the services. As part of service reviews, it is clear that the delivery of services will be market tested to ensure that Council is delivering those services at the best value for money.
- Fee review – Council has been reviewing fees and charges with the objective of reducing the funding burden from general rates. Council has only had minor success in the past but will continue the review of a user pays system, and the degree that system can be implemented. In the past, after extensive benchmarking and review of fees, Council was only able to achieve 27% of total revenue being received through fees. This has been hard to maintain and for the 2016/17 year the expected percentage of total revenue from fees is budgeted for to be 24%. Services such as the Aquatic Centre, Council is receiving feedback that the fees are now too high and should be lowered, the effect is too push the

financial burden to general rates. Services such as the Aquatic Centre has seen a drop in usage over the last couple of years which can partly be attributed to the increase in fees.

- Borrowing strategy – Council adopted a borrowing strategy for 2015/16. Apart from general rates, borrowings is one of the obvious levers to raise finance for Councils. Council does recognise it must leave flexibility for future generations so that appropriate major projects can be funded in the future, Council also recognises that there is a limit to borrow, and subsequently pay off those borrowings, if the ability to raise revenue is limited.
  Council has been strategic
- If the application for an increase in the rate cap is not achieved, then Council will have to review its spend on infrastructure in order to operate within the rate cap.
- Council has set out to achieve efficiencies through its purchasing, from an operational level introducing purchase cards for efficiencies, through to its tendering process to seek the delivery of works, especially capital projects through a competitive process. Council's procurement policy has a ceiling of $100,000 in which the purchase of goods or services is to go through the tendering process in order to deliver those services at the best competitive rate. It was considered that the limits set down in the Local Government Act were too high and efficiencies would be lost if Council adhered only to those levels.

The first scenario included the following assumptions:

Assumptions:	
Inflation Rate:	**2.5%**
Rate Increase	**2.5%**
Future Rate Increase	**2.5%**
Future Growth	**1.5%**
Statutory Fees	**1.0%**
Fee Increase	**2.5%**
Employee Costs Increase:	**3.0%**
Material & Contracts increase:	**3.0%**
Other Expenses increase:	**2.5%**
Future Capiatl Growth	**4.0%**
CY Capital Growth	**4.0%**

The result of this modified strategy is:

Debt Balance ($'000)	Debt Due ($'000)	Underlying Result ($'000)	Operating Result ($'000)	Capital ($'000)	Year ($'000)	New Loans / (Debt Reduction) ($'000)	Cash Levels ($'000)	Excess Cash ($'000)	Working Capital ($'000)
48,147	8,128	(7,275)	42,952	112,860	2015/16	**15,000**	27,445	3,248	109%
48,147	3,872	(217)	24,921	62,877	2016/17	**0**	22,004	2,214	108%
54,147	3,804	(1,319)	25,754	67,104	2017/18	**6,000**	20,445	(227)	102%
66,147	4,431	(2,967)	24,099	70,496	2018/19	**12,000**	21,176	(115)	101%
79,147	5,893	(5,162)	21,874	70,002	2019/20	**13,000**	22,562	702	100%
91,147	8,081	(7,476)	20,942	68,575	2020/21	**12,000**	24,895	2,531	102%
99,147	10,545	(9,799)	19,943	66,142	2021/22	**8,000**	26,176	2,725	100%
112,147	13,059	(11,815)	17,829	70,787	2022/23	**13,000**	27,203	3,180	100%
121,147	14,615	(14,455)	18,115	68,412	2023/24	**9,000**	28,596	3,173	102%
141,147	16,051	(16,820)	12,607	76,013	2024/25	**20,000**	29,588	3,646	62%
168,146	43,178	(19,522)	7,188	72,444	2025/26	**27,000**	37,506	10,689	101%
191,146	26,546	(24,717)	2,149	70,389	2026/27	**23,000**	40,286	12,474	100%
214,147	30,469	(28,347)	1,533	71,082	2027/28	**23,000**	43,678	14,894	100%
245,146	34,645	(32,073)	(7,029)	71,127	2028/29	**31,000**	48,461	17,336	101%
300,146	40,094	(36,539)	(13,601)	86,559	2029/30	**55,000**	57,317	25,941	102%
347,147	49,015	(43,029)	(21,774)	74,598	2030/31	**47,000**	64,122	31,297	101%
402,146	57,428	(48,989)	(26,811)	77,239	2031/32	**55,000**	73,496	39,180	100%
464,146	68,483	(55,702)	(33,022)	79,298	2032/33	**62,000**	83,937	47,772	100%
533,147	79,956	(63,094)	(39,875)	84,648	2033/34	**69,000**	91,605	53,683	100%
617,147	88,144	(71,147)	(47,319)	87,883	2034/35	**84,000**	106,097	66,279	101%
689,147	102,758	(80,529)	13,240	155,180	2035/36	**72,000**	104,456	62,647	100%
						656,000			

It can be clearly seen that the strategy of maintain infrastructure spend as per previous financial strategies is not possible. This situation only leaves Council with two options. The first would be to reduce capital infrastructure spend to effectively balance the long term financial strategy. It has been well researched the effects of not providing sufficient infrastructure spend, in the long term this will cost the municipality in replacing the infrastructure earlier or accepting a lower quality of infrastructure.

The second option is to request a variation to the rate cap to raise sufficient funds to cover the extra spend in infrastructure. For 2016/17, Council has the additional issue of funding the recalculated liability for the Developers Contribution Scheme, in 2016/17 the additional funds required amounts to $585,000.

Financial modelling has shown that requesting for a one year variation will not maintain the long term financial viability of the Council.

A rate rise of 3.7% in year one followed by anticipated rate increases of 2.5% thereafter will result in the Council becoming financially unviable by 24/25. After that date Council will be required to borrow significantly each year in order to operate. Debt will rise from $54,275 million in 2024/25 to $307,313 million in 2035/36.

Extensive financial modelling has shown that for Council to remain financial viable whilst maintaining the strategy of increasing funding for infrastructure renewal funding, and accommodating the Developers Contribution Scheme's liability, Council will need to increase rates in 2016/17 by 3.7%, being a 1.2% increase above the rate cap, and to have a constant rate increase of 3.6% based on an inflation rate of 2.5%.

This enables Council to reduce debt over time, and provides Council with the capacity to borrow for major infrastructure, and /or community projects over the next twenty years.

The financial parameters going forward are:

Recommended Scenario:

Assumptions:

Inflation Rate:	**2.5%**
Rate Increase	**3.7%**
Future Rate Increase	**3.6%**
Future Growth	**1.5%**
Statutory Fees	**1.0%**
Fee Increase	**2.5%**
Employee Costs Increase:	**3.0%**
Material & Contracts increase:	**3.0%**
Other Expenses increase:	**2.5%**
Future Capiatl Growth	**4.0%**
CY Capital Growth	**4.0%**

The financial predictions based on these parameters are:

Debt Balance ($'000)	Debt Due ($'000)	Underlying Result ($'000)	Operating Result ($'000)	Capital ($'000)	Year ($'000)	New Loans / (Debt Reduction) ($'000)	Cash Levels ($'000)	Excess Cash ($'000)	Working Capital ($'000)
48,147	8,128	(7,275)	42,952	112,860	2015/16	**15,000**	27,445	3,248	109%
48,147	3,872	827	25,965	62,877	2016/17	**0**	23,043	3,250	112%
51,147	3,804	892	27,965	67,104	2017/18	**3,000**	20,684	27	104%
59,147	4,149	743	27,809	70,496	2018/19	**8,000**	21,108	(147)	103%
66,148	5,186	224	27,260	70,002	2019/20	**7,000**	21,855	65	103%
69,148	6,687	(153)	28,265	68,575	2020/21	**3,000**	22,478	236	102%
69,147	8,062	(190)	29,552	66,142	2021/22	**(0)**	25,328	2,042	109%
69,147	9,392	115	29,759	70,787	2022/23	**0**	25,236	1,453	112%
62,148	9,088	318	32,888	68,412	2023/24	**(7,000)**	25,343	251	119%
64,148	8,057	1,165	30,592	76,013	2024/25	**2,000**	26,249	741	69%
62,147	32,101	1,972	28,682	72,444	2025/26	**(2,000)**	26,578	370	116%
59,147	11,337	1,309	28,175	70,389	2026/27	**(3,000)**	29,291	2,237	128%
48,233	10,914	2,125	32,005	71,082	2027/28	**(10,914)**	29,134	1,308	136%
38,567	9,666	3,640	28,684	71,127	2028/29	**(9,666)**	28,842	(1,083)	142%
44,567	8,754	5,127	28,065	86,559	2029/30	**6,000**	30,228	345	146%
37,567	9,439	5,438	26,693	74,598	2030/31	**(7,000)**	31,347	335	157%
28,779	8,789	6,870	29,048	77,239	2031/32	**(8,789)**	32,621	501	163%
19,650	9,128	8,534	31,214	79,298	2032/33	**(9,128)**	35,980	2,437	183%
11,541	8,109	10,321	33,540	84,648	2033/34	**(8,109)**	39,745	4,905	236%
8,022	3,519	12,153	35,981	87,883	2034/35	**(3,519)**	49,786	13,204	295%
5,672	2,350	13,727	107,496	155,180	2035/36	**(2,350)**	67,796	29,385	375%
						(27,475)			

Risk Profile

Provided below is the risk profile of Council with the above parameters

Long Term Financial Strategy Risk Profile

Year	Inflation	Rate %	Underlying Result %	Liquidity	Self Financing	Indebtedness	Investment Gap
94/95	1.9%	0.00%	Low	Low	High	Medium	High
95/96	5.0%	-20.00%	Medium	Low	Medium	Medium	High
96/97	3.6%	1.40%	Medium	Medium	Medium	High	High
97/98	0.4%	2.88%	Medium	Medium	Medium	Low	High
98/99	0.8%	7.50%	Medium	Low	Medium	Low	High
99/00	1.3%	7.00%	Medium	Low	Medium	Low	High
00/01	3.9%	6.50%	High	Medium	Low	Low	Medium
01/02	7.6%	3.00%	High	Low	Low	Low	Medium
02/03	3.8%	6.00%	High	Medium	Low	Low	Medium
03/04	3.0%	6.50%	Medium	Low	Low	Low	Low
04/05	2.4%	3.00%	Medium	Low	Low	Low	Low
05/06	2.4%	5.50%	High	Low	Low	Low	Medium
06/07	3.5%	7.50%	Medium	Low	Low	Low	Medium
07/08	2.8%	7.50%	Low	Low	Low	Low	Low
08/09	4.1%	5.50%	Low	Low	Low	Low	Medium
09/10	2.9%	4.0%	Low	Low	Low	Low	Low
10/11	3.0%	4.0%	Medium	Medium	Low	Low	Low
11/12	3.3%	3.5%	Medium	Medium	Low	Low	Low
12/13	3.1%	4.0%	Low	Low	Low	Low	Low
13/14	2.1%	7.5%	Medium	Low	Low	Low	Low
14/15	3.0%	5.5%	Low	Low	Low	Low	Low
15/16	3.0%	6.0%	Medium	Medium	Low	Low	Low
16/17	3.0%	5.5%	Low	Medium	Low	Low	Low
17/18	3.0%	5.5%	Low	Medium	Low	Low	Low
18/19	3.0%	5.5%	Low	Medium	Low	Low	Low
19/20	3.0%	5.5%	Low	Medium	Low	Low	Low
20/21	3.0%	5.5%	Medium	Medium	Low	Low	Low
21/22	3.0%	5.5%	Medium	Medium	Low	Low	Low
22/23	3.0%	5.5%	Low	Medium	Low	Low	Low
23/24	3.0%	5.5%	Low	Medium	Low	Low	Low
24/25	3.0%	5.5%	Low	High	Low	Low	Low
25/26	3.0%	5.5%	Low	Medium	Low	Low	Low
26/27	3.0%	5.5%	Low	Medium	Low	Low	Medium
27/28	3.0%	5.5%	Low	Low	Low	Low	Medium
28/29	3.0%	5.5%	Low	Low	Low	Low	Medium
29/30	3.0%	5.5%	Low	Low	Low	Low	Low
30/31	3.0%	5.5%	Low	Low	Low	Low	Medium
31/32	3.0%	5.5%	Low	Low	Low	Low	Medium
32/33	3.0%	5.5%	Low	Low	Low	Low	Medium
33/34	3.0%	5.5%	Low	Low	Low	Low	Medium
34/35	3.0%	5.5%	Low	Low	Low	Low	Medium

As mentioned, the two parts for Council's application for a higher rate increase resolved around:

1. Funding for additional infrastructure spending.
2. Funding for the Developers Contribution Scheme.

The components of Council's capital works program are:

Year	Year No	Core Capital	Non Core Capital	Total
2015/16	0	42,968,810	49,562,376	**92,531,186**
2016/17	1	44,774,294	18,102,891	**62,877,185**
2017/18	2	46,365,089	20,739,305	**67,104,394**
2018/19	3	48,014,512	22,481,215	**70,495,727**
2019/20	4	49,724,783	20,277,248	**70,002,031**
2020/21	5	51,498,206	17,076,804	**68,575,010**
2021/22	6	53,337,177	12,805,080	**66,142,257**
2022/23	7	55,244,183	15,542,769	**70,786,952**
2023/24	8	57,221,808	11,190,496	**68,412,304**
2024/25	9	59,272,733	16,740,041	**76,012,774**
2025/26	10	61,399,747	11,044,023	**72,443,770**
2026/27	11	63,605,745	6,783,082	**70,388,827**
2027/28	12	65,893,732	5,187,648	**71,081,380**
2028/29	13	68,266,833	2,860,232	**71,127,065**
2029/30	14	70,728,291	15,830,795	**86,559,086**
2030/31	15	73,281,478	1,316,642	**74,598,120**
2031/32	16	75,929,893	1,308,751	**77,238,644**
2032/33	17	78,677,174	621,136	**79,298,310**
2033/34	18	81,527,098	3,120,904	**84,648,002**
2034/35	19	84,483,590	3,398,514	**87,882,104**
2035/36	20	87,550,727	67,629,093	**155,179,820**
		1,319,765,904	**323,619,045**	**1,643,384,949**

The variation to the rate cap application relates to the proposed increase in funding for the core components of Council's capital works program. The core capital works program relates to infrastructure throughout Council. Council has coded a portion of infrastructure renewal as upgrade works to accurately reflect the renewal of the infrastructure and the improvement works carried out to ensure a longer lifespan for those particular infrastructure works. By doing this Council has improved the infrastructure for use by the community. An example, by when completing appropriate renewal works on a road Council will upgrade parts of the road to improve the bicycle use.

Core Capital Program:

Year No	New	Renewal	Upgrade	Grand Total
0	12,877,075	21,846,524	8,245,211	42,968,810
1	13,383,036	22,455,269	8,935,989	44,774,294
2	13,909,007	23,243,885	9,212,198	46,365,089
3	14,455,783	24,061,306	9,497,424	48,014,512
4	15,024,190	24,908,615	9,791,978	49,724,783
5	15,615,088	25,786,937	10,096,180	51,498,206
6	16,229,371	26,697,443	10,410,364	53,337,177
7	16,867,966	27,641,344	10,734,873	55,244,183
8	17,531,841	28,619,901	11,070,065	57,221,808
9	18,222,000	29,634,423	11,416,310	59,272,733
10	18,939,488	30,686,269	11,773,991	61,399,747
11	19,685,390	31,776,851	12,143,504	63,605,745
12	20,460,836	32,907,634	12,525,262	65,893,732
13	21,267,001	34,080,142	12,919,690	68,266,833
14	22,105,105	35,295,954	13,327,232	70,728,291
15	22,976,420	36,556,715	13,748,343	73,281,478
16	23,882,265	37,864,128	14,183,500	75,929,893
17	24,824,013	39,219,967	14,633,193	78,677,174
18	25,803,093	40,626,072	15,097,934	81,527,098
19	26,820,989	42,084,353	15,578,249	84,483,590
20	27,879,245	43,596,797	16,074,686	87,550,727
Grand Total	**445,930,510**	**659,590,528**	**214,244,866**	**1,319,765,904**

The second component of the rate variation relates to the re indexation of the Developers Contribution Scheme: The comparison for the costings of the Developers Contribution Scheme from 2015 to 2016 are:

Council Commitment for 2016/17			
	As per 2015 Budget	**As Per 2016 Budget**	**Variance**
	($'000)	**($'000)**	**($'000)**
DCP Construction	6,896	7,481	585

Funding of Developers Contribution Scheme

Incorporated within the 2015/16 budget was the long term funding for the Developers Contribution Scheme.

The table below indicates the cashflow funding requirements of the scheme for the twenty (20) year financial plan.

	DCP Liability 2015			
		Income	Expenditure	Balance
		($'000's)	($'000's)	($'000's)
Year 0	**2014/15**	1,429	547	882
Year 1	**2015/16**	4,597	2,092	3,387
Year 2	**2016/17**	4,463	14,066	(6,216)
Year 3	**2017/18**	7,812	19,271	(17,675)
Year 4	**2018/19**	8,649	16,515	(25,541)
Year 5	**2019/20**	7,086	10,512	(28,967)
Year 6	**2020/21**	7,335	16,485	(38,117)
Year 7	**2021/22**	5,609	6,758	(39,266)
Year 8	**2022/23**	6,295	14,284	(47,255)
Year 9	**2023/24**	11,694	9,261	(44,822)
Year 10	**2024/25**	13,311	14,848	(46,359)
Year 11	**2025/26**	8,820	10,406	(47,945)
Year 12	**2026/27**	10,176	489	(38,258)
Year 13	**2027/28**	5,984	4,041	(36,315)
Year 14	**2028/29**	6,872	6,914	(36,357)
Year 15	**2029/30**	4,963	21,313	(52,707)
Year 16	**2030/31**	1,848	558	(51,417)
Year 17	**2031/32**	3,013	-	(48,404)
Year 18	**2032/33**	2,994	-	(45,410)
Year 19	**2033/34**	3,000	-	(42,410)
Year 20	**2034/35**	2,543	693	(40,560)

This table illustrates that over the twenty (20) period of the 2015/16 financial strategy the liability for Council in relation to the Developers contribution scheme was $40 million. Over the first 10 year's the liability was $46 million.

The funding of the liability was a combinations of rate income and loan borrowings. Council set a borrowing strategy in 2015/16, borrowing a total of $46 million over this twenty period which assisted in the funding of the Developers Contribution Scheme and to provide funding for major capital projects in the 2015/16 financial year. Part of the borrowing strategy was to reduce the debt liability from a high of $75 million to $8 million dollars over the twenty (20) year period. Capacity was built into this strategy to enable Council the ability to fund future major projects.

In the creation of the financial strategy, the capital works program was essentially made up of core capital works combined with future funding requirements of the Developers Contribution Scheme. No new projects have been included over the next twenty (2) years thus the need to ensure borrowing capacity is available in the Council's financial strategy.

During 2015/16 it has been recognised that approximately $4 million will not be received through the Developers Contribution Scheme. This money will be received at a future date which has put additional strain on Council's cashflow. The impact has been minimised by the delay of infrastructure works however, as can be seen between the two tables there is still a negative cashflow of approximately $2.2 million.

In addition to the shortfall of funds in 2015/16, as part of the terms of Developers Contribution Scheme, the associated costs are indexed to keep Council's liability current. The effect of both these events have changed the funding profile over the 20 years to:

	DCP Liability 2016			
		Income	Expenditure	Balance
		($'000's)	($'000's)	($'000's)
Year 0	**2014/15**	1,429	547	882
Year 1	**2015/16**	1,716	1,462	1,136
Year 2	**2016/17**	10,238	18,103	(6,729)
Year 3	**2017/18**	11,820	20,739	(15,648)
Year 4	**2018/19**	11,441	22,481	(26,688)
Year 5	**2019/20**	11,033	20,277	(35,932)
Year 6	**2020/21**	12,018	17,077	(40,991)
Year 7	**2021/22**	12,931	12,805	(40,865)
Year 8	**2022/23**	12,481	15,543	(43,927)
Year 9	**2023/24**	14,908	11,190	(40,209)
Year 10	**2024/25**	11,317	16,740	(45,632)
Year 11	**2025/26**	8,141	11,044	(48,535)
Year 12	**2026/27**	7,828	6,783	(47,490)
Year 13	**2027/28**	10,358	5,188	(42,320)
Year 14	**2028/29**	5,027	2,861	(40,154)
Year 15	**2029/30**	2,413	15,830	(53,571)
Year 16	**2030/31**	210	1,317	(54,678)
Year 17	**2031/32**	598	1,309	(55,389)
Year 18	**2032/33**	553	621	(55,457)
Year 19	**2033/34**	530	3,121	(58,048)
Year 20	**2034/35**	587	3,399	(60,860)

Specific Responses

- *There have been significant variations in Council's capital works program over recent years. In particular, it appears that there has been a significant growth in new infrastructure, and a significant underspend in asset renewal expenditure (from budget to actual). Council has underspent on renewals by 19 per cent on average over the past 4 years and has overspent on new capital on average by 88 per cent each year over the past 4 years. It is important that the Council clearly explains these changes. It is also important for Council to explain whether these changes have impacted on the Council's current need for additional revenue to fund capital works.*

The significant increase in new infrastructure spend has been due to a number of new community projects. These include:

- Aquatic Projects $17 million
  New 50m indoor heated pool at Ballarat Aquatic Centre
  3 Water play spaces
  Upgrade of outdoor pools
  Indoor water slide at Ballarat Aquatic Centre
- Ballarat Soccer Precinct $5.4 million
- Eureka Stadium Upgrade $15 million
- Her Majesty Theatre (new Seating) $1.1 million
- Sebastopol Library Upgrade $2 million
- Botanic Gardens Fernery (upgrade) $1.4 million
- Lucas Community Hub $4.2 million
- CE Brown Reserve Upgrade $2.5 million
- Ballarat West Employment Zone $5 million
- Developers Contribution Scheme $2 million
- Each year Council budgets for new assets received from new subdivisions each year. The budget is usually approximately $12 million dollars however, the 2014/15 financial year recorded a result for new subdivisional assets of $23.5 million

Council faces three distinct issues:

1. Since amalgamation (1994) Council has not had sufficient funds to maintain facilities (including recreation facilities) at an adequate level, thus the condition on these facilities have deteriorated to a degree that money spent has been classified as a new or upgrade rather renewal funds.

Council recognised this issue in 2007 and implemented a rating strategy to increase revenue with a view to increase funding for essential capital projects required by the community and to provide essential funding for core capital works such as road renewal etc.

2. Due to the shortfall of funds in the past, Council has not had the resources to fund essential projects. Projects such as an indoor 50m pool, constantly requested by the community, was never built. The revenue base of Council has reached levels to provide sufficient funds to operate these facilities whilst raising borrowings to fund the construction costs.
3. The Ballarat City Council is one of the fastest growing municipalities in Australia. As a result of this growth Council is required to provide facilities in the growth areas. The Lucas suburb has grown quickly whereby Council has acknowledged the demand to build a community centre in that suburb which will provide the community a kindergarten and other essential community facilities.

Whilst Council has invested in significant major projects and has received government grants to assist in the funding of these projects, Council has continued to fund increases in the core, or essential capital projects each year to allow for the efficient operations of the facilities. These include roads, drainage, plant replacement funding etc.

- *We also note significant downward variations in the depreciation and amortisation figures listed in the income statement in the budget and SRP when compared to what was reported in the annual report each year over the past 4 years.*
  - *Please explain this variation?*
  - *Why was the revised depreciation and amortisation figure not reflected in subsequent budgets and SRPs?*

Depreciation estimates is a constant issue for Council which is effected by two issues.

1. Due to the accounting standards all assets are required to be revalued which can alter the valuations significantly between year's dependant on the unit rates for any one year. Council has the issue in the past whereby we significantly revalued the assets, the next year the assets were significantly devalued.
2. In the current climate the value of new infrastructure can vary significantly. In 2014/15 Council budgeted $11.4 million for new subdivisional assets whilst a sum of 23.5 million was recorded at year end.

With the growth of the municipality, and based on the two issues discussed above, it could be conceivable that depreciation could meet the budget set in the strategic resource plan. Depreciation levels are reviewed each year and another review will occur at the end of this financial year to ensure depreciation levels are appropriately recorded.

- *The application refers to core infrastructure – please advise what constitutes core infrastructure?*

Core infrastructure includes the essential capital works that must be expended each year to ensure the efficient operations of Council. The deferral of this type of expenditure will result in long term costs to Council.

The following list is the proposed core capital works program for 2016/17. The amounts provided are the gross cost of this program:

BAC Programmable Assets & Equipment	200,000
Ballarat Botanical Gardens - Asset Renewal Program	60,000
Bicycle Paths	120,000
Bicycle Strategy Projects	260,000
Bridge Rehabilitation	218,400
Bus Shelter repair and replacement	166,400
City Entrances	168,730
Desktop Replacement Program	476,550
Drainage Projects	855,000
Facility Renewal Program	2,706,080
Federal Blackspot Funding	1,000,000
Federal Roads to Recovery Funding	1,000,000
Footpath Works	561,600
Home carers - Hand Held PDA	51,250
IT Infrastructure	509,500
IT System Development	800,000
Kerb and channelling	457,600
Lake Wendouree Infrastructure Works	100,000
Land Development Council Contribution	100,000
Landfill Upgrade	2,080,000
Library Books	386,168
Major New Capital Road Projects	512,500
Major Rural Roads Infrastructure Works	1,284,594
Median Strip Landscaping Project	102,500
Minor Road improvements /upgrades	1,180,600
Monument Renewal Program	110,864
Outdoor Pools	138,580
Parking Meter Replacement Program	80,000
Parks Development Program	288,246
Plant Replacement Program	3,204,970
Playground Improvement Program	60,000
Playspace Planning Framework	277,160
Public Art Program	110,864
Public Place Recycling	11,086
Recreation Capital Improvement Program	4,264,000
Replacement Bins Program	332,592
Road Renewal	7,873,987
School Crossing Supervisor Shelters	22,173
Street Furniture Renewal Program	166,296
Street Irrigation Project	102,500
Subdivision Contribution	12,373,504
	44,774,294

- *A number of inconsistencies between application cover sheet and the application document that require clarification have been identified, these are:*
  - *The estimated shortfall of DCP revenue in 2015-16 (being $3M in the cover letter and $4M in the application).*

The short fall in revenue from the DCP in the 2015/16 financial year is forecast to be $4 million.

  - *long-term cost to Council of the developer contribution scheme - $46 million stated in the cover letter, $40 million stated in the application (under criterion 2). Further, the DCP for Ballarat West identifies a shortfall to Council of $55,806,911 over the life of the scheme and the Council website identifies a shortfall of $59,448,139 after adjustments to the development infrastructure levy in 2015. Please clarify the projected shortfall to Council resulting from the DCP and explain the discrepancies listed above.*

The calculation of the DCP for the 2015/16 budget deemed the liability over the twenty (20) years was $40 million. Over the first ten (10) years the liability was calculated at $46 million The following table (shown on page 30) is the yearly cashflow projections of the DCP included in the 2015/16 financial strategy.

	DCP Liability 2015			
		Income	Expenditure	Balance
		($'000's)	($'000's)	($'000's)
Year 0	**2014/15**	1,429	547	882
Year 1	**2015/16**	4,597	2,092	3,387
Year 2	**2016/17**	4,463	14,066	(6,216)
Year 3	**2017/18**	7,812	19,271	(17,675)
Year 4	**2018/19**	8,649	16,515	(25,541)
Year 5	**2019/20**	7,086	10,512	(28,967)
Year 6	**2020/21**	7,335	16,485	(38,117)
Year 7	**2021/22**	5,609	6,758	(39,266)
Year 8	**2022/23**	6,295	14,284	(47,255)
Year 9	**2023/24**	11,694	9,261	(44,822)
Year 10	**2024/25**	13,311	14,848	(46,359)
Year 11	**2025/26**	8,820	10,406	(47,945)
Year 12	**2026/27**	10,176	489	(38,258)
Year 13	**2027/28**	5,984	4,041	(36,315)
Year 14	**2028/29**	6,872	6,914	(36,357)
Year 15	**2029/30**	4,963	21,313	(52,707)
Year 16	**2030/31**	1,848	558	(51,417)
Year 17	**2031/32**	3,013	-	(48,404)
Year 18	**2032/33**	2,994	-	(45,410)
Year 19	**2033/34**	3,000	-	(42,410)
Year 20	**2034/35**	2,543	693	(40,560)

The calculation of the DCP following the indexation, which occurs on a yearly basis to ensure Council's commitment is appropriately recorded in future financial plans, has only recently been completed.

The figures shown on Council's website were the preliminary figures following the indexation exercise. In the preparation of the 2016/17 budget, these figures were reviewed and finalised between the Finance and Engineering departments so as to accurately record Council's liability for the DCP.

At this stage the website has yet to be updated to reflect these changes. The following table (shown on page 31) is the yearly cashflow projections of the DCP which have been included in the 2016/17 financial strategy.

	DCP Liability 2016			
		Income	Expenditure	Balance
		($'000's)	($'000's)	($'000's)
Year 0	**2014/15**	1,429	547	882
Year 1	**2015/16**	1,716	1,462	1,136
Year 2	**2016/17**	10,238	18,103	(6,729)
Year 3	**2017/18**	11,820	20,739	(15,648)
Year 4	**2018/19**	11,441	22,481	(26,688)
Year 5	**2019/20**	11,033	20,277	(35,932)
Year 6	**2020/21**	12,018	17,077	(40,991)
Year 7	**2021/22**	12,931	12,805	(40,865)
Year 8	**2022/23**	12,481	15,543	(43,927)
Year 9	**2023/24**	14,908	11,190	(40,209)
Year 10	**2024/25**	11,317	16,740	(45,632)
Year 11	**2025/26**	8,141	11,044	(48,535)
Year 12	**2026/27**	7,828	6,783	(47,490)
Year 13	**2027/28**	10,358	5,188	(42,320)
Year 14	**2028/29**	5,027	2,861	(40,154)
Year 15	**2029/30**	2,413	15,830	(53,571)
Year 16	**2030/31**	210	1,317	(54,678)
Year 17	**2031/32**	598	1,309	(55,389)
Year 18	**2032/33**	553	621	(55,457)
Year 19	**2033/34**	530	3,121	(58,048)
Year 20	**2034/35**	587	3,399	(60,860)

- *The time in which the majority of works and costs are required (first 8 years stated in the cover letter and the first 10 years stated in the application).*

As can be seen from the table for the DCP liability included in the 2015/16 budget the majority of the net cost of works occur in the first ten (10) years.

- *What contingency was built into the DCP when it commenced, and what has changed such that this contingency is no longer sufficient?*

There appears to be a miscommunication in relation to contingencies included in the costings of works and the re indexation that is carried out each year to ensure the financial strategy includes the accurate liability of the DCP. Within in the rate variation application discussion resolved around the indexation of costs as contained in the DCP.

- *Please advise how the shortfall in the contingency needed for the DCP has been calculated? What percentage of Council DCP expenditure does this represent in 2016/17 and over the life of the DCP?*

The request for additional funds refers to works to be funded totally from Council funds has increased by $585,000 as a result of the indexation of the costs as per the DCP agreement.

The indexation of costs follows the methodology contained within the DCP agreement.

Each year Council will carry out the indexation to ensure the financial strategy has the accurate liability included within it. When the 2017/18 budget, and all subsequent budgets are formulated, the liability for the DCP is expected to continue to increase.

The funding sought in relation to the DCP component represents 7.44% of the net cost to Council for the 2016/17 year, and represents 0.96% of the total liability of the DCP scheme.

- *What is the cumulative revenue impact of the growth resulting from DCP? What is the net cost to Council of the DCP after including this projected growth?*

Refer to the table on page 36 to see both revised income and expenditure of the DCP. The net cost to Council over the twenty (20) year period has increased from $40.56 million to $60.86 million dollars.

1.1 185E(3)(C) - ENGAGEMENT

- *Other than the 28 day consultation required for council budgets, what other engagement has Council undertaken with the community in recent years relevant to the reason for seeking a higher rate cap?*

Over recent years Council has expanded the community consultation process with regards to the Council plan and budget. Council has tried numerous consultation methods to engage the community.

For the 2015/16 budget, Council delivered additional consultation above the standard 28 day period as per the legislation. The attached documents set out the presentation provided to the following sections of the community.

- Seven (7) Community consultation sessions were held in major communities of Council.
- Budget briefings with key groups
    - University
    - Commerce Ballarat
    - Committee for Ballarat
    - Key industry groups
    - Media groups

- *What was the outcome of the engagement? What were previous levels of community support for the Council Plan, Budget and SRP?*

The majority of comment during the presentations sessions was positive for the direction Council was taken.

In relation to submissions to the budget and council plan, there was little comment regarding the proposed rate increases, comments were centred around additional projects to be considered and more work should be completed to deal with the infrastructure funding.

- *How did Council take account of the views captured through the engagement?*

All views, including formal submissions, were taken on board by Council and considered in additional meetings deliberating any changes to be made.

- *Does Council have a community engagement plan or strategy? What methods does it use when engaging with the community?*

Council has used various strategies ranging from direct consultation, social media, letter drops and submissions.

Council is now in the process of designing a new strategy to engage the community leading into the 2017/18 budget and council plan.

1.2 185E(3)(D) - VALUE AND EFFICIENCY

- *Are there any initiatives or actions taken by the Council in recent years to improve efficiencies and reduce costs? Can you quantify the outcomes of these initiatives?*

Each year Council looks for efficiencies in which to divert funding from operational costs to the capital works program. This being a strategy of Council since 2007.

A number of initiatives have been introduced, these include:

- Introduction of scanning software in data entry functions – annual savings of $250,000 per year.
- Removal of management vehicles – Initial capital saving of $1.5 million with annual savings of $200,00 per year.
- Tighter ceiling levels within Council's procurement policy, setting the ceiling levels at $100,000 resulting in better benchmarking of services thus achieving best value for delivery of those projects. Unable to accurately identify the savings in this case.
- Analysis and review of borrowing strategy, modifying the timing of borrowings, expected savings for the 2016/17 year to be $821,000.
- Review of IT contracts has resulted in ongoing savings of $450,000.
- Review of IT equipment provided throughout the orgainsation, including the provision of phones will yield savings in the vicinity of $250,000 per year.
- A management restructure at the end of 2015 resulted in annual savings of $500,000.
- Council exited from the Regional Library service. The resulted In savings of approximately $300,000 per year. Council made this decision to reinvest this money back into the serv ice to lift the library service which had suffered under the previous model. Council now provides shared library services whereby all participating Councils achieve savings compared to the previous model.

- *The application notes that reductions in operating costs have been realised in recent years. Can these be detailed and quantified?*

Refer to the previous question.

- *Does the Council have tendering and procurement policies and controls to ensure capital works (for renewal and DCP infrastructure) are delivered efficiently and represent value for money for ratepayers?*

As mentioned previously, Council has followed the best practice guideline for procurement of services. Council has tightened these controls by lowering the tender limits to $100,000.

Council also utilises the ability to tender for shared services with regional counterparts where applicable. Ballarat City Council won an award for this tendering method.

Council also participates where possible in tendering groups such as the MAV and Procurement Australia to achieve best value for the purchase of goods.

1.3 185E(3)(E) - TRADE OFFS AND ALTERNATIVE FUNDING

Please provide a fuller explanation of all possible options considered by the Council. This may include:

- *greater utilisation of debt financing*

Refer to page 26 to see the allocation of debt financing to deliver Council objectives. Council is proposing to borrowing to a level of $69 million. In the formulation of the 2015/16 budget Council recognised the need to use debt financing as a means of meeting its objectives of delivering major projects.

With the borrowing strategy there is limits to how much debt can be borrowed. If revenue is not increased sufficiently then there will be limits on how much Council can borrow. In addition, Council's future capital works program only includes the core capital works combined with the DCP liability over the next twenty (20) years.

The borrowing program included in the financial strategy allows Council flexibility to meet future community needs in relation to the provision of necessary community facilities.

As part of the DCP, there is still to be completed work on the expected cost of providing facilities over the next twenty (20) years. If Council were to use the maximum debt facility at this time, there would be no ability for future Councils to deliver any facilities in the future.

With the added uncertainty of future rate cap levels this has to be flexibility built into the financial strategy, to set a strategy at maximum levels would not provide Council any ability to cope with any future financial adversity. To do so would be financially irresponsible.

- *utilising current financial assets and working capital*

Refer to page 26 to review the levels of working capital. The previous Council set a criteria to maintain working capital at levels of at least 150%. This Council has recognised that this would not make the best use of working capital, thus the limit has been removed so as to make the best use of available funds. As can be seen from the financial modelling Council maintains minimum levels of working capital to make the most efficient use of available funds.

- *why future efficiency gains derived from efficiency and service reviews won't be sufficient to cover the gap in the medium to long term*

History, and research has shown that the majority of Council expenditure increases at levels in excess of the general cpi rate that the government has used to set the rate cap.

Though limits have been set for the operational budgets those efficiencies have not been worked out to date. Council will have to find ongoing efficiencies to cater for the expected rate cap inot the future unless Council resolves to cease services.

There has been a general assumption that local government has not sought efficiencies and have excess staff. This Council continually looks to deliver services at reduced cost however there cannot be efficiencies achieved indefinitely. At some stage limits will be achieved. Though Council will find further efficiencies, those areas for the biggest gains have been explored in the past.

The cumulative effect of the loss in rate revenue increases at a greater rate than what will be achieved in the long term in efficiencies.

- *delaying, revising the scope of or reprioritising projects within the capital works program*

As mentioned previously, the projects included in future capital works program only include the core capital works program and the works required under the DCP. Delaying the core capital works program will cost Council in the long term.

Lessons learnt following amalgamations clearly indicates that any short term gains from the delay of essential capital works will cost future Councils more. In the past Council delayed the replacement of plant which resulted in the efficient delivering of those services. When Council resolved to bring the fleet up to appropriate levels significant funding was required to achieve this objective.

- *Council makes the statement "the only option open to Council if the funding is not granted is to reduce infrastructure spending at the required levels". Why would Council not take this option?*

As explored in the financial modelling, increased debt financing is not feasible in the medium to long term. The other options open to Council is to either reduce expenditure from the operation budget or the capital budget.

The operational budget has already faced significant reductions in expenditure, as previously mentioned the reductions have yet been worked out, to increase those reductions would put Council in a position where all the savings cannot be achieved thus resulting in significant cut backs in future years to compensate for any over expenditure this financial year.

1.4 185E(3)(F) - LONG TERM PLANNING

Please provide the following documents and information (if they exist):

- *long term financial plan (other than SRP)*

Twenty (20) financial plan including history dating back to 1994/95 included as an attachment.

- *asset management plan(s)*

Attached

- *debt policy/strategy*

Debt policy is as per listed in the financial strategy for the 2016/17 year onwards. Council does not have a separate document, Council views its funding requirements each year when the financial strategy is reviewed and updated. The overarching policy is that Council remains within the base limits set down by the State Government.

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- *Please clarify the Council's projections for operating expenses growth. Under 'reasons' section in the application, and during the preliminary meeting, Council noted that the funds allocated for operating activities is budgeted to increase by 3 per cent per year. Whilst this is generally consistent with the budget baseline information, where operating expenses are forecast to increase by 1.58 per cent between 2015/16 and 2016/17, it is inconsistent with the 2015/16 SRP where operating expenses are set to increase over the next four years by 6.7 per cent on average per year.*

The expenditure increases are as per the financial strategy. The only exception to this is an inbuilt escalation in expenditure to match the growth of the municipality. As the growth of the municipality occurs revenue is increased through supplementary valuations. This growth results in increased services levels especially in the delivery of outdoor services. As a result, 75% of all growth funding through supplementary rates is directly attributed to those out door services.

In previous strategies 50% of growth funding was provided, history has shown that this level of funding was not sufficient and basic work levels were not achieved.

- *Has the full long term effect of the 1.2 per cent increase in rates beyond the average rate cap been considered (as the extra 1.2 per cent will be permanently increase the rate base)?*

Refer to page 26 for details.

Calculating the Higher Rate Cap

The edits completed by the commission staff are correct.

- *There is a difference in the schedule 1 for other expenditure for the 'Expenditure – WHC' sheet and 'Expenditure – NHC' sheet. For the 'Expenditure – NHC' sheet, it contains $696,000 of other income to be allocated for 'Councillor Pensioner Rebates', 'Council Recreational 1 Rebate', and 'abandonments'. But 'Expenditure – WHC' does not include this expenditure. Is this a mistake?*

This is a mistake, both the NHC and WHC sheets for the operational budget should both be the same.

- Council is requesting a rate increase of $1,033,000 for capital expenditure. This is reflected on the 'Assets – NHC' and 'Assets – WHC' sheets and the 'Calculating the Higher Cap' sheet. But, the 'Revenue WHC' shows rates are set to increase by $ 1,043,654 ($10,654 more than $1,033,000). Is this a mistake?

The additional $10,654 relates to the increase in supplementary rates. Supplementary rates have been calculated on 1% of total rates raised. The calculation for the higher rates was only calculated on the rates calculated without any supplementary rates. The variance is approximately .01% which is deemed insignificant.

- *The outputs sections in 'outputs – WHC' and 'Outputs – NHC'. They have not been completed.*

As explained at our meeting held on the 17th March, for the purposes of completing the templates it was determined that business unit reporting was the most appropriate, considering that reconciliation will be required in the future. To provide data at lower levels were outputs are known would require a change in the chart structure which is not possible in the time frame. As discussed meaningful outputs at business unit level is not available at this time and considering the application for the higher cap is for capital works the outputs will be of no relevance at this time.

- *Schedule 1 in sheets 'Revenue – NHC' and 'Revenue WHC'. They seem to be completed incorrectly.*

The Revenue WHC is incomplete, the amount of $105,208,652 should be inserted into Cell R152.

- *The Service “M.A.D.E.”. What does the acronym stand for?*

This the Museum of Australian Democracy at Eureka. This is a separate incorporated body owned by Council that runs this museum; Council provides a contribution to its operations.

- *In the assets sheets, there are many assets types listed with no ‘percentage of assets past intervention level’*

Assets in this situation do not currently have the data available.

A Responsible Budget

The budget is a careful balance of being responsible with rate-payers money and maintaining, serving and building Ballarat so that every year, it's the city you want to live in.

Each new project and each commitment of extra investment has been carefully considered.

We are committed to delivering our projects on time and on budget. We are controlling costs of the business, and we have reduced management costs by $1 million this year.

This lets us spend more on the projects and services that we know are a priority for the people of Ballarat.

Servicing Ballarat

This year's budget is about delivering the fundamental services for Ballarat. Council have locked in the necessary costs to run its 100-plus services in 2015/2016 Budget.

This budget delivers all the services that you count on and use every day including roads maintenance, libraries, immunisation and collecting garbage. We know these services are important to residents and they are the core work of Council. All of these services will continue to be funded through this budget.

Maintaining Ballarat

We are taking charge of maintaining Ballarat. We need to take care of what we have – our roads, our buildings, our parks and gardens, and sporting and recreational facilities – it makes good financial sense. And means that the things that we love about Ballarat will be here for future generations.

We are making key investments to keep Ballarat up-to-date, and well placed for future growth, which means putting extra money into core infrastructure.

Building Ballarat

This year's budget continues the hard work of building for growth in Ballarat, including stimulating job growth and a stronger local economy. We have received massive State Government funding for key major projects, and we will partner that with a $5 million investment in the Ballarat West Employment Zone, for the future growth and jobs in Ballarat, and $5 million for the Ballarat Major Events Precinct.

For the first time, we ran early online and face-to-face consultation, talking about popular new community initiatives and asking residents to tell us their priority projects for this budget. In response, we will deliver 11 new projects from this list and give you what you told us you want in Ballarat.

Clean Ballarat

As one of Australia's fastest growing regional cities, Ballarat is committed to preserving the quality environment that makes our city a special place to live. Council is dedicated to Clean Ballarat – providing an integrated solution to all of the city's environmental initiatives. This includes looking at

how we manage and deal with the city's waste as well as innovative solution to our water and energy use.

Budget Narrative with Projects

Servicing Ballarat

This year's budget is about delivering fundamental services for Ballarat. Council have locked in the necessary expenses to run its 100-plus services for the 2015/2016 Budget.

This budget delivers all the services that you need and use every day including roads maintenance, libraries, immunisation and collecting garbage. We know these services are important to residents and they are the core work of Council.

- $13.73 million for roads, drains and footpath projects, including $2 million for rural roads
- $200,000 additional funding for community events including Christmas and Winterlude
- $300,000 to the City of Ballarat Community Impact Grants Program
- $375,000 to the Township Empowerment Programs
- $360,000 to bicycle projects

Maintaining Ballarat

We are taking charge of maintaining Ballarat. We need to take care of what we have – our roads, our buildings, our parks and gardens, and sporting and recreational facilities – it makes good financial sense.

We are making key investments to keep Ballarat up-to-date, and well placed for future growth, which means putting extra money into core infrastructure.

- 4% increase in capital investment
- $2.6 million to maintain Council buildings – an increase of $1.2 million
- $380k for the city's public monuments, street furniture and art installations
- $360k for city presentation projects
- $600k for neighbourhood parks including playgrounds.

Building Ballarat

This year's budget continues the hard work of building for growth in Ballarat, including stimulating job growth and a stronger local economy.

- $5 million to Ballarat West Employment Zone. Matching State Government funding of $25 million
- $5 million to the Wendouree Basketball and Sports Centre. Partnering $9m from State Government
- $2.65 million to Lucas Community Hub. Partnering $1.6m from State Government

We had great community interest and support for the Budget Priority Projects Survey and Council is pleased to deliver $4.7 million in community projects. Of the 16 popular projects, 11 will be funded in 2015/2016 Budget.

- $1.4 million – Fernery at Ballarat Botanical Gardens
- $1.25 million – Sebastopol Library redevelopment
- $1.148 million – Her Majesty's Theatre redevelopment
- $250,000 – CBD Public Toilet
- $230,000 – Black Hill Reserve
- $150,000 – Mining Exchange sound project
- $100,000 – Implementation of the Environmental Sustainability Strategy
- $100,000 – Regional Motorsport Facility
- $50,000 – Art Gallery of Ballarat renewal
- $50,000 – Youth Space
- $25,000 – LED Street Lighting

Council has delivered the new indoor 50 metre pool project under budget and will invest the remaining funding into new aquatics infrastructure and upgrades to existing aquatic assets.

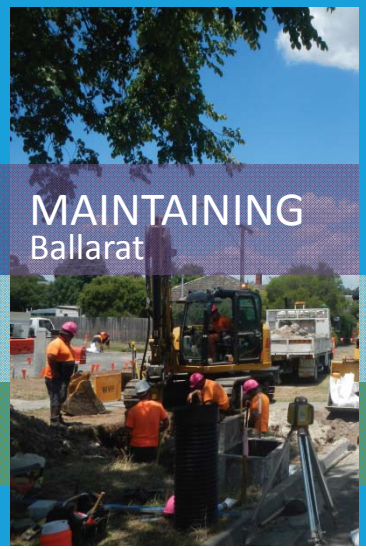
- New water playspace in Sebastopol
- New water playspace at the Ballarat Aquatic and Lifestyle Centre (BALC)
- New teenage water playspace replacing the slide at Eureka Pool.
- Reinvestment in local pools: Buninyong, Brown Hill and Black Hill outdoor pools

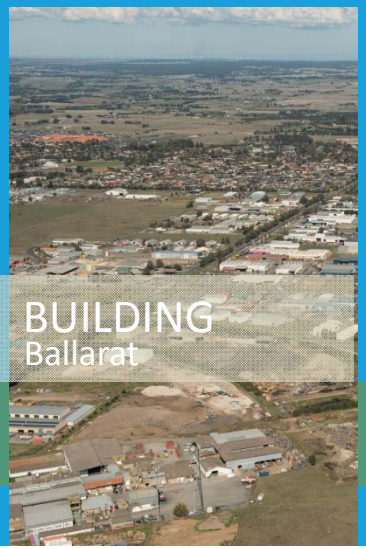
Clean Ballarat

Council is dedicated to Clean Ballarat – providing an integrated solution to all of the city's environmental initiatives. This includes looking at how we manage and deal with the city's waste as well as innovative solution to our water and energy use.

- $100,000 to a priority action of the Environmental Sustainability Strategy
- $25,000 to replacing street lighting with low energy use light fittings
- Investigate innovative waste management, from street collection to transfer station and landfill.
- Progress options for bio energy within the Ballarat West Employment Zone.

CITY OF BALLARAT Budget 2015/16





CITY OF BALLARAT Budget 2015/16

April 8-24	May 18 – June 15	June 17	June 24
Priority Projects Consultation Community Meetings Ward Meetings Sport & Recreation Meeting Arts & Culture Meeting Townships Meetings Miners Rest, Learmonth, Buninyong Online via myTownHall	Formal Budget Process Residents are encouraged to view the Draft Budget and Council Plan and provide feedback to Council. Both documents are available to view at the City of Ballarat's Customer Service Centre, 25 Armstrong Street South; Town Hall, Sturt Street; and online at the City of Ballarat website: www.ballarat.vic.gov.au	Council meeting for Draft Budget submissions	Budget goes to Council for adoption

CITY OF BALLARAT Budget 2015/16

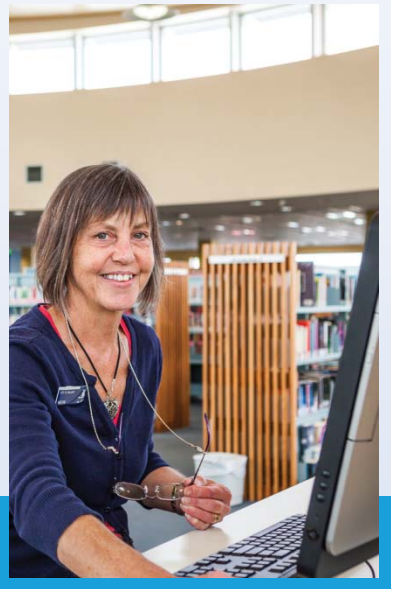
This year's budget is about delivering fundamental services for Ballarat. Council have locked in the necessary expenses to run its 100-plus services for the 2015/2016 Budget.

This budget delivers all the services that you need and use every day including roads maintenance, libraries, immunisation and collecting garbage. We know these services are important to residents and they are the core work of Council.

A selection of Servicing Ballarat projects:

- **$13.63 million** for road construction and renewal, including $2 million for rural roads
- **$1.54 million** for drainage projects
- **$1.65 million** for Ballarat's three libraries and outreach service
- **$1.148 million** for Bicycle Strategy projects and bicycle paths
- **$200,000** additional funding for community events including Christmas and Winterlude
- **$300,000** to the City of Ballarat Community Impact Grants Program
- **$375,000** to the Township Empowerment Programs

SERVICING BALLARAT



CITY OF BALLARAT Budget 2015/16

We are taking charge of maintaining Ballarat. We need to take care of what we have – our roads, our buildings, our parks and gardens, and sporting and recreational facilities – it makes good financial sense.

A selection of Maintaining Ballarat projects:

- **$2.6 million** to maintain Council buildings – an extra $1.2 million on the previous year
- **$10 million** for roads maintenance - (On top of $13.63m building component)
- **$210,000** for bridge repairs
- **$1.02 million** for city presentation projects including street furniture, city entrances, street irrigation and landscaping, public place recycling and bus shelters
- **$216,000** for public art and restoring city monuments
- **$318,000** for neighbourhood playgrounds
- **$281,000** for neighbourhood parks

4% increase in capital investment

MAINTAINING BALLARAT

CITY OF BALLARAT Budget 2015/16

This year's budget continues the hard work of building for growth in Ballarat, including stimulating job growth and a stronger local economy. Extensive lobbying with the State Government has secured $53 million to build a better Ballarat.

This year's Council Budget funds critical major projects, in partnership with the State Government:

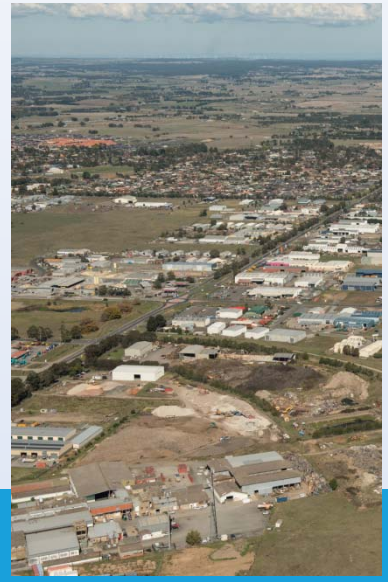
- **Ballarat West Employment Zone $5 million** - City of Ballarat **$25 million** - State Government
- **Wendouree Basketball and Sports Centre $5 million** - City of Ballarat **$9 million** - State Government
- **Lucas Community Hub $2.65 million** - City of Ballarat **$1.6 million** - State Government

In 2015/16, the City of Ballarat will also build the following projects, fully funded by the State Government:

- **Eureka Stadium AFL Upgrade $15 million** - State Government
- **CE Brown Reserve Clubrooms Upgrade $2.5 million** - State Government

The City of Ballarat will also invest **$4.5 million** in sports and recreation projects in 2015/16.

BUILDING BALLARAT



CITY OF BALLARAT Budget 2015/16

Council is dedicated to the Clean Ballarat program– providing an integrated approach to all of the city's environmental initiatives. This includes looking at how we manage and deal with the city's waste as well as innovative solution to our water and energy use.

Clean Ballarat projects in the Draft Budget 2015/16:

- **$2.32 million** for waste and recycling services and programs
- **$100,000** to deliver a priority action of the Environmental Sustainability Strategy
- **$25,000** to replace street lighting with low energy use light fittings as part of a long term transition project
- Investigate innovative waste management, from street collection to transfer station and landfill.
- Progress options for bio energy within the Ballarat West Employment Zone.

CLEAN BALLARAT

CITY OF BALLARAT Budget 2015/16

In the Draft Budget 2015/16, Council is pleased to deliver 11 new and popular projects, totalling a $4.5 million investment in the community

In April, Council asked the community to get involved in early discussions with the Budget Priority Projects Survey. A total of 638 residents completed the simple questionnaire on myTownHall and paper surveys, sharing their thoughts on which proposed projects were a priority for Ballarat this year.

You told us what you wanted in Ballarat this year, and we have listened.

PROJECTS

myTownHall Have Your Say BALLARAT

CITY OF BALLARAT Budget 2015/16

We will deliver all these great community projects in 2015/2016, building a better Ballarat, for our local community and for visitors to the city.

Fernery – $1.4 million
Design and build a new fernery and interactive experience at the Ballarat Botanical Gardens

Sebastopol Library – $1.25 million
Rejuvenation of the existing Sebastopol Library to provide a modern library and community hub

Her Majesty's Theatre – $1.12 million
Replace theatre seats and upgrade theatre amenity to provide a contemporary theatre experience

Public Toilet – $250,000
Construct an additional CBD Public Toilet in the entertainment precinct

Black Hill Reserve – $230,000
Re-open the lookout facility at Black Hill and improve road access

Mining Exchange – $150,000
Install soundproofing and acoustic treatment to establish the Mining Exchange as a live music venue

Implementation of the Environmental Sustainability Strategy – $100,000
Funding to implement a priority action contained within the ESS

Motorsport Regional – $100,000
Secure land for a possible future motor sport complex

The following projects will also be funded through internal re-prioritisation of council programs :

Art Gallery of Ballarat – $50,000
Renew the front foyer desk and install blackout curtains in the rear gallery

Youth Space- $50,000
Establish a new Youth Space at a location to be decided

LED Street Lighting – $25,000
Replacement street lighting in the City of Ballarat with low energy use light fittings

PROJECTS

My TownHall
Have Your Say
CITY OF BALLARAT

CITY OF BALLARAT Budget 2015/16

RATES

The City of Ballarat has proposed a 5.5% rate increase for the 2015/16 financial year. The increase is applied to all ratepayers. Commercial rate will rise by 3.5%.

Waste Management Service Charge

This charge covers both the weekly collection of household waste and the fortnightly collection and disposal of recyclables. Residential properties that are provided with a waste removal service will be charged a total of $284 per property in 2015/16.

Fire Services Levy

All councils in Victoria are legislated to collect the Fire Services Levy on behalf of the State Government. The Fire Services Levy is included in your rates.

Rates Rebate for eligible pensioners

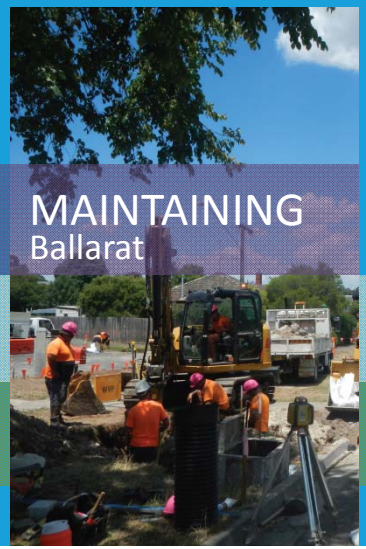
Eligible pensioners who live alone in their own home and are solely responsible for the payment of rates and charges on that property will benefit from a rebate on their residential rate bill in the 2015/16 financial year. The City of Ballarat provides the rate relief to assist with cost of living pressures.

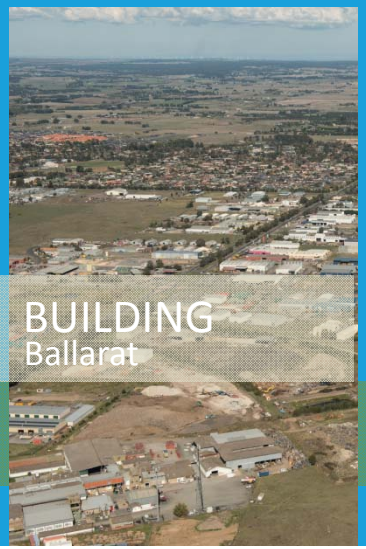
RATES

CITY OF BALLARAT Budget 2015/16

The Draft Budget and Council Plan will be available to view from Monday, 18 May.

Feedback must be received by 9am, Monday 15 June.





CITY OF BALLARAT

Buildings

Asset Management Plan

Version 1

May 2015

Document Control	

Document ID: City of Ballarat Buildings 2015 AM Plan DRAFT v1 20150609.doc

Rev No	Date	Revision Details	Author	Reviewer	Approver
1	9 Jun 2015	First DRAFT for review/comment. Modelling the Asset Register and an affordable scenario aligned to the LTFP.	SV(JRA)	CH(CoB) BH(CoB)	

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

Context

Located 110km north-west of Melbourne, the City of Ballarat municipality covers an area of 740 km² and has a population of 100,550[1] people with a conservative forecast growth of 30%[2] (or 1.7% per year) to 130,000 by 2031.

Council has a diverse building stock servicing the main centre of Ballarat plus four outlying townships and the wider region.

A significant proportion of council's infrastructure assets have been in existence for many years. These assets originated from a combination of Council, State and Federally funded construction programs and a small number of assets donated from non-profit organisations and/or from developer contributions from town planning approvals.

Managing services from these assets, whether they're old or new, in a high growth area is a challenge for any council. This plan focuses on the needs, challenges and risks attributed to managing the existing and future building assets across the City of Ballarat for the next 20 years.

The purpose of this document is to provide the framework for a sustainable delivery model for council's buildings in the most cost effective manner.

The Building Assets

The City of Ballarat has 720 building assets and are classified as follows:

- 20 Amenities
- 3 Art Venues
- 11 Astronomy Buildings
- 31 Child Care Centres
- 21 Commercial
- 38 Community Centre
- 42 Community Club Room
- 6 Glasshouse
- 3 Libraries
- 46 Miscellaneous Structures
- 29 Offices
- 57 Public Toilets
- 185 Sheds
- 137 Shelters
- 91 Sports Amenities

These assets have a depreciated replacement value (written down value) of $126M and a current replacement cost of $234M as reported at 30 June 2014.

The Aim

The aim of this plan is to forecast the timing and cost to replace existing assets and their key components over a 20 year planning period commencing in the 2014/15 financial year to an agreed service level. This is to ensure lifecycle costs are kept to a minimum and service levels are provided at an acceptable and sustainable level. In addition, it is important the provision of new buildings and facilities are duly considered in respect to impacts on service levels, resources, finances and risk.

It is these impacts that need to be assessed as part of this plan and where the residual risk is considered high, due processes and control measures are employed to ensure exposure is accepted and/or minimised in consultation with the community.

The Approach

For building assets, three modelling scenarios are considered when developing forecasts and impacts.

Scenario 1 projects future renewal timing and costs using the acquisition year (or date of last renewal) and useful life from Council's asset register. This is an important aspect as it communicates what is being stated in Council's Financial Statements and should reflect the status of asset consumption and remaining service potential. This is an important consideration as instances can occur where remaining lives could be under and/or over stated which can impact valuations and the subsequent depreciation expense allocated to the Operating Statement.

Scenario 2 is aimed at sustaining existing assets over the long term at current service levels. The needs are based on technical knowledge and expertise from officers and existing modelling systems. This is the best available measure of outlays required at the present time ensuring confidence is increased over time via an improvement plan.

Scenario 3 balances the operating, maintenance and capital renewal and upgrade/new expenditure projections identified in Scenario 2 with the available funds in the Long-term Financial Plan (LTFP) and discusses the likely service implications and risks should there be a shortfall.

[1] 2011 Census
[2] http://forecast2.id.com.au

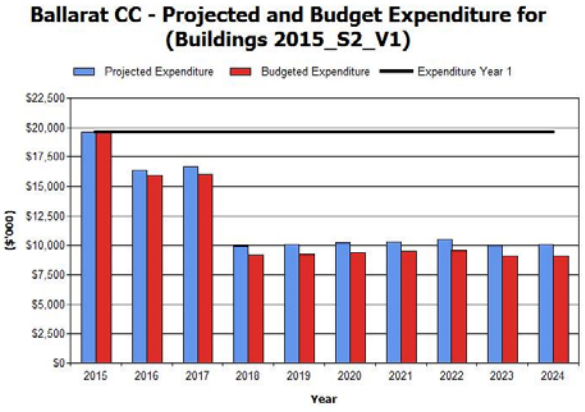
The difference between Scenario 2 and 3 represents "what we can't do". This enables a discussion about the 'gap' in service delivery and will lead to a more informed discussion about what are achievable and acceptable service levels, while giving a focus on managing risk. In time, with increased knowledge of the asset stock and future needs Council will be in a more effective position to communicate these risks to the community.

This plan focuses on the development of all three scenarios to understand the likely trade-off decisions on service levels, costs and risk when balancing the projected needs with the available finance.

What does it Cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is $123.9M or $12.39M on average per year.

Estimated available funding for this period is $116.6M or $11.66M on average per year which is 94% of the cost to provide the service. This is a funding shortfall of $733,000 on average per year. Projected expenditure required to provide services in the AM Plan compared with planned expenditure currently included in the Long Term Financial Plan are shown in the graph below.



Projected expenditure to sustain current service levels against the budgeted LTFP

The Findings

Results from Scenario 1 indicate that approximately 3.5% of the assets (in value) have reached the end of their life according to the asset register. This has two consequences:

1. There is an understatement of useful lives for some assets. The asset register indicates assets to the value of approximately $8.2M have passed their designated required renewal date. This is shown in figure 5.1.

2. Consequently, the forward projection of depreciation cannot be used as a reliable measure of asset consumption because it excludes the material amount of building assets that have been fully depreciated. (i.e. representing approximately 3.5% of asset value)

The current year operations and maintenance budget is $3.3M and the projected requirements are expected to increase to $4.4M by 2024 and $5M by 2034 due to the addition of new assets from increasing demand, growth and/or risk control measures.

Renewing of existing assets is estimated at $26.8M to sustain service levels at current levels for the next 10 years.

An estimated $74M ($18M contributed and $56M constructed) of building assets is forecast to be added in the first 10 years of the planning period specifically for upgrading and/or provision of new assets to meet growth and demand.

These medium to long term estimates exceed the LTFP over the 10 year planning period by $7.3M. Subsequently, ongoing if not improved monitoring of ageing and significant assets is crucial to ensure services can be sustained and risk of asset 'failure' is minimised.

Scenario 3 balances the above needs with the 10 year Long-term Financial Plan. At the City of Ballarat, this means the likely reduction of service levels in some areas. Given the possible $7.3M shortfall in funding over the next 10 years it is possible planned maintenance schedules could be compromised combined with delayed response times to reactive maintenance requests in order to meet the revenue projections in the LTFP.

There is limited function and utilisation data, knowledge and reporting of assets combined with the likely demands in these areas due to growth will pose a risk for Council. Increased investment in monitoring and reporting of the buildings performance will enable a more valued decision support mechanism ensuring risk is being duly managed.

What we will do

We plan to provide building services for the following:

- Operation, maintenance, renewal and upgrade of all building assets to meet service levels set by Council in annual budgets.
- Sustain a $3.3M annual operational budget (in real terms) over the 10 year planning period.
- Sustain a $26.8M average renewal program over the 10 year planning period.
- Sustain a $56.0M upgrade program over the 10 year planning period.
- We will assess remaining life of our existing assets and align with up to date condition data of critical assets as a priority.
- Improve confidence in the forward renewal needs in the next revision of this plan.

What we cannot do

We do **not** have enough funding to provide all services at the desired service levels or provide new services unless there is a real increase in the operational budget allocation.

Works and services that cannot be provided under present funding levels are:

- An estimated $7.3M funding shortfall in priority operations and maintenance over the next 10 years due to the addition of contributed and new assets.

This can result in lower service delivery and increased risk prompting the need to consult with the community regarding affordable service delivery options.

Managing the Risks

There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:

- Ageing and general deterioration of assets.
- Maintenance and servicing costs increasing beyond forecast revenue projections.
- Some buildings deteriorating to a lower service standard resulting in a higher risk profile.

We will endeavour to manage these risks within available funding by:

- Re-allocating finances to priority assets to sustain current services where possible.
- Ensuring preventative maintenance schedules are maintained and enhanced where possible.
- Investigate procurement strategies and alternative cost effective treatments to reduce replacement and lifecycle costs.
- Improve management and prioritisation of capital renewal and upgrade projects.
- Undertake targeted condition, function and capacity audits to better understand performance and report status to the community.
- Ensure our Community Engagement Strategy is targeted and adequately resourced.

Confidence Levels

This AM Plan is based on a medium level of confidence information. The expenditure and valuations projections are based on best available data and knowledge from systems and key staff.

The Next Steps

As with all asset management plans, they need to promote a process of continuous improvement. The actions resulting from this asset management plan are:

- Implement a continuous improvement strategy to assess and report on the condition, function and capacity of council controlled assets.
- Develop and confirm current and desired levels of service in consultation with the community to understand sustainable levels of service.
- Assess remaining life of our assets and align with up to date performance data and knowledge.
- Develop and adopt a prioritisation framework for renewal and upgrade/new projects.
- Assess building infrastructure risks and report to the audit committee.
- Ensure the Asset Management Plan is updated on an annual basis incorporating an annual review and update of service level performance, financial projections and risk.

Questions you may have

What is this plan about?

This asset management plan covers the building assets that serve the City of Ballarat community's needs. These assets include Town Hall, Arts Centres, Tourist Venues, Libraries, Maternal & Child Health Centres, Sports Pavilions, Halls, Community Centres, and many more throughout the community area that enable people to amongst other things to learn, meet, perform, do business, shelter and play.

Managing services from ageing and long-lived infrastructure is a challenge for many Councils and this plan focuses on the needs, challenges and risks attributed to managing building assets over the next 20 years.

What is an Asset Management Plan?

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

The asset management plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services.

Why is there a funding shortfall?

Most of the Council's building assets were constructed by council from own source revenue or government grants, at times provided and accepted without consideration of ongoing operations, maintenance and replacement needs.

Many of these assets are approaching the later years of their life and require replacement or major refurbishment to meet current standards.

Our present funding levels are sufficient to continue to provide existing services at current levels in the short to medium term however this scenario is marginal and dependant on a sustainable funding model. Some assets may experience decreasing service levels and consequently increase risk should funding fall short.

What options do we have?

Resolving a funding shortfall involves several steps:

1. Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels,
2. Improving our efficiency in operating, maintaining, renewing and replacing existing assets to optimise life cycle costs,
3. Identifying and managing risks associated with providing services from infrastructure,
4. Making trade-offs between service levels and costs to ensure that the community receives the best return from infrastructure,
5. Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs,
6. Consulting with the community to ensure that building services and costs meet community needs and are affordable,
7. Developing partnership with other bodies, where available to provide services,
8. Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

What happens if we don't manage the shortfall?

It is possible that we may have to reduce service levels in some areas, unless new sources of revenue are found. For the building assets, the service level reduction may include:

- Accelerated asset deterioration,
- Increasing pressure to effectively allocate available funds,
- Increased utilisation,
- Reduced hours of operation, and/or
- Closure.

What can we do?

We can develop options, costs and priorities for future building services, consult with the community to plan future services to match the community service needs with ability to pay for services and maximise community benefits against costs.

What can you do?

We will be pleased to consider your thoughts on the issues raised in this asset management plan and suggestions on how we may change or reduce its building mix of services to ensure that the appropriate level of service can be provided to the community within available funding.

2. INTRODUCTION

2.1 Background

An asset management plan demonstrates responsive management of assets (and services provided from assets), compliance with regulatory requirements, and communicates funding needed to provide the required levels of service over a 20 year planning period.

The asset management plan follows the format for AM Plans recommended in Section 4.2.6 of the International Infrastructure Management Manual[3].

The asset management plan is to be read with the organisation's Asset Management Policy, Asset Management Strategy and the following associated planning documents:

- City of Ballarat, 2014, 'Council Plan 2014/15'
- City of Ballarat, 2014, 'Strategic Resource Plan 2014 – 2015'
- Capital Works Program – Policy Framework
- Maintenance Plans and Specifications
- Strategy Documents / Master plans
    - Public Toilet Strategy
    - Regional Pound (CP1.9.2)
    - Multistorey car park within CBD (Proposed) (CP1.4.4)
    - Asset Renewal Strategy (CP1.10.1)
    - Preserving our Heritage Strategy (CP1.11.1)
    - Botanical Gardens Fernery (CP1.11.2)
    - Regional Archive and Heritage Centre (CP1.11.2)
    - Neighbourhood Planning Initiatives – Miners Rest (CP2.1)
        - New early years facility (CP2.1.3)
        - Community Hub (CP2.1.4)
    - Early Years Infrastructure Plan 2013 – 2017 (CP2.2.2)
    - Aquatics Strategy –
        - 50 m indoor heated pool with indoor aquatic play space elements at the Ballarat aquatics centre (CP2.3.1)
        - upgrade to visitor amenities at the Eureka outdoor pool (CP2.3.4)
    - Sports and Recreation Strategy (CP2.3.5)
    - Five-Year Recreation Asset Program (CP2.3.6)
    - Precinct Master Plan (CP2.3.9)
        - Hollioake Park precinct – future indoor sport redevelopment options
    - Integrated Indoor Sport Solution (CP2.3.10)
    - Regional Motorsport Facility (CP2.3.11)
    - Disability Access and Inclusion Plan (CP2.7.1)
    - Community Safety Action Plan (CP2.8.1)
    - Social Housing Plan (CP2.11.1)
    - Feasibility Plan for Regional Archive Centre (CP2.14.2)
    - Feasibility Study for Ballarat Library/Community Hub and Sebastopol Library/Community Hub (CP2.14.3)
    - Project Plans - Ballarat West Employment Zone (CP3.1.2)
        - Freight Facility
        - Innovation Centre
        - Bio-energy Facility
    - Development option for Civic Hall Project (CP3.2.1)
    - Livestock Selling Centre - Redevelopment Project (CP3.3.1)
    - Showgrounds Feasibility Plan (CP3.3.2)
    - Integrated Ballarat Hospital Precinct Master Plan and Economic Activation Plan (CP3.3.4)
    - Ballarat Aerodrome Master Plan (CP3.3.5)
    - Ballarat Regional Soccer Facility project Plan (CP3.3.6)

[3] IPWEA, 2011, Sec 4.2.6, *Example of an Asset Management Plan Structure*, pp 4|24 – 27.

- Urban Renewal Master Plan for Ballarat Railway Station Precinct (CP3.4.1)
- Visitor Information Centre – Project Plan (CP3.5.3)
- Museum of Australian Democracy at Eureka - Project and operation plans (CP3.5.7)
- Ballarat Events Precinct Master Plan (CP3.6.1)
- Equine Precinct Master Plan (CP3.6.2)
- CBD Strategy (CP3.7.1)
- School Mines Site - Master Plan (CP3.7.2)
- Arts and Culture Strategic Plan 2013 -2017 (CP3.8.1)
- Proposed Arts Hub - Business Plan (CP3.8.3)
- Infrastructure Plan for Her Majesty's Theatre (CP3.8.7)
- Art Gallery That – Capital Works Program (CP3.8.8)
- Customer Service Areas – Presentation Upgrade Plan (CP4.7.2)
- Environment Sustainability Strategy (CP4.13.1)

The City of Ballarat (CoB) Building assets make up 16% of the Council's total infrastructure assets by value.

The infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide building services to the community.

Table 2.1: Assets covered by this Plan

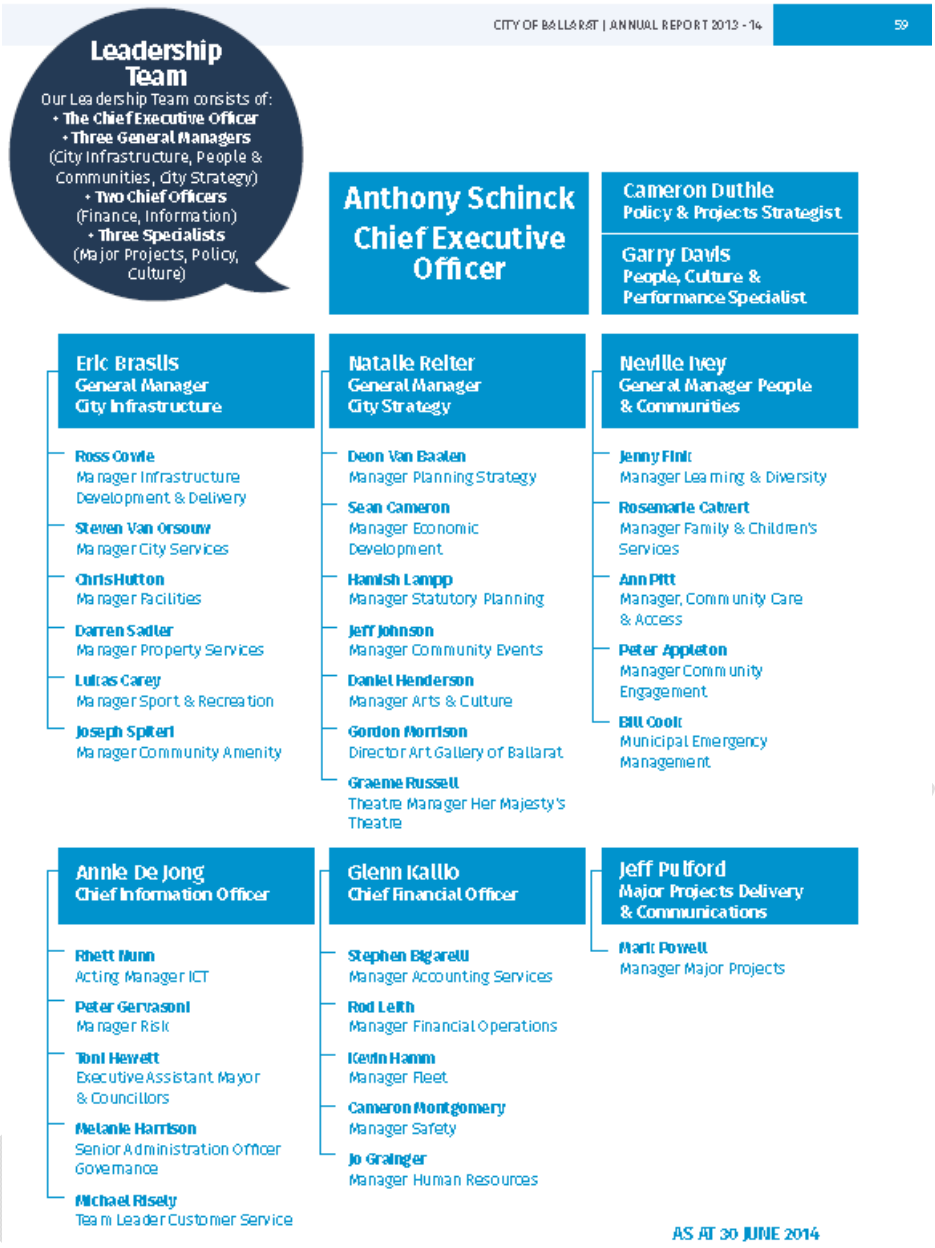
Asset category	N°	Replacement Value
B-Buildings-B-Amenities	20	$2,213,500
B-Buildings-B-Arts Venue	3	$100,000,000
B-Buildings-B-Astronomy Building	11	$848,000
B-Buildings-B-Child Centres/ELC	31	$7,548,000
B-Buildings-B-Commercial	21	$5,689,500
B-Buildings-B-Community Centre	38	$19,093,019
B-Buildings-B-Community Club Room	42	$3,735,000
B-Buildings-B-Glasshouse	6	$2,765,000
B-Buildings-B-Libraries	3	$4,500,000
B-Buildings-B-Miscellaneous Structures	46	$4,076,500
B-Buildings-B-Office	29	$32,340,000
B-Buildings-B-Public Toilet	57	$6,040,000
B-Buildings-B-Shed	185	$7,401,000
B-Buildings-B-Shelter	137	$4,859,500
B-Buildings-B-Sports Amenities	91	$32,395,606
TOTAL	**720**	**$233,504,625**

Key stakeholders in the preparation and implementation of this asset management plan are: Shown in Table 2.1.1.

Table 2.1.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Councillors	• Represent needs of community/shareholders, • Allocate resources to meet the organisation's objectives in providing services while managing risks, • Ensure organisation is financially sustainable.
CEO	Overall responsibility for developing the asset management strategy, plans and procedures and reporting on the status and effectiveness of asset management within the organisation.
General Manager City Infrastructure	• Managerial oversight of inspection regime, identification of and timely and effective response to risks. Ensure annual review and update of service levels. • Ensure forward expenditure projections are based on delivering at least two service level scenarios (i.e. aspirational and affordable).
Chief Financial Officer	• Managerial oversight of asset funding model and Long Term Financial Plan. • Ensure capitalisation process is managed effectively.
Coordinator Asset Management	• Provide forward expenditure projections based on delivering various service level scenarios. • Annual review and update of service levels.
Manager Facilities	• Responsible to lead the development of the Building Asset Management Plan. • Provide forward expenditure projections based on delivering various service level scenarios. • Annual review and update of service levels.
Supervisors and field service staff	• Provide local knowledge level detail on assets. Verify the size, location and performance of assets. • Describe the maintenance standards employed and Council's ability to meet technical and customer levels of service.
Specialist asset management consultants	• Provide capacity building and mentoring initiatives to achieve core maturity compliance with the national framework for financial and asset management planning and reporting. • Independently peer review plans and revaluation methodology.

Our organisational structure for service delivery from infrastructure assets is detailed below,



2.2 Goals and Objectives of Asset Management

The organisation exists to provide services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', by contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

Our goal in managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.[4]

[4] Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

2.3 Plan Framework

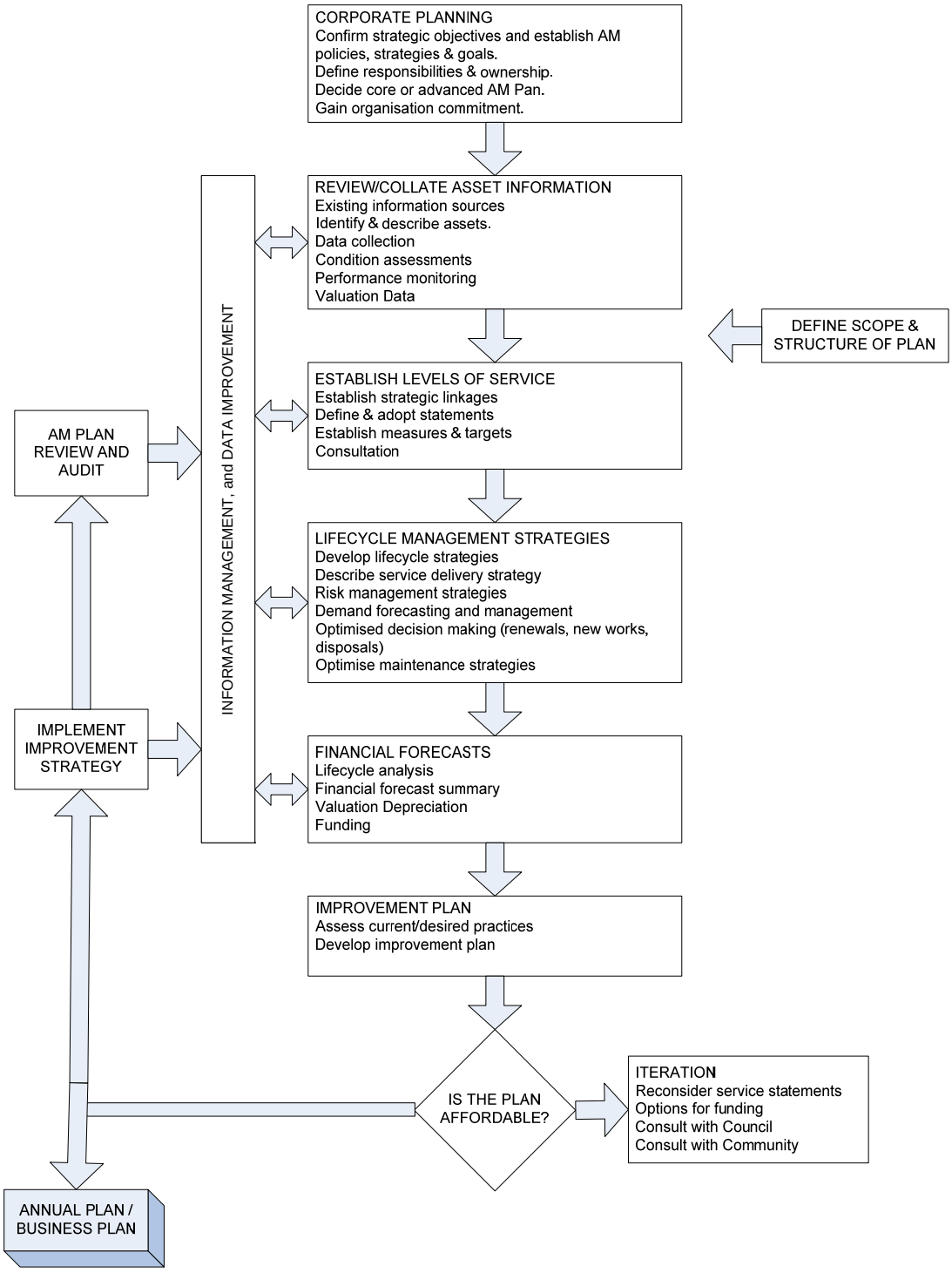
Key elements of the plan are

- Levels of service – specifies the services and levels of service to be provided by the organisation,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Life cycle management – how Council will manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices,
- Monitoring – how the plan will be monitored to ensure it is meeting organisation's objectives,
- Asset management improvement plan.

A road map for preparing an asset management plan is shown below.

Road Map for preparing an Asset Management Plan

Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11.



2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 20 year planning period in accordance with the International Infrastructure Management Manual[5]. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels in a financially sustainable manner.

2.5 Community Consultation

This 'core' asset management plan is prepared to facilitate community consultation initially through feedback on public display of draft asset management plans prior to adoption by the Council. Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service. This will assist the Council and the community in matching the level of service needed by the community, service risks and consequences with the community's ability and willingness to pay for the service.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

We participate in the Victorian Local Government Community Satisfaction Survey. The community satisfaction survey is a state-wide telephone survey used to collect direct feedback from the community about councils, covering five main areas:

- council's overall performance
- community consultation and engagement
- advocacy – lobbying on behalf of the community
- customer service
- overall council direction

The survey is conducted by the Department of Environment, Land, Water and Planning on behalf of participating councils. A minimum of 400 local residents and ratepayers in each municipality over 18 years of age are selected at random.

The most recent community satisfaction survey results will be reported in a future revision of this plan and used in developing council's Strategic Resource Plan.

[5] IPWEA, 2011, IIMM.

3.2 Strategic and Corporate Goals

This asset management plan is prepared under the direction of the organisation's Council Plan goals and objectives including the long-term vision and strategy – *The Ballarat Strategy*.

The Ballarat Strategy will address an emerging gap in the long-term planning for Ballarat's future – this gap is the result of Ballarat's greater than expected population growth in the past decade and strong projected population growth over the next 25 years.

Relevant organisational goals and objectives and how these are addressed in this asset management plan are:

Table 3.2: Organisational Goals and how these are addressed in this Plan

Goal	Objective	How Goal and Objectives are addressed in AM Plan
Engaging our Community	To enable council gain a strong understanding of the community's values, aspirations, ideas and concerns, and to use this understanding to plan for Ballarat's short-term and long-term future.	The AM Plan provides information on the Service Aims and the existing condition and the proposed mechanisms to manage Assets
		Development of the service levels provided by Building assets, and the balancing of this with the available funding and acceptable risk will require communication and consultation with the community.
Deliver financial management responsibly to ensure long-term sustainability of the organisation and its assets.	4.8.1 Ensure Council remains in the medium financial risk category (as a minimum).	Ensuring that Council operations align with the Long Term Financial Strategy (LTFS) which sees Council in the Medium Risk category.
	4.8.2 Manage Ballarat's services and assets to the best of Council's ability in line with Asset Management Plans.	Council continues to receive an annual state of the assets report prior to the adoption of its annual budget.
	4.8.3 Optimise and rationalise Council assets across all asset classes for the greater community and organisation benefit	Asset management plans are to be used to guide Councils decision making in providing community facilities.

The organisation will exercise its duty of care to ensure public safety is accordance with the infrastructure risk management plan prepared in conjunction with this AM Plan. Management of infrastructure risks is covered in Section 5.2

3.3 Legislative Requirements

The organisation has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act, 1989	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery. Section 6.0 outlines the purposes of a Council. The purposes of a Council are: To provide equitable and appropriate services and facilities for the community and to ensure that those services and facilities are managed efficiently and effectively. To manage, improve and develop the resources of its district efficiently and effectively. Section 7.0 outlines the objectives of Council to seek its purposes. In seeking to achieve its purposes, a Council has the following objectives: To facilitate the involvement of members of the community, users of facilities and services and Council staff in the development, improvement and co-ordination of local government; To co-ordinate with other public bodies to ensure that services and facilities are provided and resources are used effectively and efficiently; To ensure adequate planning for the future of its municipal district; To represent and promote the interests of the community and to be responsive to the needs of the community; To formulate comprehensive policies and set performance targets; To develop, implement and monitor its strategic plans and budgets. Section 205 outlines Councils care and management.
Building Act 1993 Building Regulations 2006	Part 3, Permits; Part 5, Occupation of buildings and public entertainment; Part 7, Protection of adjoining properties; and Part 8, Enforcement safety standards.
Building Code Australia (BCA)	The BCA (Building Code of Australia) is the definitive regulatory resource for the domestic and non-domestic building construction industries, providing a nationally accepted and uniform approach to technical requirements for the building industry. It is routinely called up in legislation and cited in building contracts, making it an important document for everyone in the building industry.
Children's Services Act 1996	Provides for the licensing and regulation of children's services.
Disability Act 2006	The objects of this Act are: (a) to eliminate, as far as possible, discrimination against persons on the ground of disability in the areas of: (i) work, accommodation, education, access to premises, clubs and sport; and (ii) the provision of goods, facilities, services and land; and (iii) existing laws; and (iv) the administration of Commonwealth laws and programs; (b) to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law as the rest of the community; and (c) to promote recognition and acceptance within the community of the principle

Legislation	Requirement
	that persons with disabilities have the same fundamental rights as the rest of the community.
Victorian Disability Act 2006	The purpose of the Disability Act 2006 is to enact a new legislative scheme for persons with a disability which reaffirms and strengthens their rights and responsibilities and which is based on the recognition that this requires support across the government sector and within the community. Under Section 38 of the Act, the Victorian Government makes it a legal requirement for public sector bodies to develop Disability Action Plans (DAP) and that each DAP should address the following outcomes: (d) reducing barriers to persons with a disability accessing goods, services and facilities; (e) reducing barriers to persons with a disability obtaining and maintaining employment; (f) promoting inclusion and participation in the community of persons with a disability; and (g) achieving tangible changes in attitudes and practices which discriminate against persons with a disability.
Essential Services Act 1958	Determines how interruption or dislocation to essential services such as light, power, water, sewer etc. is managed.
Environmental Protection Act 1970	To provide a legislative framework for the protection of the environment in Victoria having regard to environment protection principles (S1A). Establishes the Environment Protection Authority (EPA) and details the powers, duties and functions of that authority (Part II)
Planning and Environment Act 1987	Establishes a framework for planning the use, development and protection of land within Victoria in the present and long-term interests of all Victorians (S1). The Act establishes the Planning Schemes (S4).
Victorian Heritage Act 1995	Protection of historic buildings, structures and precincts
Graffiti Prevention Act 2007	The Graffiti Prevention Act 2007 came into force in April 2008. The Act increased penalties' for graffiti offences and now granted Police the right to search and charge people aged 14 years and older.
Occupational Health and Safety Act 2004	To generally comply with the objectives of the Act: (a) to secure the health, safety and welfare of persons at work; (b) to protect persons at work against risks to health or safety; (c) to assist in securing safe and healthy work environments; (d) to eliminate, at the source, risks to the health, safety and welfare of persons at work; and (e) to provide for the involvement of employees and employers and associations representing employees and employers in the formulation and implementation of health and safety standards. All Local laws and relevant policies of the Council Local laws are adopted to protect public health, safety, or amenity in
All Local laws and relevant policies of the Council	Local laws are adopted to protect public health, safety, or amenity in a municipality. They are designed to ensure that the actions of an individual or group do not have a negative or undesirable impact on the rest of the community.
Other relevant Australian Standards and Codes of Practice	State Environment Protection Policies (SEPPs) SEPP is subordinate legislation made under the provisions of the Environment Protection Act 1970 to provide more detailed requirements and guidance for the application of the Act to Victoria. SEPP aims to safeguard the environmental values and human activities (beneficial uses) that need protection in the State of Victoria from the effect of waste. Such as: Human health and well-being; Ecosystem protection; Visibility;

Legislation	Requirement
	Useful life and aesthetic appearance of buildings, structures, property and materials; Aesthetic enjoyment; and Local amenity. SEPP expresses in law the community's expectations, needs and priorities for using and protecting the environment. The National Pollutant Inventory (NPI) was developed as a National Environment Protection Measure (NEPM) by the National Environment Protection Council (NEPC), and is a statutory instrument under the National Environment Protection Council Act (Australia) 1994. It was incorporated into Victorian law as an Industrial Waste Management Policy. This applies to all industries regardless of whether facilities are licensed by EPA or not.
Australian Accounting Standards	Set out the financial reporting standards relating to infrastructure assets.AASB116, AASB136, AASB1121, AAS1001, AASB1041, AAS1015 and AASB1051.
OH&S Acts 1986 & 2000	Protect the public against risks to health or safety arising out of or in connection with the activities of persons at work or the use of operation of various types of plant.
Crown Lands Act 1989	Sets out the objectives and principles for Crown Land management.
Other relevant state and federal acts and regulations. Australian Standards and Building guidelines	As appropriate.

The organisation will exercise its duty of care to ensure public safety in accordance with the infrastructure risk management plan linked to this AM Plan. Management of risks is discussed in Section 5.2.

3.4 Community Levels of Service

Service levels are defined in two terms, customer levels of service and technical levels of service.

Community Levels of Service measure how the community receives the service and whether the organisation is providing community value.

Community levels of service measures used in the asset management plan are:

Condition	How good is the service?
Function	Does it meet users' needs?
Capacity/Utilisation	Is the service over or under used?

The organisation's current and expected community service levels are detailed in Tables 3.4 and 3.5. Table 3.4 shows the agreed expected community levels of service based on resource levels in the current long-term financial plan and community consultation/engagement.

Table 3.4: Community Level of Service

Service Attribute	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTFP
COMMUNITY LEVELS OF SERVICE				
Condition	Buildings are in suitable condition for their purpose.	% of buildings in poor/very poor condition including confidence assessment.	15% poor/very poor. Low confidence.	To be developed in future revisions of this Plan.
Function	Buildings are 'fit for purpose'.	% of buildings in poor/very poor function.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.
Capacity/ Utilisation	Buildings form and size is appropriate to usage.	% of buildings in poor/very poor capacity/utilisation.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.

3.5 Technical Levels of Service

Technical Levels of Service - Supporting the community service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities that the organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services such as cleaning, operating hours, inspections, recurrent service contracts, utility charges, etc.
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition (e.g. minor building and structure repairs, light bulb replacements, painting, attending to vandalism repairs),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (e.g. major repairs, roof sheeting replacement and other building component replacement activities),
- Upgrade – the activities to provide a higher level of service (e.g. adding another room, increasing the size of a facility) or a new service that did not exist previously (e.g. a new library).

Service and asset managers plan, implement and control technical service levels to influence the customer service levels.[6]

Table 3.5 shows the technical level of service expected to be provided under this AM Plan. The agreed sustainable position in the table documents the position agreed by the council following community consultation and trade-off of service levels performance, costs and risk within resources available in the long-term financial plan. Presently, this task is in development and targeted in the improvement plan.

[6] IPWEA, 2011, IIMM, p 2.22

Table 3.5: Technical Levels of Service

Service Attribute	Service Objective	Activity Measure Process	Current Performance *	Desired for Optimum Lifecycle Cost **	Agreed Sustainable Position ***
TECHNICAL LEVELS OF SERVICE					
Operations	Building facilities meet user's needs.	Annual condition & safety inspection.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.
	Buildings are clean.	Cleaning frequency.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.
	Budget		$1,040,000/yr	TBA	TBA
Maintenance	Buildings are suitable for purpose.	Reactive service requests completed within adopted timeframes.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.
		Planned maintenance activities completed to schedule.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.
	Budget		Reactive $687,000/yr Planned $1,604,000/yr $2,291,000/yr	TBA	TBA
Renewal	Building facilities meet user's needs.	Condition of buildings	15% poor/very poor	5% poor/very poor	TBA
	Budget (next 10 years)		$26,803,000r	TBA	TBA
Upgrade/New	Community Facilities and Services Plan	Projects completed on time and within budget.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.
	Budget (next 10 years)		$56,000,000	TBA	TBA

Note: * Current activities and costs (currently funded).

** Desired activities and costs to sustain current service levels and achieve minimum life cycle costs (not currently funded).

*** Activities and costs communicated and agreed with the community as being sustainable (funded position following trade-offs, managing risks and delivering agreed service levels).

4. FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

4.2 Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation of assets were identified and are documented in Table 4.3.

4.3 Demand Impact on Assets

The impact of demand drivers that may affect future service delivery and utilisation of assets are shown in Table 4.3.

Table 4.3: Demand Drivers, Projections and Impact on Services

Demand drivers	Present position	Projection	Impact on services
Population	100,550	The population is forecast to grow to 130,000 by 2031[7].	Population growth will increase utilisation and demand for more services and building related assets.
Residential & Commercial development.	Increasing demand.	Further increases likely given the growth projections.	Increasing demand on services and infrastructure.

4.4 Demand Management Plan

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

Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures[8]. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.4: Demand Management Plan Summary

Demand Driver	Impact on Services	Demand Management Plan
Population Increase	Increasing demand for services.	Under development
Ageing Population	DDA compliance becomes a requirement for new works.	Increased budget and DDA implementation Plan
Residential & Commercial development.	Changing demand on services and infrastructure.	Consideration of asset and/or service transfer, multi-use, shared and rationalisation initiatives.

[7] http://forecast2.id.com.au
[8] IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.

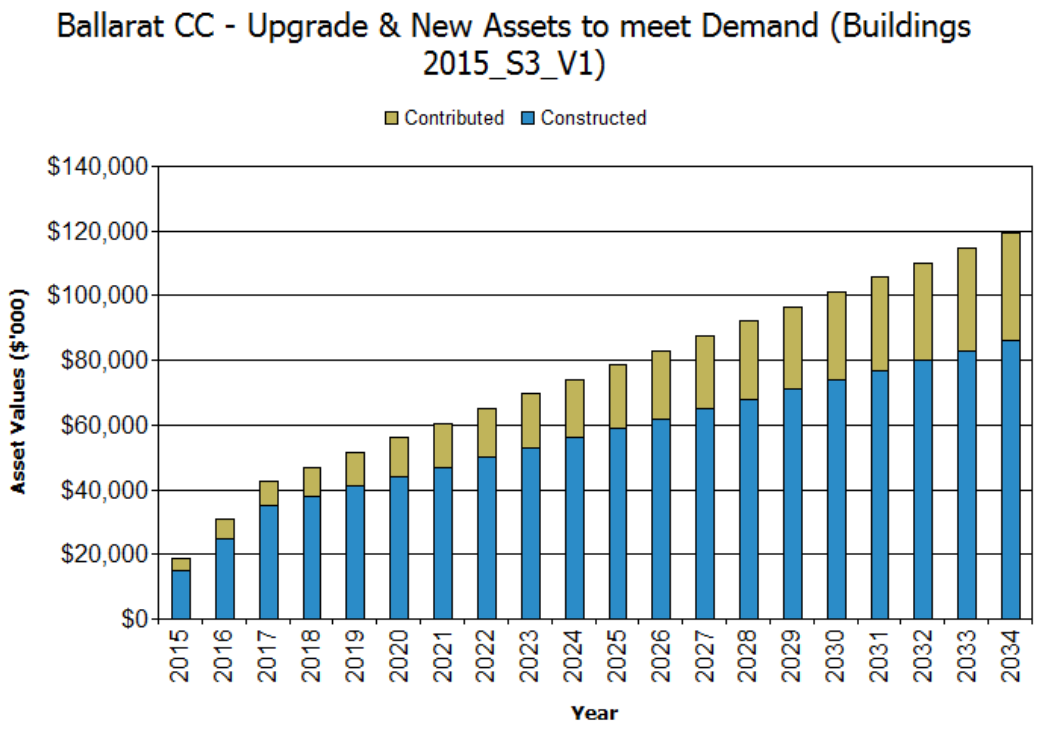
4.5 Asset Programs to meet Demand

New assets required to meet growth will either be acquired free of cost from land developments or constructed by council. Non-growth assets contributed to council such as sporting facilities, buildings, bus shelters traditionally built/operated by not-for-profit organisations are also considered as part of the analysis.

These new assets constructed/acquired by the organisation are discussed in Section 5.5.

The cumulative value of new contributed and constructed asset values are summarised in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand



An estimated $74M ($18M contributed and $56M constructed) is forecast to be added in the first 10 years of the planning period specifically for upgrading and/or provision of new assets. A slightly smaller amount has been forecast for the remaining 10 years of the planning period bringing the total to $119M over 20 years. In percentage terms, Council is increasing its asset value by 50% over the next 20 years.

Acquiring these new assets will commit the organisation to fund ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs in Section 5.

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the organisation plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while optimising life cycle costs.

5.1 Background Data

The data and forecasts are based on assets recorded in the financial asset register, known service deficiencies from routine inspections and customer requests. It is important careful monitoring of those assets with poor to very poor performance at a detailed component level is maintained to manage appropriate service provision and associated risk.

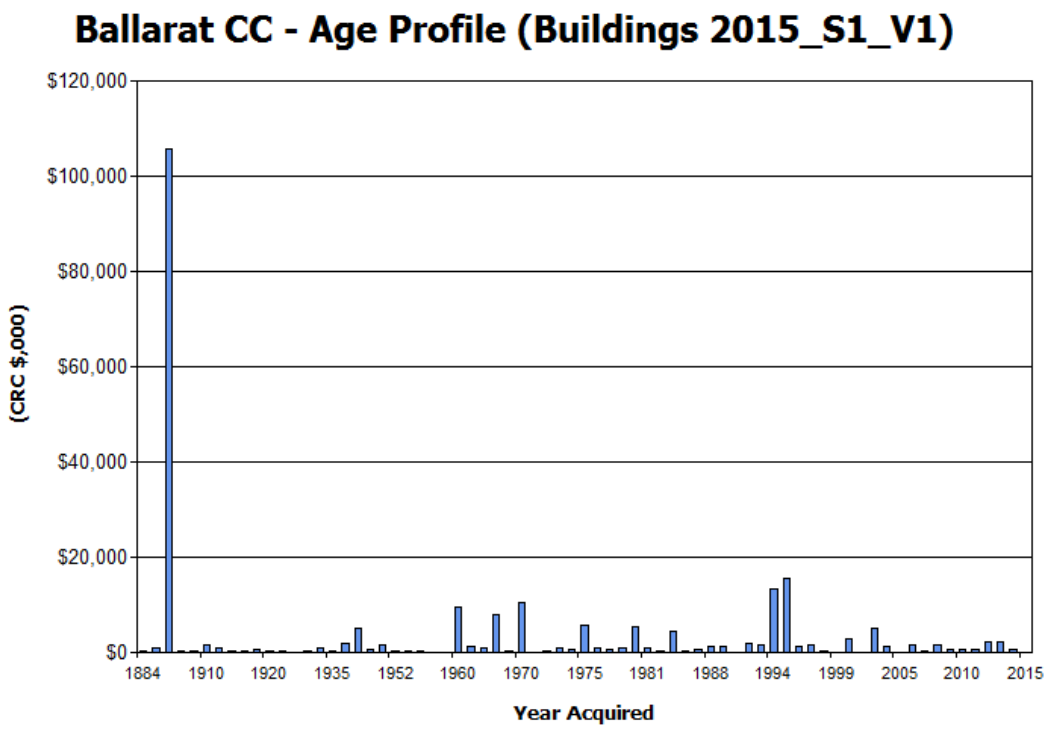
5.1.1 Physical parameters

The assets covered by this asset management plan are shown in Table 2.1.

The building asset category comprises a complex mix of asset types, components, of varying age, function and condition.

The age profile of the assets included in this AM Plan is shown in Figure 2 sourced from the financial asset register based on the date of construction/acquisition or date of last renewal against the current replacement cost.

Figure 2: Asset Age Profile by Current Replacement Cost



According to the asset register the majority of the building assets by value were constructed or last replaced in 1900 ($106M) accounting for 45% of the total asset value suggesting there may be warrants for investigation of the data.

The asset register provides essential information not only for asset management plans and the long-term financial plan for financial reporting it is also used to calculate depreciation in the operating statement therefore it is important the supporting data is of high confidence (± 10%) to report whether we have enough revenue to support future capital investment in infrastructure.

Given the high value of replacement cost in 1900 suggests a review of costs and acquisition dates (and componentisation) is required and is included in the Improvement Plan in Section 7.2.

5.1.2 Asset capacity and performance

The organisation's services are generally provided to meet design standards where these are available.

Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

Location	Service Deficiency
Various buildings – numerous sites.	There is a wide difference in levels of compliance across the building asset portfolio. Some of the recently renovated buildings are completely compliant, while older buildings lack meeting the basic accessibility requirements.
	Environmental Performance across all buildings – retrofit and/or redevelop Council's buildings and facilities to ensuring that all council buildings and facilities minimise their environmental impact and maintain measurable environmental performance standards.
	Some locations across the municipality are inadequately serviced by particular building assets.
	There are a number of facilities that require building works to meet additional user needs as they are not fully utilised and unsuitable; additional male and female change facilities, storage space, and social / function space (as patronage increases and new trends emerge).
Ballarat Civic Hall	◦ Vandalism ◦ Compliance ◦ No tenants ◦ Public liability
Ballarat Aerodrome	◦ Asbestos ◦ Essential Service Measures Compliance

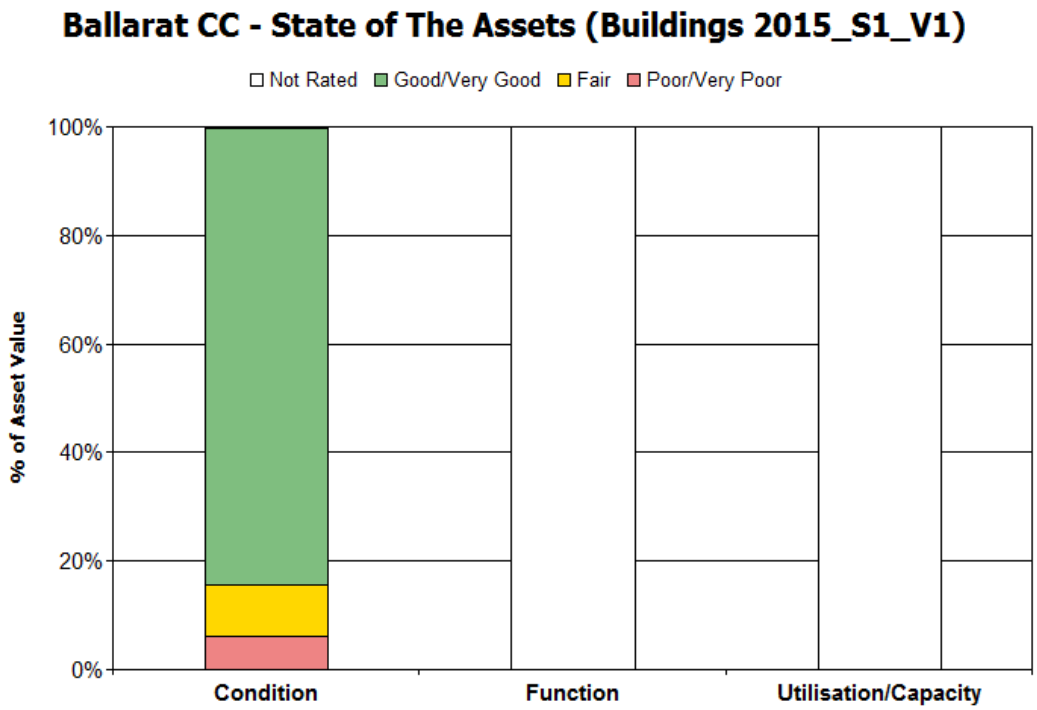
The above service deficiencies were identified from customer requests, programmed safety and existing asset inspection programs.

5.1.3 Asset condition

Condition is monitored and managed at an operational level, and the information used to prepare the condition profile is based on regular assessments every year dependant on known asset and service deficiencies of the building asset stock.

The condition profile of our assets by asset value is shown in Figure 3.

Fig 3: Asset Condition Profile



Condition is measured using a 1 – 5 grading system[9] as detailed in Table 5.1.3.

Table 5.1.3: Simple Condition Grading Model

Condition Grading	Description of Condition
1	**Very Good**: only planned maintenance required
2	**Good**: minor maintenance required plus planned maintenance
3	**Fair**: significant maintenance required
4	**Poor**: significant renewal/rehabilitation required
5	**Very Poor**: physically unsound and/or beyond rehabilitation

The majority of assets have been assessed for condition of which 6% ($14M) are performing in a poor to very poor state of repair highlighting the importance of resourcing ongoing inspection, monitoring and reporting regimes.

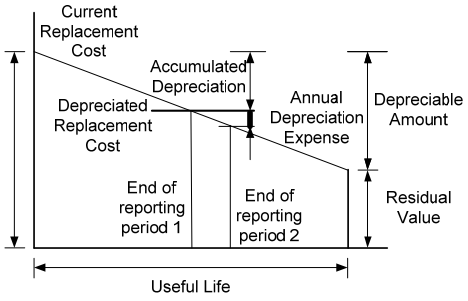
In addition, there is an understatement of useful lives for some assets. The asset register indicates assets to the value of approximately $8.2M have passed their designated required renewal date. These assets account for 3.5% of the depreciable asset stock suggesting a high level assessment of the remaining life of these assets be commissioned as a priority.

[9] IPWEA, 2011, IIMM, Sec 2.5.4, p 2|79.

5.1.4 Asset valuations

The value of assets recorded in the asset register as at 30 June 2014covered by this asset management plan is shown below. Assets were last revalued at "[Enter revaluation date]" . Assets are valued at greenfield rates for replacement cost as per Victorian legislative requirements.

Current Replacement Cost	$233,505,000
Depreciable Amount	$233,505,000
Depreciated Replacement Cost[10]	$126,156,000
Annual Depreciation Expense	$ 3,176,000



Key assumptions made in preparing the valuations were:

- Use of existing valuation data
- Useful lives are based on broad industry averages

Major changes from previous valuations are due to existing assets not previously recognised and existing records being reviewed and updated after verification

Various ratios of asset consumption and expenditure have been prepared to help guide and gauge asset management performance and trends over time.

Rate of Annual Asset Consumption (Depreciation/Depreciable Amount)	1.40%
Rate of Annual Asset Renewal (Capital renewal exp/Depreciable amount)	0.50% (Year 1)
Rate of Annual Asset Upgrade/New (Capital upgrade expenditure/Depreciable amount)	6.40% (Year 1)
Rate of Annual Asset Upgrade/New (Including contributed assets)	7.90% (Year 1)

In 2015 council plans to renew assets at 39.40% of the rate they are being consumed and will be increasing its asset stock by 7.90% in the year.

To provide services in a financially sustainable manner, Council will need to ensure that it is renewing assets at the rate they are being consumed over the medium-long term and funding the life cycle costs for all new assets and services in its long term financial plan.

5.2 Infrastructure Risk Management Plan

An assessment of risks[11] associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the organisation. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.2. These risks are reported to management and Council via the audit committee.

[10] Also reported as Written Down Current Replacement Cost (WDCRC).
[11] Council's Infrastructure Risk Management Plan

Table 5.2: Critical Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
All Buildings	Damage from fire, flood, storms, etc..	High	Check adequacy of insurance, install fire alarms and develop continuity plan.	Medium	Within existing budget. Staff time
Building Maintenance	Maintenance costs increasing due to additional assets from growth and demand.	High	Continue to improve knowledge of asset performance. Maintenance is managed appropriately at an operational; level within existing budgets. Future planning improvements can be made by documented service level risks and utilisation of these in establishing future maintenance priorities.	Medium	Within existing budget. Staff time
Building Renewal	Buildings deteriorate to a lesser service standard and higher risk situation.	Medium	Continue to improve knowledge of asset performance. Future planning improvements can be made by further documented service level risks and utilisation of these in establishing future renewal priorities.	Medium	Within existing budget. Staff time
Utilisation	Buildings not meeting the needs of service providers and growth patterns.	Medium	Continue to monitor not only the condition of buildings, but how well they suit the needs of users.	Medium	Within existing budget. Staff time
Increasing financial pressure to adequately maintain the building portfolio	Growth in building portfolio due to provision of grants.	Medium	Although grants may be available for the capital cost of new or expanded facilities, due consideration should be made to ensure sufficient ongoing operation and maintenance funds can be provided to support these additional assets	Medium	Within existing budget. Staff time

Note * The residual risk is the risk remaining after the selected risk treatment plan is operational.

Note, building infrastructure risk is currently being reviewed as part of the Improvement Plan (Section 7.2) and will be enhanced as part of the next revision/update of this plan.

5.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, e.g. Cleaning, lift and other inspections, recurrent HVAC, fire, security, electrical and plumbing service contracts, utility costs, operating hours.

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

5.3.1 Operations and Maintenance Plan

Operations activities affect service levels including quality and function through cleaning frequency and opening hours of building and other facilities.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating, e.g. minor tile, flooring,

roofing, cladding and wall repairs, light bulb replacements, plumbing repairs, etc. but excluding rehabilitation or renewal. Maintenance may be classified into reactive, planned and specific maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions.

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Specific maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacing air conditioning units, etc. This work falls below the capital/maintenance threshold but may require a specific budget allocation.

Actual past maintenance expenditure is shown in Table 5.3.1.

Table 5.3.1: Maintenance Expenditure Trends

Year	Maintenance Expenditure		
	Planned and Specific	**Unplanned**	**Total**
2011/12	Unavailable	Unavailable	Unavailable
2012/13	Unavailable	Unavailable	Unavailable
2013/14	$1,604,000	$687,000	$2,291,000

Planned maintenance work is currently 70% of total maintenance expenditure.

Maintenance expenditure levels are considered to be adequate to meet projected service levels at the current time, which may be less than or equal to current service levels is some areas. Where maintenance expenditure levels are such that will result in a lesser level of service, the service consequences and service risks have been identified and service consequences highlighted in this AM Plan and service risks considered in the Infrastructure Risk Management Plan.

Given the increase in donated assets (approximately $18M in 10 years) it is increasingly important to ensure existing operations and maintenance strategies are sustainable and enhanced where possible.

Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement.

Typical operation and maintenance activities include:

- Exit Light Performance Tests
- Fire Safety inspection program
- Gas Appliance Inspections
- Safety Switch Push Button Tests
- Electrical Condition Inspections and repairs
- Passive Asset Condition Inspection Program
- Painting
- Termite & pest control
- Roof Repairs & cleaning gutters
- Window Repairs
- Air-Conditioner and heating Inspection, service and repair program
- Corrosion Treatments
- Vandalism Repairs
- Graffiti removal
- Building Ground Maintenance
- Emergency Lighting Repairs
- Cleaning

5.3.2 Operations and Maintenance Strategies

The organisation will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities include:

- Scheduling operations activities to deliver the defined level of service in the most efficient manner,
- Undertaking maintenance activities through a planned maintenance system to reduce maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost),
- Maintain a current infrastructure risk register for assets and present service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council,
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs,
- Review asset utilisation to identify underutilised assets and appropriate remedies, and over utilised assets and customer demand management options,
- Maintain a current hierarchy of critical assets and required operations and maintenance activities,
- Develop and regularly review appropriate emergency response capability,
- Review management of operations and maintenance activities to ensure Council is obtaining best value for resources used.

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

The organisation's service hierarchy is shown is Table 5.3.2.

Table 5.3.2: Asset Service Hierarchy

Star Rating	Service Hierarchy	Service Level Objective
★★★★★	Premium	Provides a key public focus for the Council, and is a defining icon of Council service. The facilities are used every day, and this would frequently include times of high peak numbers. The assets are critical in the delivery of Council Services, and provide a high profile image that reflects and projects the quality of Council Services to the public. To maintain the image of Council, these facilities are maintained to very high standards, with quick response times to building problems.
★★★★	Intermediate	Provides an important public focus for the Council. The facilities are used every day, and this would frequently include times of high peak numbers. The assets are important in the delivery of Council Services, and provide an image that reflects and projects the quality of Council Services to the Public. To maintain the image of Council, these facilities are maintained to high standards, with quick response times to building problems.
★★★	Standard	Provides a regular public focus for the Council. The facilities are used most days, and this could include times of high peak numbers. The assets are often the vehicle through which Council delivers service, and they may be important in the district community. They may be key dedicated facilities that are provided by Council and used by predominantly one community group. They generally do not need to provide an image that reflects and projects the quality of Council Services to the public. These facilities are maintained to normal standards, with medium response times to building problems, and mid-level intervention triggers.
★★	Secondary	Does not provide a public focus for the Council. The facilities are used occasionally, from a few times per week to a few times per month, with only low peak numbers. The assets are not a public focus for the delivery of Council Services, although they may be important to the local community. They may be secondary dedicated facilities that are provided by Council and use predominantly one community group. They do not need to provide an image that reflects and projects the quality of Council Services to the public. These facilities are maintained to lower standards, with lower response times to building problems, and higher level intervention triggers.
★	Basic	Does not provide a public focus for the Council, and is not a key area for Council activities. The facilities are used occasionally, a few times per month with low peak numbers. The assets are not a public focus for the delivery of Council Services, although they may be important to the local community and the users. They may be facilities that are provided by Council and used by predominantly one community group. They do not need to provide an image that reflects and projects the quality of Council Services to the public. These facilities are maintained to lower standards, with lower response times to building problems, and higher level intervention triggers.

Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. By identifying critical assets and critical failure modes, organisations can target and refine investigative activities, maintenance plans and capital expenditure plans at the appropriate time.

Operations and maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc. Critical assets failure modes and required operations and maintenance activities are detailed in Table 5.3.2.1.

Table 5.3.2.1: Critical Assets and Service Level Objectives

Critical Assets	Critical Failure Mode	Operations & Maintenance Activities
To be developed		

Standards and specifications

Maintenance work is carried out in accordance with the following Standards and Specifications.

- Building Code of Australia BCA
- Occupational Health and Safety Regulations 2007
- Worksafe Victoria
- AS 4360:2004 Risk management
- AS 4804:2001Occupational health and safety management system
- AS/NZS ISO 14001:2004 Environmental Management Systems - Specification with guidance for use; and
- AS/NZS ISO 14004:2004 Environmental Management Systems - General guidelines on principles, systems and supporting techniques.

Mechanical Services

- AS3661.1, AS366.3 – Air handling and water systems of buildings microbial control
- AS1324.1, AS1324.2 – Air filters for use in general ventilation and air conditioning.
- AS1668.1, AS1668.2, AS1668.3 – The use of ventilation and air conditioning in buildings – smoke and indoor containment control.
- AS1851 – Maintenance of fire protection equipment – Part 6

Pest Control

- AS3660 2000 Termite management

Electrical

- RCD Testing and maintenance
- AS2293.2 Emergency lighting systems
- AS3760 Testing and tagging of portable appliances

Carpentry and Handyman

- Building Code of Australia 2006 – Class 2 to Class 9 buildings

Painting

- AS2311 – The painting of buildings
- AS1627 – Metal finishing – preparation and treatment of surfaces
- AS/NZS3750 – Paint for steel structures
- AS4361.2 – Guide to lead paint management
- AS2700 – Colour standards for general purposes

Plumbing

- Gas Industry Act 2001
- Gas Safety Act 1997.
- Plumbing Code of Australia 2004
- AS/NZS3500 Plumbing and drainage parts 1 to 5
- AS2845.3 – Water supply and back flow prevention devices

Fire Services

- AS1851.4 (1992) Fire Hydrants
- AS1851 (2005)
    - Fire Hose Reels
    - Fire Hydrant's Manual Boost
    - Fire Extinguishers and Blankets
    - Fire Sprinkler System
    - Number Control Valves
    - Manual Boost
    - Fire Indicator Panels – Sub Indicator Panels
    - Smoke / Thermal / Manual VESDA Systems
    - Fire Bridge Connections
    - EWIS
    - Smoke Control Mechanical Ventilation Units
    - Fire Dampers
    - Fire Rated Door

Lifts

- AS1735 – Servicing of lifts, wheelchair platforms, dumbwaiter

Automatic Doors

- AS3000 Electrical installations
- AS4085 (1992) Automatic sliding doors

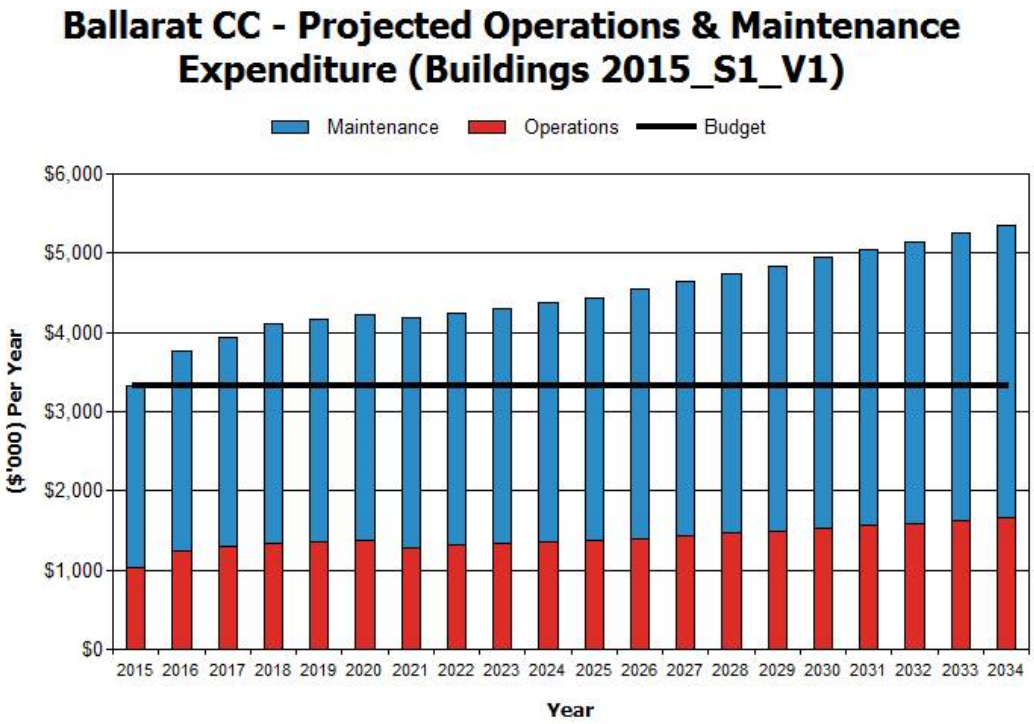
Graffiti Removal

- AS2311 – The painting of buildings
- AS1627 – Metal finishing – preparation and treatment of surfaces
- AS/NZS3750 – Paint for steel structures
- AS4361.2 – Guide to lead paint management
- AS2700 – Colour standards for general purposes

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the acquisition of new assets as shown in Figure 4. Note that all costs are shown in current 2014/15 dollar values (i.e. real values net of inflation).

Figure 4: Projected Operations and Maintenance Expenditure



The current year operations and maintenance budget is $3.3M and the projected requirements are expected to increase to $4.4M by 2024 (a forecast 10 year spend of $40.64M) and $5M by 2034 due to the addition of new assets from increasing demand, growth and/or risk control measures.

Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment and analysis in the infrastructure risk management plan.

Maintenance is funded from the operating budget where available. This is further discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal and replacement expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

Examples of renewal include:

- Full building component replacement
- Roof sheeting replacement
- Restumping
- Security system replacement
- Replacing heating, ventilation & cooling systems

5.4.1 Renewal plan

Assets requiring renewal/replacement are identified from one of three methods provided in the IPWEA NAMS.PLUS 'Expenditure Template' used to create the forward projections.

- Method 1 uses Asset Register data to project the renewal costs using acquisition year and useful life to determine the renewal year, or
- Method 2 uses capital renewal expenditure projections from external condition modelling systems (such as Building Management Systems), or
- Method 3 uses a combination of average *network renewals* plus *defect repairs* in the *Renewal Plan* and *Defect Repair Plan* worksheets on the 'Expenditure template' using best available knowledge of officers.

A combination of all three methods was used for this asset management plan. It is common that the asset register used in Method 1 is not developed to a level of maturity where it is reliable for producing a realistic renewal forecast. Ideally when this asset register is sorted by remaining life from 1 to 10 years it should be consistent with the capital renewal program. This is not the case at the City of Ballarat and the refinement of the asset register to achieve this situation should become an important part of the asset management improvement plan.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed on "[Enter date of review of useful lifes]" .

Table 5.4.1: Useful Lives of Assets

Asset (Sub)Category	Useful life
Structures (Substructure/foundation, Superstructure/Structural walls & Roof structure/truss/frame)	Refer to Useful life report
External (Facades, roofing, windows, doors, sealants, plaster, paint, etc.)	Refer to Useful life report
Internal (Rooms, flooring, ceilings, finishing's, sealants, plaster, paint, kitchens, toilets, stairs)	Refer to Useful life report
Fixtures and Fittings (plumbing, built-ins, benches, kitchen/bathroom fit out)	Refer to Useful life report
Mechanical and Electrical (HVAC, electrical, fire protection)	Refer to Useful life report

5.4.2 Renewal and Replacement Strategies

The organisation will plan capital renewal and replacement projects to meet level of service objectives and minimise infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner,
- Undertaking project scoping for all capital renewal and replacement projects to identify:
    - the service delivery 'deficiency', present risk and optimum time for renewal/replacement,
    - the project objectives to rectify the deficiency,
    - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
    - and evaluate the options against evaluation criteria adopted by the organisation, and
    - select the best option to be included in capital renewal programs,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,
- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council,
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required ,
- Review management of capital renewal and replacement activities to ensure Council is obtaining best value for resources used.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replacing stumps under buildings, or replacing the roof), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. adequate cooling and/or lighting).[12]

It is possible to get some indication of capital renewal and replacement priorities by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have a high utilisation and subsequent impact on users would be greatest,
- The total value represents the greatest net value to the organisation,
- Have the highest average age relative to their expected lives,
- Are identified in the AM Plan as key cost factors,
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.[13]

The ranking criteria used to determine priority of identified renewal and replacement proposals is normally detailed in Table 5.4.2 however at this stage an agreed and adopted prioritisation framework is yet to be developed and is included in the improvement plan. Therefore the projected capital renewal and replacement projects are currently being prioritised in an ad-hoc informal manner using basic parameters such as condition and risk.

Table 5.4.2: Renewal and Replacement Priority Ranking Criteria

Criteria	Weighting
To be determined in the next revision of this AM Plan.	
Total	**100%**

Renewal and replacement standards

Renewal work is carried out in accordance with the following Standards and Specifications.

- Relevant Australian Standards
- Disability Discrimination Act
- Compliance with current regulations
- Building Code of Australia
- Recognised Best Practice Industry Standards

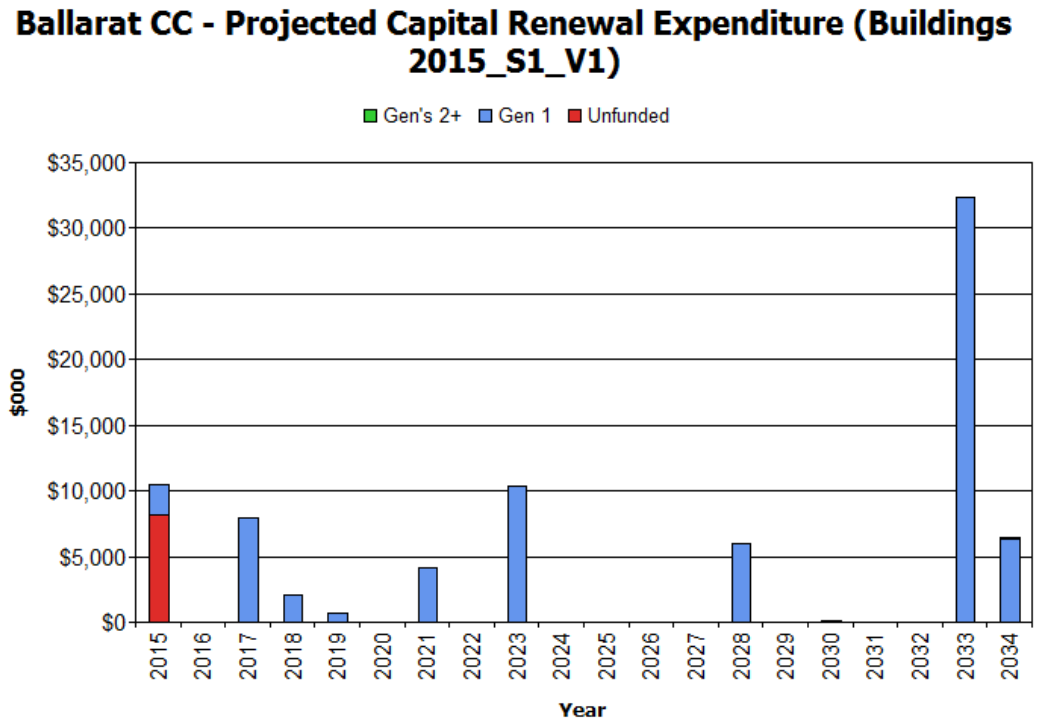
[12] IPWEA, 2011, IIMM, Sec 3.4.4, p 3|60.
[13] Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3|66.

5.4.3 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the existing asset stock ages and increases from growth. The projected capital renewal and replacement program is shown in the Appendices.

The projected 20 year capital renewal expenditures developed for each of the Scenarios are shown below. All amounts are shown in real values (net of inflation).

Fig 5.1: Projected Capital Renewal and Replacement Expenditure (Scenario 1 from the Asset Register)



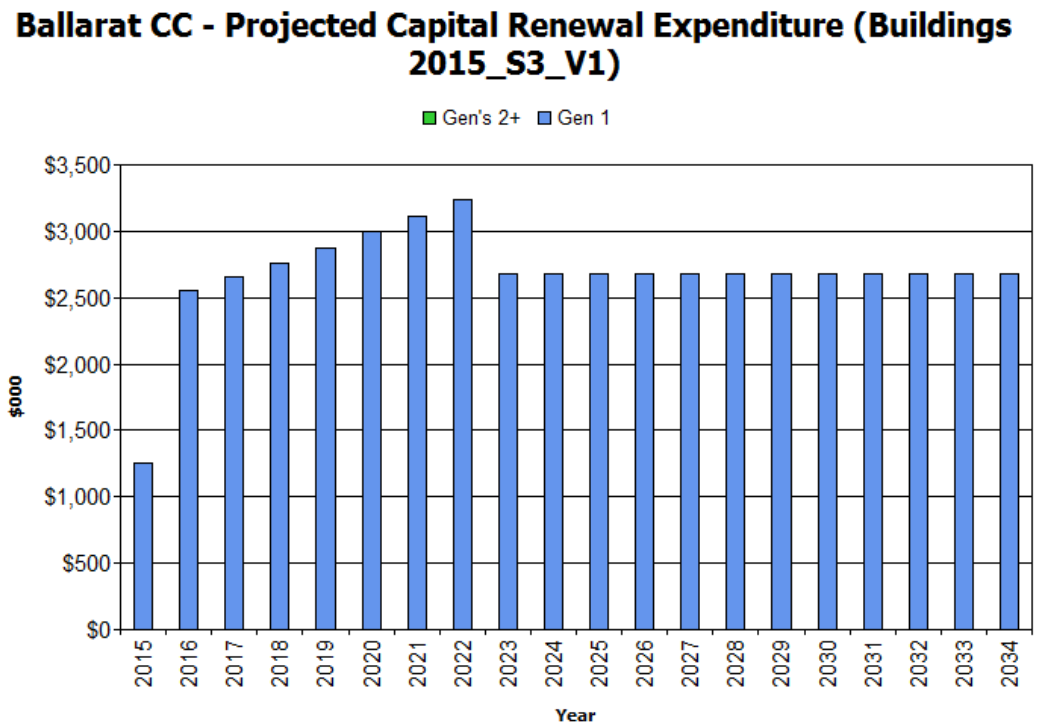
The renewal projection (forecast) in Scenario 1 (using the asset register) shows a backlog of renewals to the value of $8.2M. This is 3.5% of the total asset value that are past their useful life indicating they are fully depreciated.

Whilst the long term averages and total values from this register may be useful, the shorter term renewal forecasts are clearly not, and are inconsistent with the known (and funded) capital renewal plans and condition profiles. This indicates that further refinement of the asset register is required before it is valuable as a capital renewal planning tool and should be given a high priority in the asset management improvement plan. The review is particularly important with respect to the useful lives in the asset register and considering function and utilisation data and knowledge and aligning these with the required expenditure pattern for renewals and partial renewals.

Deferred renewal and replacement, i.e. those assets identified for renewal and/or replacement and not scheduled in capital works programs are to be included in the risk analysis process in the risk management plan.

Renewals and replacement expenditure in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

Fig 5.2: Projected Capital Renewal and Replacement Expenditure (Scenario 3 - Balanced with LTFP)



The above Scenario 3 chart shows the 20-year capital renewal expenditure projections based on sustaining current service levels.

At present, the short to medium 10-year outlook suggests $26.8M is required and funded in the LTFP to sustain current service levels. This is the best available measure of renewal need at the present time.

Given an ageing asset stock and the 1.7% per annum population growth projections combined with limited function and capacity performance data and knowledge the risks that may arise during the planning period could be significant and will need to be carefully monitored. With increased investment in monitoring, auditing and reporting of the infrastructure supporting the services a more reliable estimate of renewal will assist with evaluating future risks. By doing so, Council will be in a more effective position to communicate these risks to the community.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the organisation from land development or state asset transfer agreements. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is normally detailed in Table 5.5.1 below however at this stage an agreed and adopted prioritisation framework is yet to be developed and is included in the improvement plan for action. Consequently the projected new and capital upgrade/expansion projects are currently being prioritised in an ad-hoc informal manner using basic parameters such as demand, function and those identified in the Council Plan.

Table 5.5.1: New Assets Priority Ranking Criteria

Criteria	Weighting
To be determined in the next revision of this AM Plan.	

5.5.2 Capital Investment Strategies

The organisation will plan capital upgrade and new projects to meet level of service objectives by:

- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
    - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset,
    - the project objectives to rectify the deficiency including value management for major projects,
    - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
    - management of risks associated with alternative options,
    - and evaluate the options against evaluation criteria adopted by Council, and
    - select the best option to be included in capital upgrade/new programs,
- Review current and required skills base and implement training and development to meet required construction and project management needs,
- Review management of capital project management activities to ensure Council is obtaining best value for resources used.

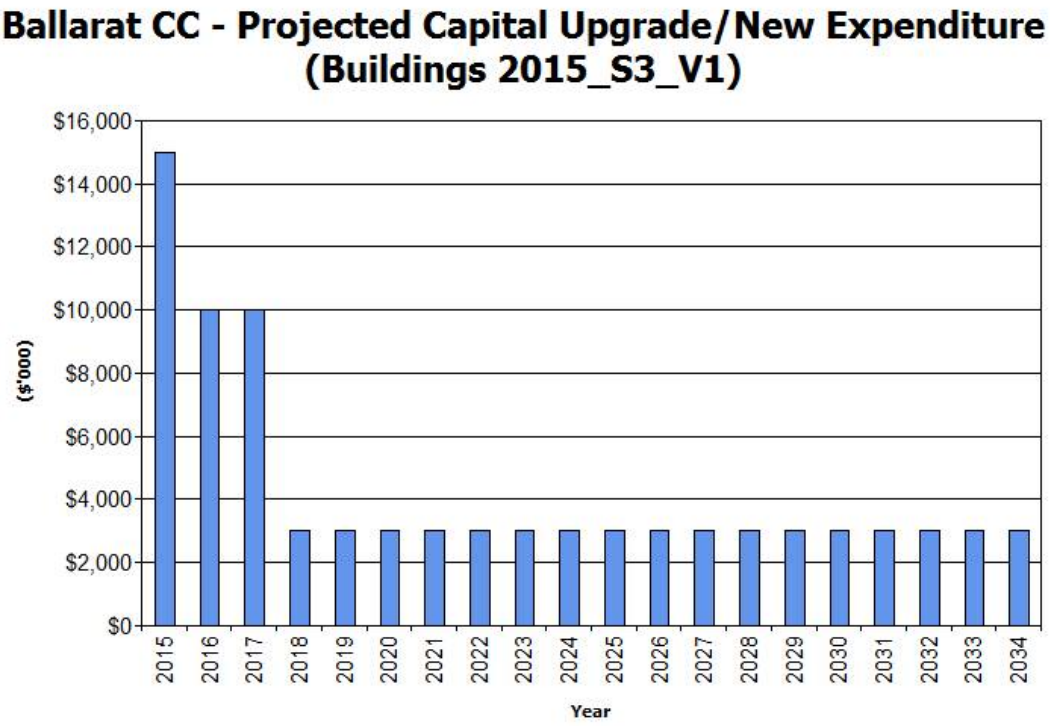
Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

5.5.3 Summary of future upgrade/new assets expenditure

The projected 20 year capital upgrade/new expenditures have been developed and are shown below. All amounts are shown in real values (i.e. today's dollars) and net of inflation.

Figure 6.1 below shows the prioritised delivery of projects and programs over the 20-year planning period. The first ten years to 2024 includes $56M worth of upgrade and new projects.

Fig 6.1: Projected Capital Upgrade/New Asset Expenditure



Expenditure on new assets and services in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6, together with estimated annual savings from not having to fund operations and maintenance of the assets. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any. Any revenue gained from asset disposals is accommodated in Council's long term financial plan.

Where cash flow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

Table 5.6: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Expenditure	Operations & Maintenance Annual Savings
Refer to the Disposal Plan			$50,000 per annum forecast.	

5.7 Service Consequences and Risks

The organisation has prioritised decisions made in adopting this AM Plan to obtain the optimum benefits from its available resources. Decisions were made based on the development of 3 scenarios of AM Plans.

Scenario 1 - What we would like to do based on asset register data

Scenario 2 – What we should do with existing budgets and identifying level of service and risk consequences (i.e. what are the operations and maintenance and capital projects we are unable to do, what is the service and risk consequences associated with this position). This may require several versions of the AM Plan.

Scenario 3 – What we can do and be financially sustainable with AM Plans matching long-term financial plans.

The development of scenario 1 and scenario 2 AM Plans provides the tools for discussion with the Council and community on trade-offs between what we would like to do (scenario 1) and what we should be doing with existing budgets (scenario 2) by balancing changes in services and service levels with affordability and acceptance of the service and risk consequences of the trade-off position (scenario 3).

5.7.1 What we cannot do

There are some operations and maintenance activities that are unable to be undertaken within the next 10 years. These include:

- Should the operational budget remain static (i.e. no increase in real terms) the estimated funding shortfall is around $7.3M in the first ten years
- Anticipated reduction in maintenance frequency and defect repairs for some buildings.

5.7.2 Service consequences

Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. These include:

- Reduced level of service for some community buildings.
- Community buildings not meeting legislative and/or DDA requirements.
- Permanent or temporary closure of buildings for unplanned maintenance activities.
- Buildings not meeting the needs or specific user groups.
- Increased number of defects.
- Longer response time to service requests.

5.7.3 Risk consequences

The operations and maintenance activities and capital projects that cannot be undertaken may maintain or create risk consequences for the organisation. These could include:

- Higher likelihood of building component failure leading to accelerated degradation.
- Increased risk of user injury due to untreated maintenance or vandalism issues.
- Potential for total asset value loss due to critical fault issues.
- Increased maintenance and servicing costs.
- Ageing assets combined with growth areas will accelerate deterioration of assets.

These risks have been included with the Infrastructure Risk Management Plan summarised in Section 5.2 and risk management plans actions and expenditures included within projected expenditures.

6. FINANCIAL SUMMARY

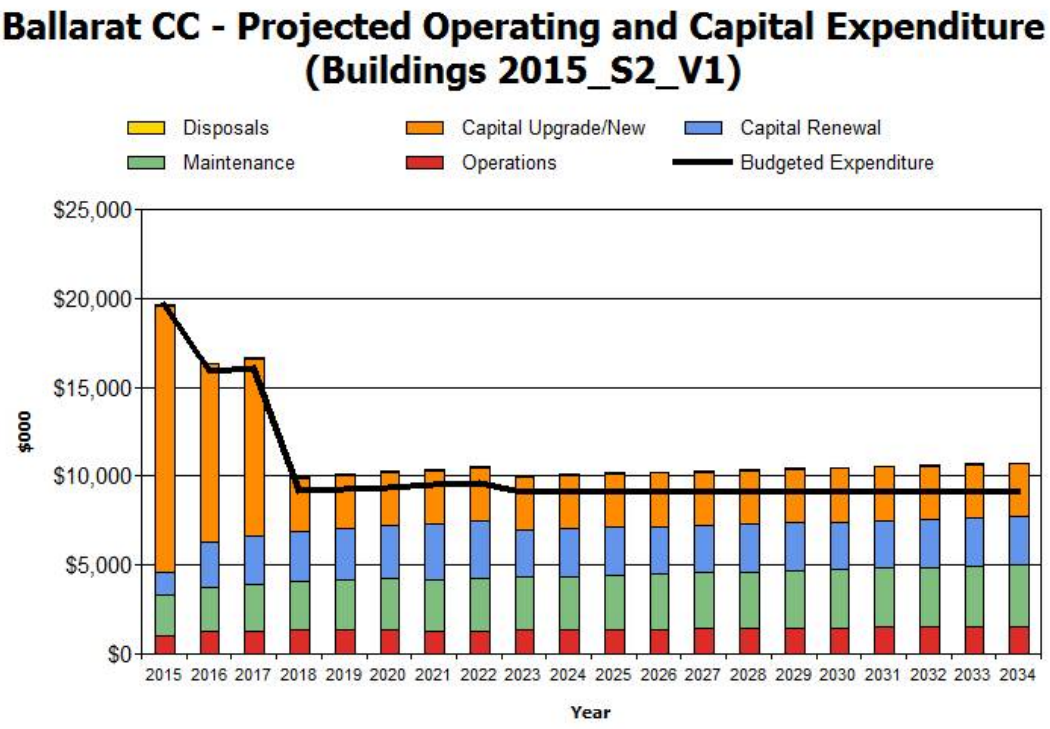
This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

Projections are based on best available information and are aimed at providing a likely forecast for the future and indicate priority asset and financial management and planning tasks. Confidence levels around the reliability and accuracy of the data used to prepare the financial projections exist, however, it is important that the projections be based on best available information and improved over time as information becomes available on current and desired levels of service and current and projected future asset performance.

6.1 Financial Statements and Projections

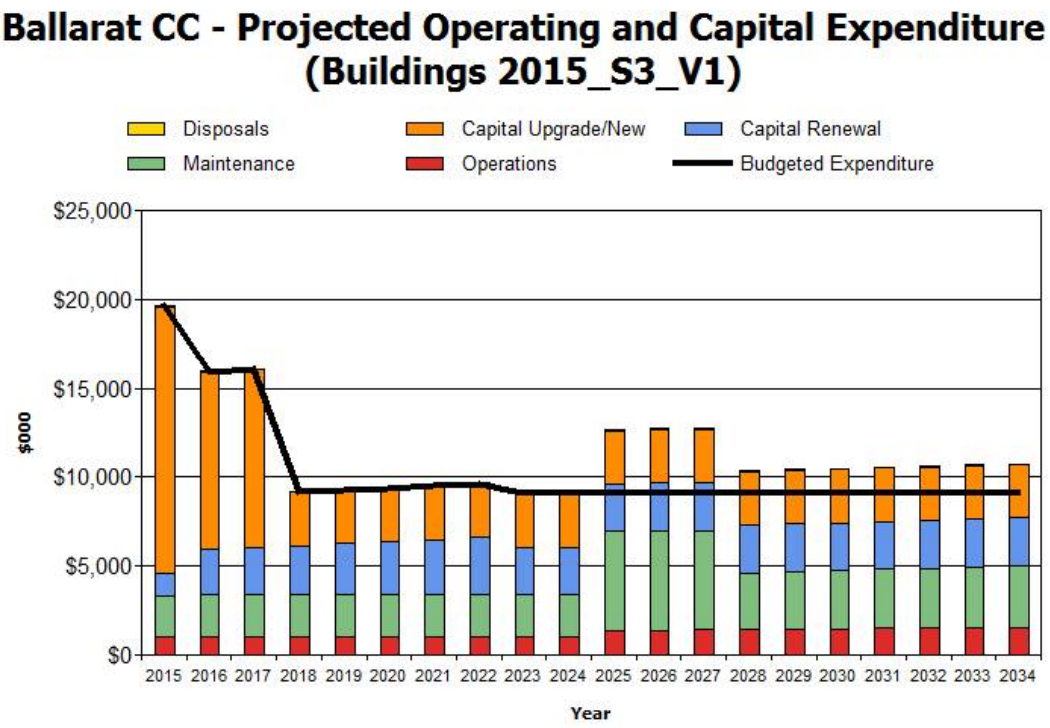
The combined 20 year financial projections for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets) for Scenario 2 & 3 are shown below. All amounts are shown in real values (i.e. 2014/15 dollars and net of inflation).

Fig 7.1: Scenario 2 - Projected Operating and Capital Expenditure
(Sustaining assets and services over the planning period at current levels)



Scenario 2 requirements are based on an amount sustaining existing assets over the long term at current service levels. This level of funding estimated at $123.9M over the next 10 years is not currently being achieved in the Long Term Financial Plan (current projections suggest $116.6M is allocated). This means the deferral of $7.3M priority operational, maintenance, replacement and upgrade/new works and activities past the 10 year LTFP timeframe which is represented in Figure 7.2 below.

Fig 7.2: Scenario 3 - Projected Operating and Capital Expenditure (Balanced with the LTFP)



The mix of operational and capital activities and projects in the $7.3M deferral past the first 10 years of the plan is a question for the Executive and Council to determine however for the purpose of the exercise the above chart represents a maintenance deferral. Clearly there will be implications and the service / risk consequences of this should form the basis of reviewing priorities in subsequent updates of the asset management program as part of the ongoing improvement plan.

6.1.1 Sustainability of service delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the asset renewal funding ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period.

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[14] 100%

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 100% of the funds required for the renewal and replacement of its assets to sustain current services.

Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense). The life cycle cost for the services covered in this asset management plan is $7.24M per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

[14] AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is $6.011M per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is -$1.228M per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 83% of life cycle costs.

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the life cycle expenditure is less than that life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist council in providing services to their communities in a financially sustainable manner. This is the purpose of asset management plans and long term financial plan.

Medium term – 10 year financial planning period

This asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. In a core asset management plan, a gap is generally due to increasing asset renewals for ageing assets.

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is $6.794M on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $6.011M on average per year giving a 10 year funding shortfall of $783,000 per year. This indicates that Council expects to have 88% of the projected expenditures needed to provide the services documented in the asset management plan.

Medium Term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is $6.329M on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $5.751M on average per year giving a 5 year funding shortfall of $579,000. This indicates that Council expects to have 91% of projected expenditures required to provide the services shown in this asset management plan.

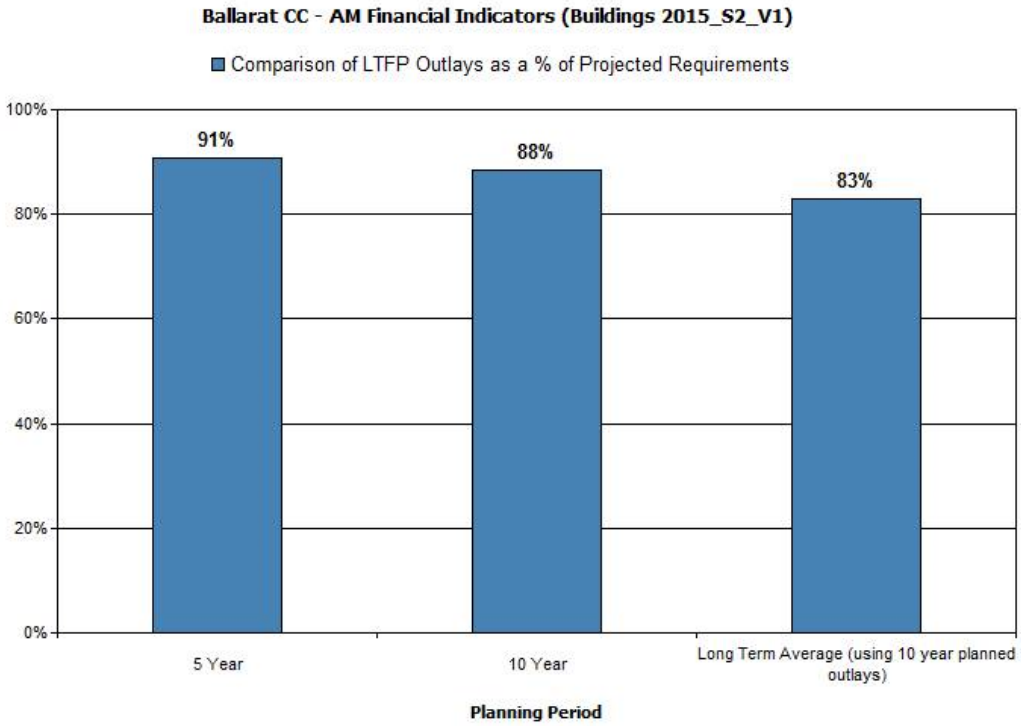
Asset management financial indicators

Figure 7A shows the long term life cycle costs/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period expressed as a percentage.

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 100% for the first few years of the asset management plan and ideally over the 10 year life of the Long Term Financial Plan. Anything less than this in the 5-10 year period would suggest funding levels below that required to sustain existing service levels.

The following chart summarises the ratios for Scenario 2 - Sustaining assets and services at current levels over the planning period.

Figure 7A: Asset Management Financial Indicators



The chart illustrates that funding remains below what is required to sustain existing service levels for the short to medium term (5 to 10 years). It shows council have 91% of the funds required to operate, maintain and replace assets in the next 5 years, 88% for the next 10 years and 83% over the assets life cycle.

For the 5 year planning period, the projected and planned expenditures should be almost the same to demonstrate sustainability, the gap should be close to zero and the sustainability indicator should be nearing 1.0 or 100% as this is the period most under the control of Council.

At 91% this is not cause for immediate concern and improvements in data quality plus a review of services and service levels and financing options will lead to a more sustainable position over time.

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the AM Plan. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan

Figure 8: Projected and LTFP Budgeted Renewal Expenditure

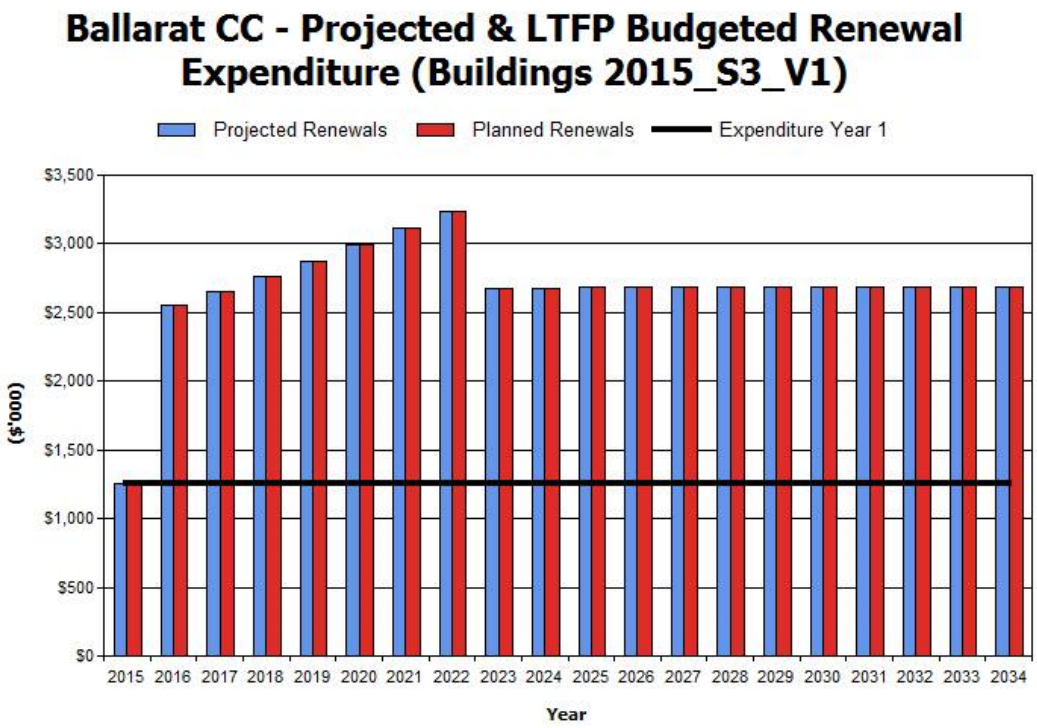


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendices A & B.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year	Projected Renewals ($000)	LTFP Renewal Budget ($000)	Renewal Financing Shortfall ($000) (-ve Gap, +ve Surplus)	Cumulative Shortfall ($000) (-ve Gap, +ve Surplus)
2015	$1,250	$1,250	$0	$0
2016	$2,552	$2,552	$0	$0
2017	$2,656	$2,656	$0	$0
2018	$2,764	$2,764	$0	$0
2019	$2,876	$2,876	$0	$0
2020	$2,993	$2,993	$0	$0
2021	$3,115	$3,115	$0	$0
2022	$3,237	$3,237	$0	$0
2023	$2,680	$2,680	$0	$0
2024	$2,680	$2,680	$0	$0
2025	$2,680	$2,680	$0	$0
2026	$2,680	$2,680	$0	$0
2027	$2,680	$2,680	$0	$0
2028	$2,680	$2,680	$0	$0
2029	$2,680	$2,680	$0	$0
2030	$2,680	$2,680	$0	$0
2031	$2,680	$2,680	$0	$0
2032	$2,680	$2,680	$0	$0

Year	Projected Renewals ($000)	LTFP Renewal Budget ($000)	Renewal Financing Shortfall ($000) (-ve Gap, +ve Surplus)	Cumulative Shortfall ($000) (-ve Gap, +ve Surplus)
2033	$2,680	$2,680	$0	$0
2034	$2,680	$2,680	$0	$0

Note: A negative shortfall indicates a financing gap, a positive shortfall indicates a surplus for that year.

Providing services in a sustainable manner will require matching of projected asset renewal and replacement expenditure to meet agreed service levels with **the corresponding** capital works program accommodated in the long term financial plan.

A gap between **projected asset renewal/replacement expenditure and amounts accommodated in the LTFP** indicates that **further work is required on reviewing service levels in the AM Plan (including possibly revising the LTFP)** before finalising the asset management plan to manage required service levels and funding **to eliminate any funding gap**.

We will manage the 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and review future services, service levels and costs with the community.

6.1.2 Projected expenditures for long term financial plan

Table 6.1.2.1 & 6.1.2.2 shows the projected expenditures for the 10 year long term financial plan for Scenario 2 & 3.

Expenditure projections are in2014/15 real values.

Table 6.1.2.1: Scenario 2- Projected Expenditures for Long Term Financial Plan ($000)

Year	Operations ($000)	Maintenance ($000)	Projected Capital Renewal ($000)	Capital Upgrade/ New ($000)	Disposals ($000)
2015	$1,040	$2,291	$1,250	$15,000	$50
2016	$1,237	$2,523	$2,552	$10,000	$50
2017	$1,293	$2,645	$2,656	$10,000	$50
2018	$1,344	$2,758	$2,764	$3,000	$50
2019	$1,364	$2,802	$2,876	$3,000	$50
2020	$1,384	$2,846	$2,993	$3,000	$50
2021	$1,290	$2,891	$3,115	$3,000	$50
2022	$1,310	$2,935	$3,237	$3,000	$50
2023	$1,330	$2,979	$2,680	$3,000	$50
2024	$1,350	$3,023	$2,680	$3,000	$50

Table 6.1.2.2: Scenario 3- Projected Expenditures for Long Term Financial Plan ($000)

Year	Operations ($000)	Maintenance ($000)	Projected Capital Renewal ($000)	Capital Upgrade/ New ($000)	Disposals ($000)
2015	$1,040	$2,291	$1,250	$15,000	$50
2016	$1,040	$2,341	$2,552	$10,000	$50
2017	$1,040	$2,341	$2,656	$10,000	$50
2018	$1,040	$2,341	$2,764	$3,000	$50
2019	$1,040	$2,341	$2,876	$3,000	$50
2020	$1,040	$2,341	$2,993	$3,000	$50
2021	$1,040	$2,341	$3,115	$3,000	$50
2022	$1,040	$2,341	$3,237	$3,000	$50
2023	$1,040	$2,341	$2,680	$3,000	$50
2024	$1,040	$2,341	$2,680	$3,000	$50

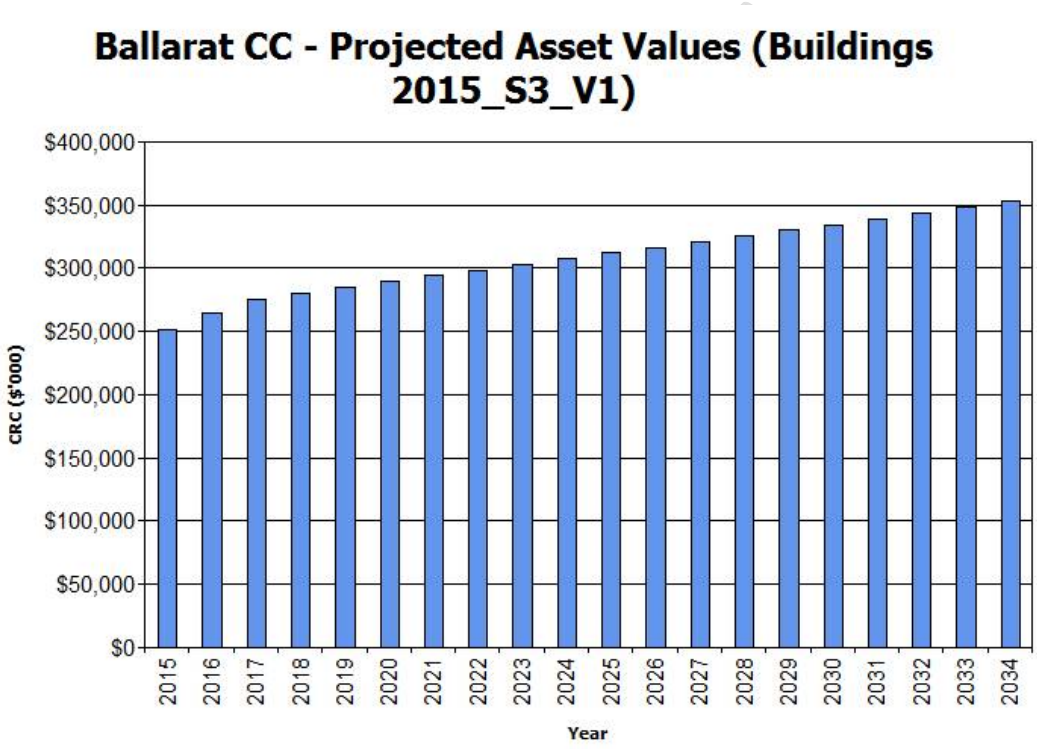
6.2 Funding Strategy

After reviewing service levels, as appropriate to ensure ongoing financial sustainability, the projected expenditures identified in Section 6.1.2 will be accommodated in the Council's 10 year long term financial plan.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council including assets constructed by land developers and others plus assets donated to Council. Figure 9 shows the projected replacement cost asset values over the planning period in real values. Values are based on the 2014 Financial Statements.

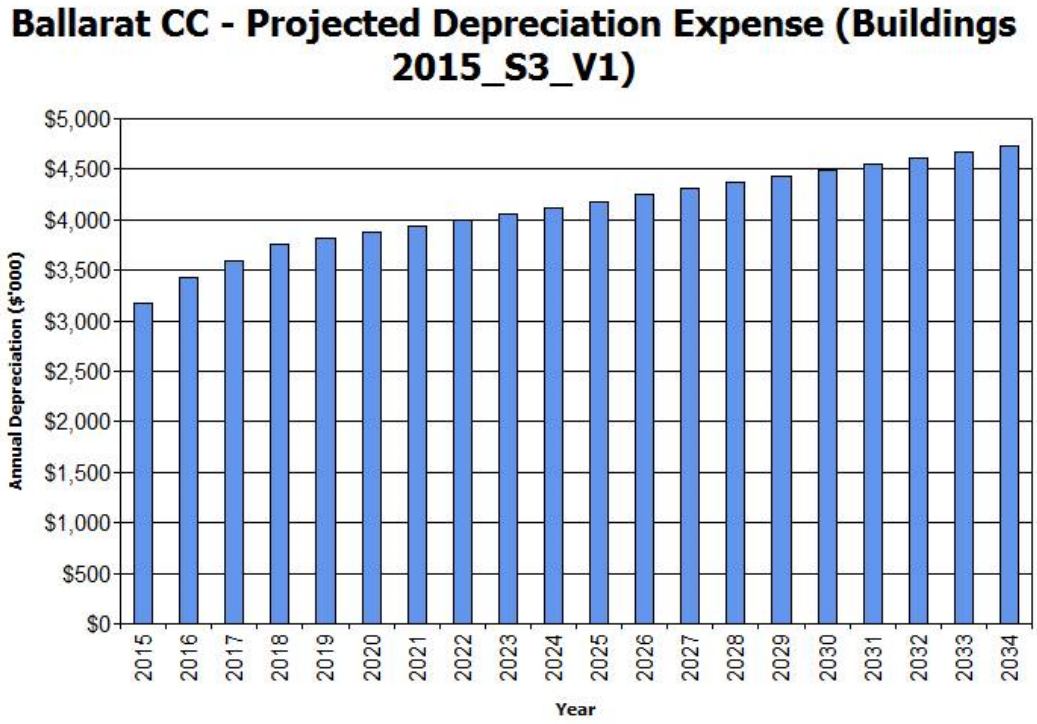
Figure 9: Projected Asset Values



The projected asset values are forecast to increase from the current value of $233M to $352M by 2034.

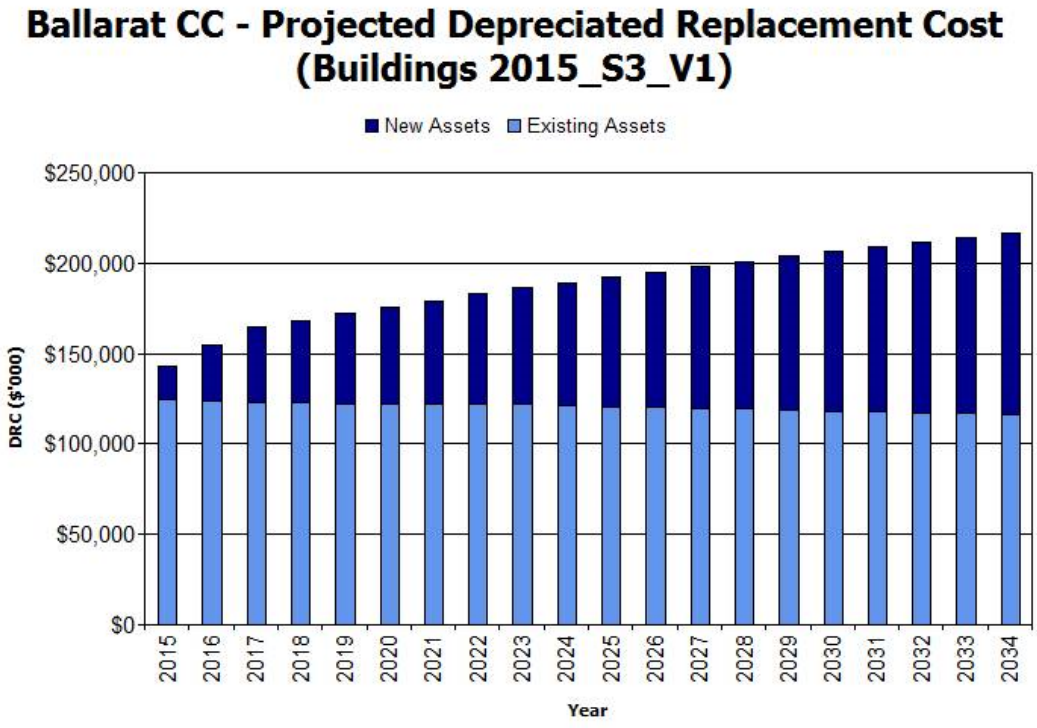
Depreciation expense is forecast to increase in line with asset values as shown in Figure 10 from $3.176M in 2015 to $4.736M in 2034.

Figure 10: Projected Depreciation Expense



The depreciated replacement cost will vary over the forecast period depending on the timing of new assets being acquired, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 11. The depreciated replacement cost of contributed and new assets is shown in the darker colour and in the lighter colour for existing assets.

Figure 11: Projected Depreciated Replacement Cost



From the data supplied, the current renewal rate of existing assets will need to be monitored and increased to sustain the increasing accumulated depreciation costs. This is demonstrated by the steadily declining depreciated replacement cost of existing assets as shown by the light coloured bars. A constant value for the DRC illustrates that Council is maintaining its infrastructure capital.

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in AM Plan and Risks of Change

Key Assumptions	Risks of Change to Assumptions
That Building assets will remain in Council's ownership throughout the planning period and that levels of service remain unchanged.	Low
Required maintenance is assumed to take place in accordance with relevant guidelines/standards.	Low
Natural disasters, accidents and other unplanned events are not considered in the asset lifecycles.	Medium
All expenditure stated is in 2014/15 dollar values.	Low
Maintenance expenditure is based on historical expenditure and assumes there will no significant change.	Low
Maintenance and operations allocations are based on maintaining current service levels and utilisation.	Medium
It is assumed that regulations/standards relating to Building infrastructure will remain the same over the planning period	Low
It is assumed that the basic mix of Building infrastructure will not alter significantly over the planning period.	Low

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale[15] in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy ± 40%
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.1.

[15] IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Table 6.5.1: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	B Reliable	Based on local corporate knowledge and State government projections.
Growth projections	B Reliable	Estimated, however further substantiation required for next revision of the AM Plan
Operations expenditures	B Reliable	Based on 2014/15 budget, expenses split into operations and maintenance.
Maintenance expenditures	B Reliable	Based on 2014/15 budget, expenses split into operations and maintenance.
Projected Renewal exps. - Asset values	A Highly reliable	Sourced from Confirm database and 2014/15 audited financial statements.
- Asset residual values	A Highly reliable	Sourced from Confirm database and 2014/15 audited financial statements.
- Asset useful lives	C Uncertain	Based on asset register however it is unknown if they're evidence based.
- Network renewals	B Reliable	Based on asset register as at 30 June 2014 and network level modelling from expert judgement.
Upgrade/New expenditures	B Reliable	Projected proposals based on current program allocations
Disposal expenditures	C Uncertain	Based on current knowledge extrapolated.

Over all data sources the data confidence is assessed as medium to high confidence level for data used in the preparation of this AM Plan.

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

"[Enter summary of accounting & financial systems]"

Accountabilities for financial systems

The responsible officer is the Chief Financial Officer.

Accounting standards and regulations

Financial statements are general purpose financial statements and are prepared in accordance with

- Australian Accounting Standards,
- Other authoritative pronouncements of the Australian Accounting Standards Board,
- Urgent Issues Group Interpretations,
- the Local Government Act (1989) and Regulation, and
- the Local Government Code of Accounting Practice and Financial Reporting.

Capital/maintenance threshold

Items of infrastructure, property, plant and equipment are not capitalised unless their cost of acquisition exceeds the following;

- Building construction & reconstruction > $5,000
- Major repairs: > $5,000

Required changes to accounting financial systems arising from this AM Plan

None identified

7.1.2 Asset management system

The following systems are used for asset management within the City of Ballarat:

Confirm – Asset management System

MapInfo – Mapping of assets

Asset registers

There is currently an interface between the Confirm Asset Management System and MapInfo.

Linkage from asset management to financial system

There is currently no direct link between the Financial Asset Register and the Asset Management System. A direct interface will be implemented as part of the Asset Management System improvement program.

Accountabilities for asset management system and data maintenance

The Coordinator for Asset Management is responsible for

- Data maintenance
- Developing targets and frequency for asset condition inspections
- Maintaining matching data within MapInfo
- Developing asset hierarchy within the Asset Management System including any changes or additions required to existing hierarchy
- Determining required system improvements
- Auditing data

Operations staff complete asset condition inspections and input data in accordance with established business protocols.

Required changes to asset management system arising from this AM Plan

- Completion of linkages to other systems
- Review the accuracy and currency of asset related data, particularly useful lives and acquisition dates for all components.
- Continued development of a single technical asset register as the corporate asset register, in which financial valuation calculations including annual depreciation can be undertaken at an individual asset component level.
- Development of a works costing and maintenance management system to improve works planning and cost recording, in particular to identify expenditure type (operations, maintenance, capital renewal and capital new/upgrade)
- Improved project cost accounting to record costs against the asset component and develop valuation unit rates.

7.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	**Asset Register** Assess the Remaining Life of all assets on a priority basis and align with up to date performance data and knowledge.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
2	Review and update data for the year of acquisition or date of last renewal and replacement cost in the asset register. Consider componentisation as per the Australian Building Component Guideline.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
3	**Infrastructure Risk Management** Review and update the infrastructure risk management plan detailed in 5.2.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
4	Assess high residual building infrastructure risks and report to the audit committee.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
5	**Forward Projections** Ensure funding models reflect the resources required meeting the timely renewal of existing assets and those identified and implemented under the Strategic Plan.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
6	Develop and adopt a prioritisation framework for renewal and upgrade/new projects.			
7	Increase confidence and prioritise renewal and upgrade/new estimates based on risk.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
8	**Levels of Service** Develop and confirm current and desired community and technical levels of service to understand and report on a sustainable service delivery model.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
9	**AM Plan** Maintain an annual review of the AM Plan incorporating an update of service level performance, financial projections and risk.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
10	Implement a continuous improvement strategy to assess and report on the performance of councils controlled assets.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015

7.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The AM Plan will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the organisation's long term financial plan.

The AM Plan has a life of 4 years (Council election cycle) and is due for complete revision and updating within 1 year of each Council election.

7.4 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into Council's long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans,
- **The Asset Renewal Funding Ratio achieving the target of 1.0.**

8. REFERENCES

City of Ballarat, 2014, 'Council Plan 2014/15'

City of Ballarat, 2014, 'Strategic Resource Plan 2014 – 2015',

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9. APPENDICES

Appendix A Aspirational 10 year LTFP (Scenario 2)

Appendix B Affordable 10 year LTFP (Scenario 3)

Appendix C Expenditure Template (Scenario 3)

Appendix D Abbreviations

Appendix E Glossary

Appendix A Aspirational 10 year LTFP (Scenario 2 – Maintain existing service levels)

Ballarat CC - Report 7 - LTFP Expenditure Projections (Buildings 2015_S2_V1)										
Projected Expenditure	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Capital Expenditure on Renewal/Replacement of existing assets	$1,250	$2,552	$2,656	$2,764	$2,876	$2,993	$3,115	$3,237	$2,680	$2,680
Capital Expenditure on Upgrade/New assets	$15,000	$10,000	$10,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000
Operational cost of existing assets	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040
Maintenance cost of existing assets	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291
Operational cost of New assets	$0	$82	$138	$189	$209	$229	$250	$270	$290	$310
Maintenance cost of New assets	$0	$182	$304	$417	$461	$505	$550	$594	$638	$682
Disposal of Surplus Assets	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50
All dollar values in ($'000)'s										

Appendix B Affordable 10 year LTFP (Scenario 3)

Ballarat CC - Report 7 - LTFP Expenditure Projections (Buildings 2015_S3_V1)										
Projected Expenditure	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Capital Expenditure on Renewal/Replacement of existing assets	$1,250	$2,552	$2,656	$2,764	$2,876	$2,993	$3,115	$3,237	$2,680	$2,680
Capital Expenditure on Upgrade/New assets	$15,000	$10,000	$10,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000
Operational cost of existing assets	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040
Maintenance cost of existing assets	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291
Operational cost of New assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance cost of New assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Disposal of Surplus Assets	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50
All dollar values in ($'000)'s										

Appendix C Expenditure Template (Scenario 3)

NAMS.PLUS3 Asset Management — Ballarat CC

Buildings 2015_S3_V1 Asset Management Plan

First year of expenditure projections **2015** (financial yr ending)

Buildings 2015

Asset values at start of planning period

			Calc CRC from Asset Register
Current replacement cost	$233,505	(000)	$0 (000)
Depreciable amount	$233,505	(000)	This is a check for you.
Depreciated replacement cost	$126,156	(000)	
Annual depreciation expense	$3,176	(000)	

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	0.00%
Additional maintenance	0.00%
Additional depreciation	1.36%

Planned renewal budget (information only)

You may use these values calculated from your data or overwrite the links.

Planned Expenditures from LTFP

20 Year Expenditure Projections Note: Enter all values in current **2015** values

Financial year ending	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure Outlays included in Long Term Financial Plan (in current $ values)										
Operations										
Operations **budget**	$938	$938	$938	$938	$938	$938	$938	$938	$938	$938
Management **budget**	$102	$102	$102	$102	$102	$102	$102	$102	$102	$102
AM systems **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total operations	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040	$1,040
Maintenance										
Reactive maintenance **budget**	$687	$687	$687	$687	$687	$687	$687	$687	$687	$687
Planned maintenance **budget**	$1,604	$1,604	$1,604	$1,604	$1,604	$1,604	$1,604	$1,604	$1,604	$1,604
Specific maintenance items **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total maintenance	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291	$2,291
Capital										
Planned renewal **budget**	$1,250	$2,552	$2,656	$2,764	$2,876	$2,993	$3,115	$3,237	$2,680	$2,680
Planned upgrade/new **budget**	$15,000	$10,000	$10,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000
Non-growth contributed asset value	$3,000	$2,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Asset Disposals										
Est Cost to dispose of assets	$50	$50	$50	$50	$50	$50	$50	$50	$50	$50
Carrying value (DRC) of disposed assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan)										
Additional Expenditure Outlays required and not included above	2015 $000	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000
Operations	$0	$115	$115	$115	$115	$115	$0	$0	$0	$0
Maintenance	$0	$50	$50	$50	$50	$50	$50	$50	$50	$50
Capital Renewal	to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used)									
Capital Upgrade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
User Comments #2										

Forecasts for Capital Renewal using Methods 2 & 3 (Form 2A & 2B) & Capital Upgrade (Form 2C)										
	2015 $000	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000
Forecast Capital Renewal from Forms 2A & 2B	$1,250	$2,552	$2,656	$2,764	$2,876	$2,993	$3,115	$3,237	$2,680	$2,680
Forecast Capital Upgrade from Form 2C	$15,000	$10,000	$10,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000

Appendix D Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ASC	Annual service cost
CRC	Current replacement cost
DA	Depreciable amount
DRC	Depreciated replacement cost
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
LTFP	Long term financial plan
MMS	Maintenance management system
RV	Residual value
SoA	State of the Assets
WDCRC	Written down current replacement cost

Appendix E Glossary

Annual service cost (ASC)

1) Reporting actual cost
   The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.
2) For investment analysis and budgeting
   An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset category

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset hierarchy

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

Asset management (AM)

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Asset renewal funding ratio

The ratio of the net present value of asset renewal funding accommodated over a 10 year period in a long term financial plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMG Financial Sustainability Indicator No 8].

Average annual asset consumption (AAAC)*

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

Borrowings

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided**.**

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the organisation's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure - new
Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operations and maintenance expenditure.

Capital expenditure - renewal
Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

Capital expenditure - upgrade
Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operations and maintenance expenditure in the future because of the increase in the organisation's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility.

Capital funding
Funding to pay for capital expenditure.

Capital grants
Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure
See capital expenditure definition

Capitalisation threshold
The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

Carrying amount
The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets
See asset class definition

Component
Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

Core asset management
Asset management which relies primarily on the use of an asset register, maintenance management systems, job resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cashflow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decision- making).

Cost of an asset
The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, including any costs necessary to place the asset into service. This includes one-off design and project management costs.

Critical assets
Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.

Current replacement cost (CRC)
The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Deferred maintenance
The shortfall in rehabilitation work undertaken relative to that required to maintain the service potential of an asset.

Depreciable amount
The cost of an asset, or other amount substituted for its cost, less its residual value.

Depreciated replacement cost (DRC)
The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset.

Depreciation / amortisation
The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life
See useful life definition.

Expenditure
The spending of money on goods and services. Expenditure includes recurrent and capital outlays.

Expenses
Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or increases in liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

Fair value
The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Financing gap
A financing gap exists whenever an entity has insufficient capacity to finance asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current financing gap means service levels have already or are currently falling. A projected financing gap if not addressed will result in a future diminution of existing service levels**.**

Heritage asset
An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss
The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets
Physical assets that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no separate market value.

Investment property
Property held to earn rentals or for capital appreciation or both, rather than for:
(a) use in the production or supply of goods or services or for administrative purposes; or
(b) sale in the ordinary course of business.

Key performance indicator
A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

Level of service
The defined service quality for a particular service/activity against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental impact, acceptability and cost.

Life Cycle Cost *
1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure
The Life Cycle Expenditure (LCE) is the average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

Loans / borrowings
See borrowings.

Maintenance
All actions necessary for retaining an asset as near as practicable to an appropriate service condition, including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

- **Planned maintenance**
  Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.
- **Reactive maintenance**
  Unplanned repair work that is carried out in response to service requests and management/ supervisory directions.
- **Specific maintenance**
  Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.
- **Unplanned maintenance**
  Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance expenditure *
Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality
The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset
Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

Net present value (NPV)
The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from eg the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

Non-revenue generating investments
Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operations
Regular activities to provide services such as public health, safety and amenity, eg street sweeping, grass mowing and street lighting.

Operating expenditure
Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, eg power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

Operating expense
The gross outflow of economic benefits, being cash and non cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

Operating expenses
Recurrent expenses continuously required to provide a service, including power, fuel, staff, plant equipment, maintenance, depreciation, on-costs and overheads.

Operations, maintenance and renewal financing ratio
Ratio of estimated budget to projected expenditure for operations, maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Operations, maintenance and renewal gap
Difference between budgeted expenditures in a long term financial plan (or estimated future budgets in absence of a long term financial plan) and projected expenditures for operations, maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

Pavement management system (PMS)
A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

PMS Score
A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption *
The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

Rate of annual asset renewal *
The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade/new *
A measure of the rate at which assets are being upgraded and expanded per annum with capital upgrade/new expenditure expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Recoverable amount
The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure
Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operations and maintenance expenditure.

Recurrent funding
Funding to pay for recurrent expenditure.

Rehabilitation
See capital renewal expenditure definition above.

Remaining useful life
The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining useful life is useful life.

Renewal
See capital renewal expenditure definition above.

Residual value
The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

Revenue generating investments
Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management
The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment
A self-contained part or piece of an infrastructure asset.

Service potential
The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit sector/public sector to value assets, particularly those not producing a cash flow.

Service potential remaining
A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (Depreciated Replacement Cost/Depreciable Amount).

Specific Maintenance
Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Strategic Longer-Term Plan
A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the Council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

Sub-component
Smaller individual parts that make up a component part.

Useful life
Either:
(a) the period over which an asset is expected to be available for use by an entity, or
(b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council.

Value in Use
The present value of future cash flows expected to be derived from an asset or cash generating unit. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown *

CITY OF BALLARAT

Drainage

Asset Management Plan

Insert photo of relevant asset

Scenario 1 Version 2

April 2015

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1. EXECUTIVE SUMMARY

Context

Located 110km north-west of Melbourne, the City of Ballarat municipality covers an area of 740 km² and has a population of 100,550[1] people and is forecast to grow by 30% (or 1.7% per year) to 130,000 by 2031.

A significant proportion of the council's infrastructure assets have been in existence for many years. These assets originated from a combination of Council, State and Federally funded construction programs plus developer contributed assets from town planning approvals.

Collectively the stormwater drainage network assets essentially:

- Provide an appropriate place to discharge excess rainwater,
- Keep other facilities such as roads, pathways, parks usable during rain events,
- Maintains access to properties during and after rainfall events,
- Minimises damage to public and private property during rainfall events

The Drainage Network comprises:

- 245 Channels
- 1,087 Culverts
- 13 Detention Basins
- 12,067 Pipes
- 11,126 Pits

These infrastructure assets have a depreciated replacement value (written down value) of $104M and a current replacement cost of $343M as reported at 30 June 2014.

The provision of stormwater drainage services is a significant infrastructure challenge for council, although in the short to medium term it is the provision of additional infrastructure that is required more so than the renewal of the existing infrastructure.

Financing needs can be large, requiring planning for large peaks and troughs in expenditure for renewing and replacing such assets. The demand for new and improved services adds to the planning and financing complexity.

The Aim

The aim of this plan is to forecast the timing and cost to replace existing assets over a 20 year planning period commencing in the 2014/15 financial year to an agreed service level. This is to ensure lifecycle costs are kept to a minimum and service levels are provided at an acceptable and sustainable level. In addition, it is important the provision of new infrastructure is duly considered in respect to impacts on service levels, resources, finances and risk.

It is these impacts that need to be assessed as part of this plan and where the residual risk is considered high, due processes and control measures are employed to ensure exposure is accepted and/or minimised in consultation with the community.

The Approach

For drainage assets, a modelling scenario based on the asset register has been used when developing the forward renewal needs and upgrade/new forecasts have been based on the existing budget allocation.

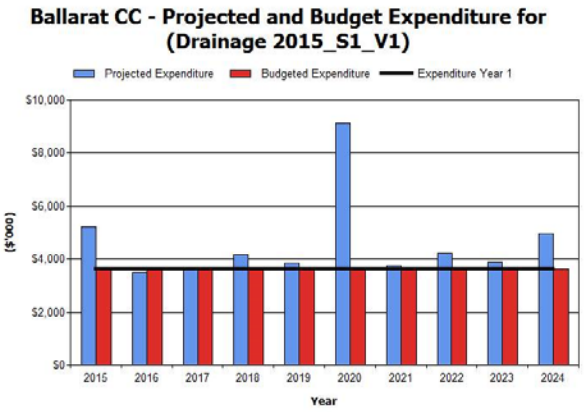
Scenario 1 projects future renewal timing and costs using the acquisition year (or date of last renewal) and useful life from Council's asset register. This is an important aspect as it communicates what is being stated in Council's Financial Statements and should reflect the state of assets and remaining service potential. Instances can occur where remaining lives can be under and/or over stated which can impact valuations and the subsequent depreciation expense allocated to the Operating Statement.

What does it Cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is $46.4M or $4.6M on average per year.

Estimated available funding for this period is $36.4M or $3.6M on average per year which is 78% of the cost to provide the service. This is a funding shortfall of $1M on average per year. Projected expenditure required to provide services in the AM Plan compared with planned expenditure currently included in the Long Term Financial Plan are shown in the graph below.

[1] 2011 Census



What we will do

We plan to provide drainage services for the following:

- Operation, maintenance, renewal and upgrade of culverts, pits, pipes, channels and detention basins to meet service levels set by Council in annual budgets.

What we cannot do

We do **not** have enough funding to provide all services at the desired service levels or provide new services. Works and services that cannot be provided under present funding levels are:

- Minimal new asset construction or upgrading of existing assets. Focus will continue to be on the maintenance, operations and renewal of existing assets as funding and resourcing allows;
- Operations and Maintenance activities will be directed by available funding and resources and the focus will continue to be on reactive maintenance in response to customer service requests and other reporting mechanisms.

Managing the Risks

There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:

- Increasing proportion of stormwater assets in poor condition
- Continued potential risk of property damage and localised flooding due to the condition of the pipe or open channel network and budgetary constraints on provision of new or upgraded assets.
- Meeting community expectations for services

We will endeavour to manage these risks within available funding by:

- Operations and Maintenance activities will be directed by available funding and resources and the focus will continue to be on reactive maintenance in response to customer service requests and other reporting mechanisms.
- Improve management and prioritisation of capital renewal and upgrade projects.
- Undertake targeted condition, function and capacity audits to better understand performance and report status to the community.

Confidence Levels

This AM Plan is based on low level confidence information.

The Next Steps

The actions resulting from this asset management plan are:

- Implement a continuous improvement strategy to assess and report on the condition, function and capacity of council controlled assets.
- Develop and confirm current and desired levels of service in consultation with the community to understand what a sustainable service delivery model should be.
- Assess remaining life and acquisition date of our assets and align with up to date performance data and knowledge.
- Develop and adopt a prioritisation framework for renewal and upgrade/new projects.
- Assess transport infrastructure risks and report to the audit committee.
- Ensure the Asset Management Plan is updated on an annual basis incorporating an annual review and update of service level performance, financial projections and risk.

Questions you may have

What is this plan about?

This asset management plan covers the infrastructure assets that serve the City of Ballarat community's drainage needs. These assets include culverts, pits, pipes, channels and detention basins throughout the community area that enable people to have protection from flooding and minimise the impacts of stormwater runoff.

What is an Asset Management Plan?

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

An asset management plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services.

Why is there a funding shortfall?

Most of the Council's drainage network was constructed by developers and from government grants, often provided and accepted without consideration of ongoing operations, maintenance and replacement needs.

Some of these assets are approaching the later years of their life and require replacement, services from the assets are decreasing and maintenance costs are increasing.

Our present funding levels are insufficient to continue to provide existing services at current levels in the medium term.

What options do we have?

Resolving the funding shortfall involves several steps:

1. Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels,
2. Improving our efficiency in operating, maintaining, renewing and replacing existing assets to optimise life cycle costs,
3. Identifying and managing risks associated with providing services from infrastructure,
4. Making trade-offs between service levels and costs to ensure that the community receives the best return from infrastructure,
5. Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs,
6. Consulting with the community to ensure that drainage services and costs meet community needs and are affordable,
7. Developing partnership with other bodies, where available to provide services,
8. Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

What happens if we don't manage the shortfall?

It is likely that we will have to reduce service levels in some areas, unless new sources of revenue are found. For drainage, the service level reduction may include

- Increase flooding of public and private property
- More nuisance flooding
- Greater time between GPT cleanouts and more pollutants entering out waterways
- Greater likelihood of structural failure for stormwater drainage infrastructure.

What can we do?

We can develop options, costs and priorities for future drainage services, consult with the community to plan future services to match the community service needs with ability to pay for services and maximise community benefits against costs.

What can you do?

We will be pleased to consider your thoughts on the issues raised in this asset management plan and suggestions on how we may change or reduce its mix of services to ensure that the appropriate level of service can be provided to the community within available funding.

2. INTRODUCTION

2.1 Background

This asset management plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding needed to provide the required levels of service over a 20 year planning period.

The asset management plan follows the format for AM Plans recommended in Section 4.2.6 of the International Infrastructure Management Manual[2].

The asset management plan is to be read with the organisation's Asset Management Policy, Asset Management Strategy and the following associated planning documents:

- City of Ballarat, 2014, 'Council Plan 2014/15'
- City of Ballarat, 2014, 'Strategic Resource Plan 2014 – 2015'

The infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide stormwater drainage services to the community.

Table 2.1: Assets covered by this Plan

Asset category	Dimension	Replacement Value
Channels	245	$58,793,685
Culverts	1,087	$23,595,738
Detention Basins	13	$648,158
Pipes	12,067	$227,028,387
Pits	11,126	$33,222,343
TOTAL		**$343,288,312**

Key stakeholders in the preparation and implementation of this asset management plan are: Shown in Table 2.1.1.

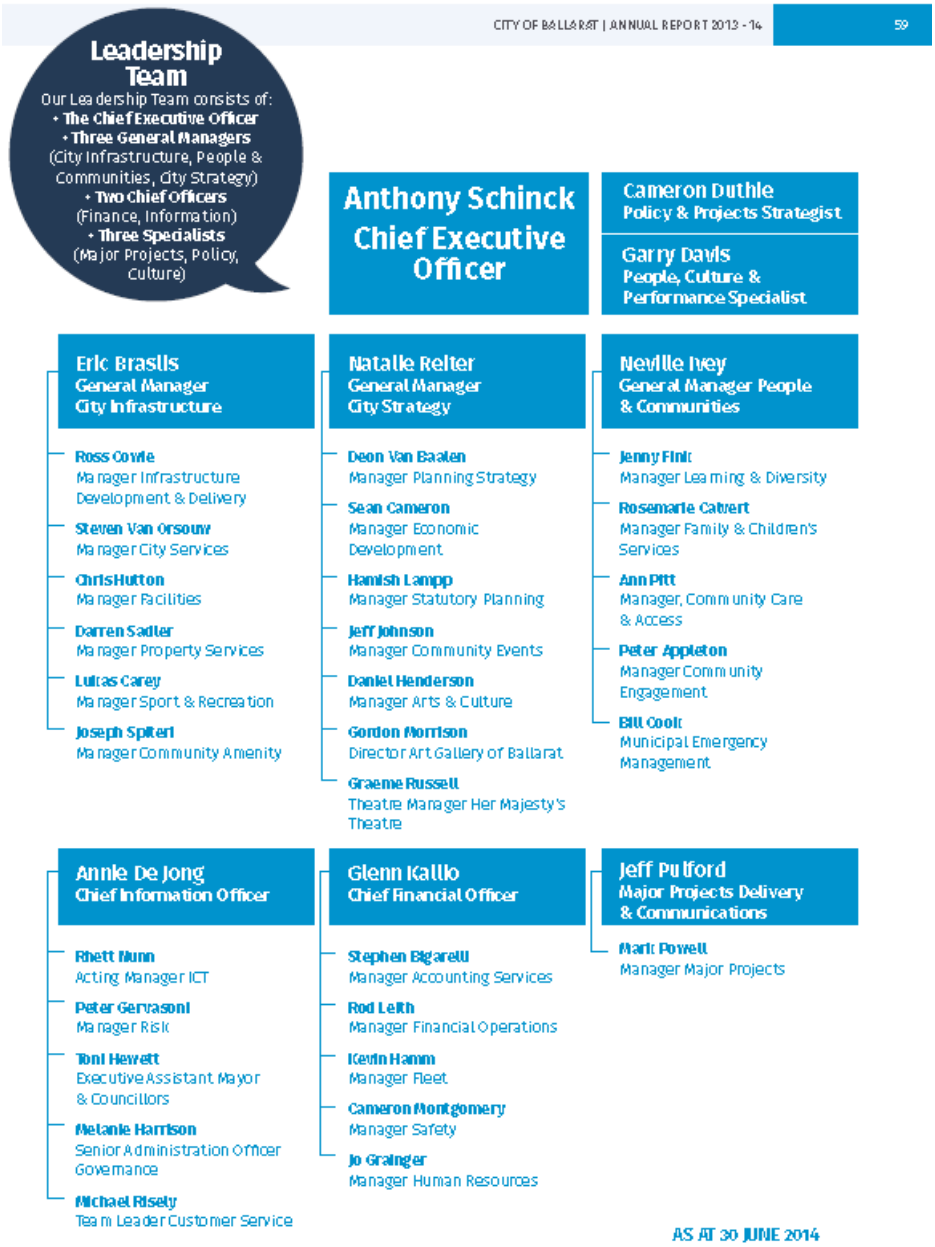
Table 2.1.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Councillors	• Represent needs of community/shareholders, • Allocate resources to meet the organisation's objectives in providing services while managing risks, • Ensure organisation is financially sustainable.
CEO	Overall responsibility for developing the asset management strategy, plans and procedures and reporting on the status and effectiveness of asset management within the organisation.
General Manager City Infrastructure	• Managerial oversight of inspection regime, identification of and timely and effective response to risks. Ensure annual review and update of service levels. • Ensure forward expenditure projections are based on delivering at least two service level scenarios (i.e. aspirational and affordable).
Chief Financial Officer	• Managerial oversight of asset funding model and Long Term Financial Plan. • Ensure capitalisation process is managed effectively.

[2] IPWEA, 2011, Sec 4.2.6, *Example of an Asset Management Plan Structure*, pp 4|24 – 27.

Key Stakeholder	Role in Asset Management Plan
Coordinator Asset Management	• Provide forward expenditure projections based on delivering various service level scenarios. • Annual review and update of service levels.
Supervisors and field service staff	• Provide local knowledge level detail on assets. Verify the size, location and performance of assets. • Describe the maintenance standards employed and Council's ability to meet technical and customer levels of service.
Specialist asset management consultants	• Provide capacity building and mentoring initiatives to achieve core maturity compliance with the national framework for financial and asset management planning and reporting. • Independently peer review plans and revaluation methodology.

Our organisational structure for service delivery from infrastructure assets is detailed below,



2.2 Goals and Objectives of Asset Management

The organisation exists to provide services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', by contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

Our goal in managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.3

2.3 Plan Framework

Key elements of the plan are

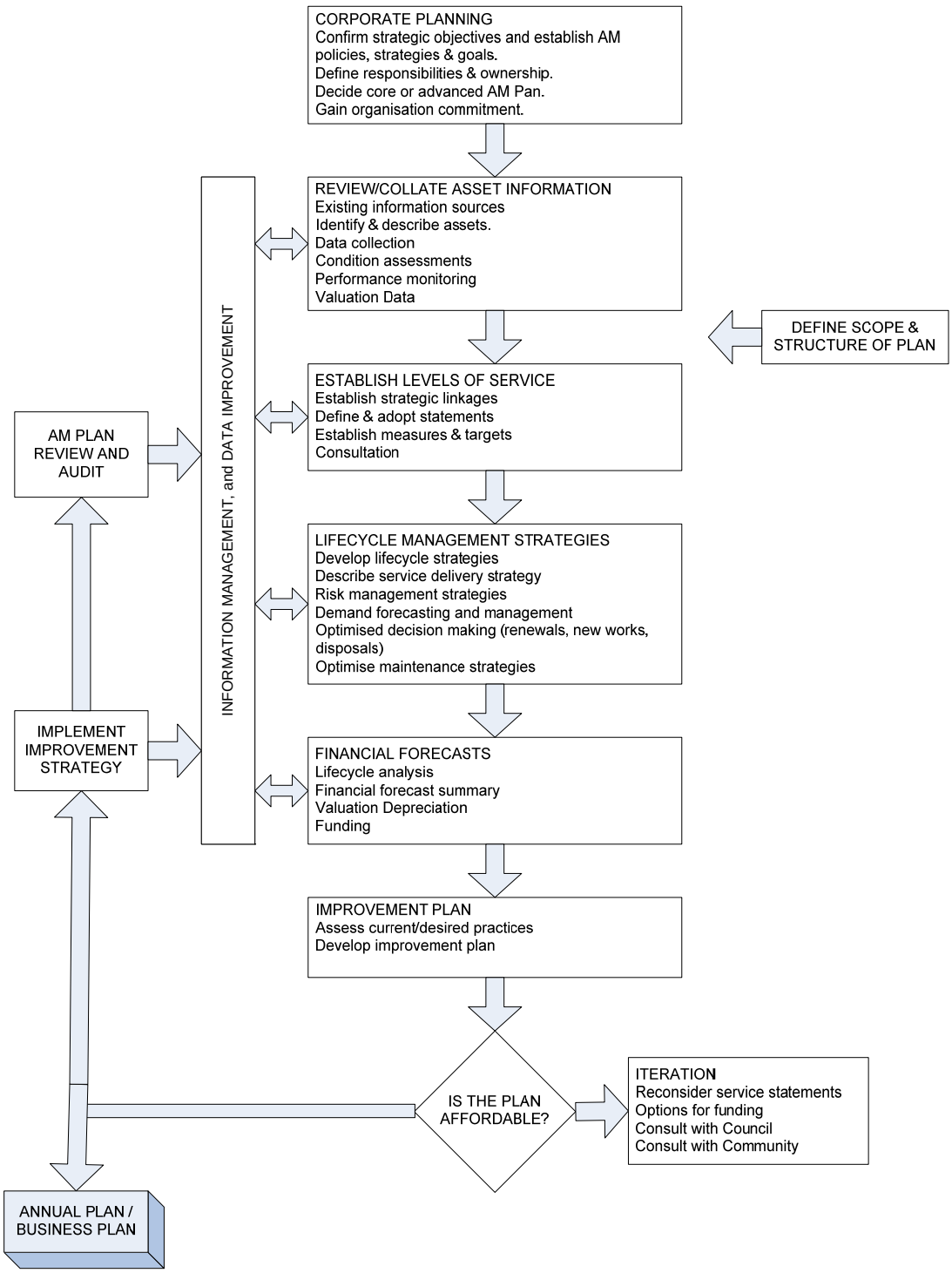
- Levels of service – specifies the services and levels of service to be provided by the organisation,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Life cycle management – how Council will manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices,
- Monitoring – how the plan will be monitored to ensure it is meeting organisation's objectives,
- Asset management improvement plan.

A road map for preparing an asset management plan is shown below.

3 Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

Road Map for preparing an Asset Management Plan

Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11.



2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 20 year planning period in accordance with the International Infrastructure Management Manual4. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels in a financially sustainable manner.

2.5 Community Consultation

This 'core' asset management plan is prepared to facilitate community consultation initially through feedback on public display of draft asset management plans prior to adoption by the Council. Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service. This will assist the Council and the community in matching the level of service needed by the community, service risks and consequences with the community's ability and willingness to pay for the service.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

We participate in the Victorian Local Government Community Satisfaction Survey. The community satisfaction survey is a state-wide telephone survey used to collect direct feedback from the community about councils, covering five main areas:

- council's overall performance
- community consultation and engagement
- advocacy – lobbying on behalf of the community
- customer service
- overall council direction

The survey is conducted by the Department of Environment, Land, Water and Planning on behalf of participating councils. A minimum of 400 local residents and ratepayers in each municipality over 18 years of age are selected at random.

The most recent community satisfaction survey results will be reported in a future revision of this plan and used in developing council's Strategic Resource Plan.

3.2 Strategic and Corporate Goals

This asset management plan is prepared under the direction of the organisation's Council Plan goals and objectives including the long-term vision and strategy – *The Ballarat Strategy*.

The Ballarat Strategy will address an emerging gap in the long-term planning for Ballarat's future – this gap is the result of Ballarat's greater than expected population growth in the past decade and strong projected population growth over the next 25 years.

4 IPWEA, 2011, IIMM.

Relevant organisational goals and objectives and how these are addressed in this asset management plan are:

Table 3.2: Organisational Goals and how these are addressed in this Plan

Goal	Objective	How Goal and Objectives are addressed in AM Plan
Engaging our Community	To enable council gain a strong understanding of the community's values, aspirations, ideas and concerns, and to use this understanding to plan for Ballarat's short-term and long-term future.	The AM Plan provides information on the Service Aims and the existing condition and the proposed mechanisms to manage Drainage Assets
		Development of the service levels provided by drainage assets, and the balancing of this with the available funding and acceptable risk will require communication and consultation with the community.
Deliver financial management responsibly to ensure long-term sustainability of the organisation and its assets.	4.8.1 Ensure Council remains in the medium financial risk category (as a minimum). 4.8.2 Manage Ballarat's services and assets to the best of Council's ability in line with Asset Management Plans. 4.8.3 Optimise and rationalise Council assets across all asset classes for the greater community and organisation benefit	Ensuring that Council operations align with the Long Term Financial Strategy (LTFS) which sees Council in the Medium Risk category. Council continues to receive an annual state of the assets report prior to the adoption of its annual budget. Asset management plans are to be used to guide Councils decision making in providing community facilities.

The organisation will exercise its duty of care to ensure public safety is accordance with the infrastructure risk management plan prepared in conjunction with this AM Plan. Management of infrastructure risks is covered in Section 5.2

3.3 Legislative Requirements

The organisation has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act, 1989	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery. Sections 198 to 200 of the Victorian Local Government Act 1989 deal with drainage. Section 198(1) of the act indicates that public drains within the municipal district are vested in Council
Australian Accounting Standards	Set out the financial reporting standards relating to infrastructure assets.AASB116, AASB136, AASB1121, AAS1001, AASB1041, AAS1015 and AASB1051.
OH&S Acts 1986 & 2000	Protect the public against risks to health or safety arising out of or in connection with the activities of persons at work or the use of operation of various types of plant.

Legislation	Requirement
Code of Practice for Operational Responsibility for Public Roads 2004	Sets out role and responsibilities for the management of State and municipal roads. Published in Government Gazette no. s267 17/12/2004.
Road Safety Act 1986	This act empowers council with regard to parking issues such as the power to erect major and minor traffic control items on roads other than declared main roads.
Crown Lands Act 1989	Sets out the objectives and principles for Crown Land management.
Other relevant state and federal acts and regulations. Australian Standards and VicRoads guidelines	As appropriate.

The organisation will exercise its duty of care to ensure public safety in accordance with the infrastructure risk management plan linked to this AM Plan. Management of risks is discussed in Section 5.2.

3.4 Community Levels of Service

Service levels are defined service levels in two terms, customer levels of service and technical levels of service.

Community Levels of Service measure how the community receives the service and whether the organisation is providing community value.

Community levels of service measures used in the asset management plan are:

Quality	How good is the service?
Function	Does it meet users' needs?
Capacity/Utilisation	Is the service over or under used?

The organisation's current and expected community service levels are detailed in Tables 3.4 and 3.5. Table 3.4 shows the agreed expected community levels of service based on resource levels in the current long-term financial plan and community consultation/engagement.

Table 3.4: Community Level of Service

Service Attribute	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTFP
COMMUNITY LEVELS OF SERVICE				
Condition	Drainage infrastructure meets intended service level.	% of drainage infrastructure in poor/very poor condition including confidence assessment.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.
Function	Drainage infrastructure is 'fit for purpose'.	% of drainage infrastructure in poor/very poor function.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.
Capacity/ Utilisation	Drainage infrastructure has the ability to meet service needs.	% of drainage infrastructure in poor/very poor capacity.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.

3.5 Technical Levels of Service

Technical Levels of Service - Supporting the community service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities that the organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services such as inspecting and cleaning.
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition (e.g. minor repairs),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (e.g. frequency and cost of pipe relining and or reconstruction and significant component replacement),
- Upgrade – the activities to provide a higher level of service (e.g. replacing a pipeline with a larger diameter, duplication) or a new service that did not exist previously (e.g. a new gross pollutant trap).

Service and asset managers plan, implement and control technical service levels to influence the customer service levels.[5]

Technical service levels are unavailable at present and are recognised as one of the priority tasks in the Improvement Plan.

5 IPWEA, 2011, IIMM, p 2.22

4. FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

4.2 Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation of assets were identified and are documented in Table 4.3.

4.3 Demand Impact on Assets

The impact of demand drivers that may affect future service delivery and utilisation of assets are shown in Table 4.3.

Table 4.3: Demand Drivers, Projections and Impact on Services

Demand drivers	Present position	Projection	Impact on services
Population	100,550	The population is forecast to grow to 130,000 by 2031.	Population growth will necessitate the need to acquire additional assets.
Residential & Commercial development.	Increasing demand.	Further increases likely given the growth projections.	Increasing demand on services and infrastructure. Higher density housing and commercial areas will likely increase impervious areas and localised concentration of stormwater, impacting on the quantity and quality of the stormwater to be managed by the Council's assets and services.
Property Protection	There is a need to improve/expand the network to provide broader protection from stormwater and flood impacts	Anticipated to continue or increase.	The impact of flooding will likely increase the demand for improvements to the stormwater systems
Regulatory requirement to improve Stormwater quality	Stormwater runoff water quality could be enhanced	Greater use of GPT's and other water cleaning devices	Greater operational expenses to maintain and clean additional water quality improving devices
Community Expectations	There is a desire from the community for increased environmental responsibility and the reuse of stormwater runoff.	Expectations are likely to increase.	Parts of the existing network are not fit for purpose. Increasing pressure to upgrade stormwater networks.

4.4 Demand Management Plan

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

Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some

assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures6. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.4: Demand Management Plan Summary

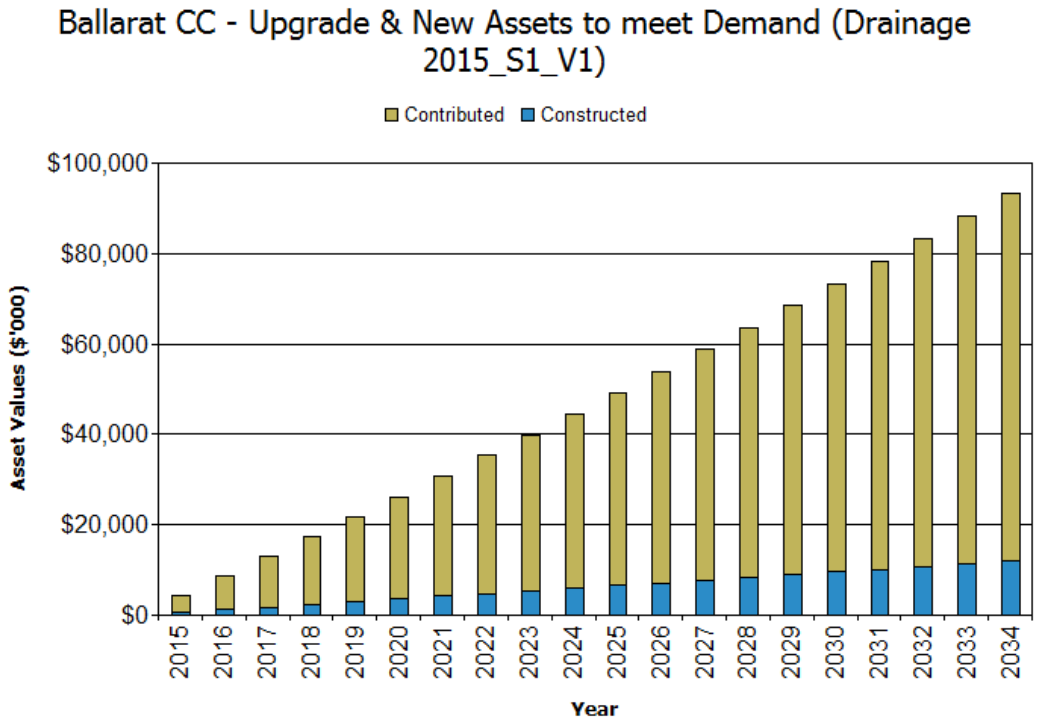
Demand Driver	Impact on Services	Demand Management Plan
Population Increase	Population growth will necessitate the need to acquire additional assets.	Population growth will necessitate the need to acquire additional assets.
Residential & Commercial development.	Increasing demand on services and infrastructure. Higher density housing and commercial areas will likely increase impervious areas and localised concentration of stormwater, impacting on the quantity and quality of the stormwater to be managed by the Council's assets and services.	Ensure existing infrastructure is working as efficiently as possible and upgrade when asset does not meet agreed service levels.
Property Protection	The impact of flooding will likely increase the demand for improvements to stormwater systems.	Fund priority works. Continue to seek grant funding for projects identified in the Council Plan and Asset Management Plans Improve understanding of costs and capacity to maintain current service levels. Continue to analyse the cost of providing services and the capacity to fund at the current level of service.
Regulatory requirement to improve Stormwater quality	Greater demand for Gross Pollutant Traps (GPT's) and other water quality improvement devices	Comply with any regulatory requirements where required and where a budget exists to construct GPT's of other water polishing devices
Community Expectations	Parts of the existing network are not fit for purpose. Increasing pressure to upgrade stormwater networks.	Fund priority works. Continue to seek grant funding for projects identified in the Council Plan and Asset Management Plans. Improve understanding of costs and capacity to maintain current service levels. Continue to analyse the cost of providing services and the capacity to fund at the current level of service.

6 IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.

4.5 Asset Programs to meet Demand

The new assets required to meet growth will be acquired free of cost from land developments and constructed/acquired by the organisation. New assets constructed/acquired by the organisation are discussed in Section 5.5. The cumulative value of new contributed and constructed asset values are summarised in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand



Acquiring these new assets will commit the organisation to fund ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs in Section 5.

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the organisation plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while optimising life cycle costs.

5.1 Background Data

The data and forecasts are based on assets recorded in the financial asset register, known service deficiencies from routine inspections and customer requests. It is important careful monitoring of those assets with poor to very poor performance at a detailed component level is maintained to manage appropriate service provision and associated risk.

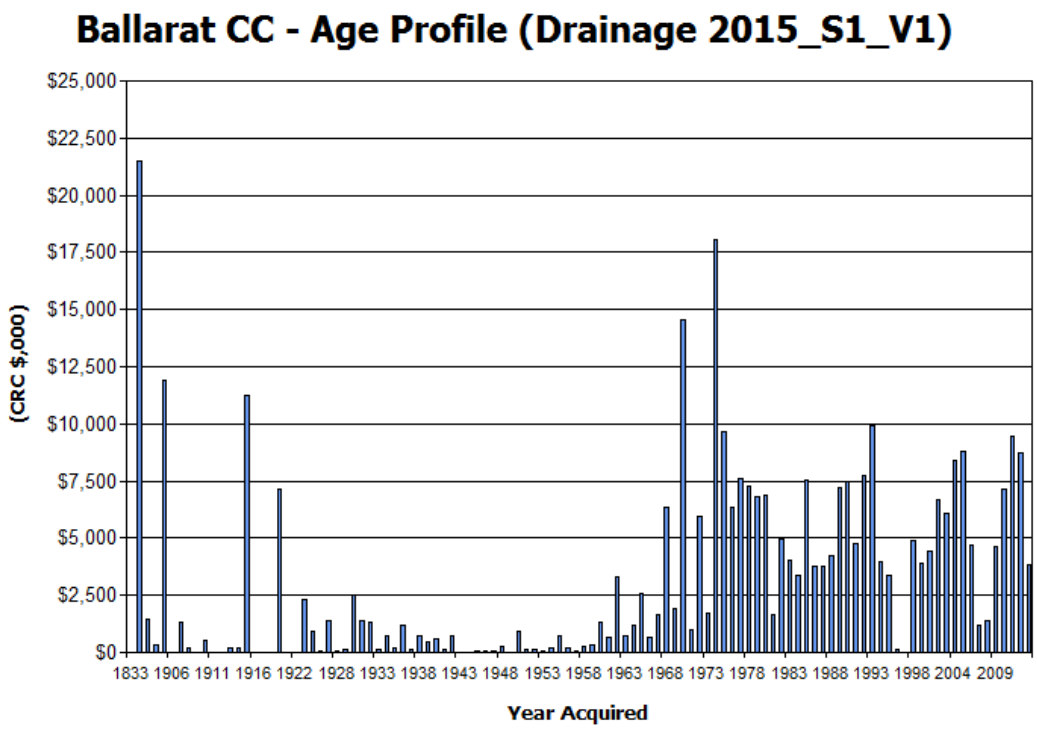
5.1.1 Physical parameters

The assets covered by this asset management plan are shown in Table 2.1.

The transport asset category comprises a complex mix of asset types, age, function and condition.

The age profile of the assets included in this AM Plan is shown in Figure 2 sourced from the financial asset register based on the date of construction/acquisition or date of last renewal against the current replacement cost.

Figure 2: Asset Age Profile



According to the asset register the majority of the drainage assets were constructed or last replaced in 1900 ($22M), 1905 ($12M), 1915 ($11M), 1970 ($14M) and 1974 ($18M) accounting for 22% of the total asset value suggesting there may be data errors in the register of assets.

The asset register provides essential information not only for asset management plans and the long-term financial plan for financial reporting it is also used to calculate depreciation in the operating statement therefore it is important the supporting data is of high confidence (± 10%) to report whether we have enough revenue to support our capital investment in infrastructure.

Given the high value of replacement costs in 1900, 1905, 1915, 1970 and 1974 suggests a review of costs and acquisition dates is required and is included in the Improvement Plan in Section 7.2.

5.1.2 Asset capacity and performance

The organisation's services are generally provided to meet design standards where these are available.

Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

Location	Service Deficiency
In this Asset Management Plan detailed performance deficiencies have not been identified	In the development of next asset management plans, and in particular as these plans are developed and integrated along with the Long Term Financial Plans and Community Plans service deficiencies will be identified.

5.1.3 Asset condition

Condition is monitored on an ad-hoc (reactive) basis by operational staff and CCTV of selected Stormwater Drainage pipes.

Less than 1% of the stormwater drainage network has been assessed. Consequently, there is a need to prepare and implement a merit based inspection program to assess the performance of the drainage network.

When inspected, condition is measured using a 1 – 5 grading system[7] as detailed in Table 5.1.3.

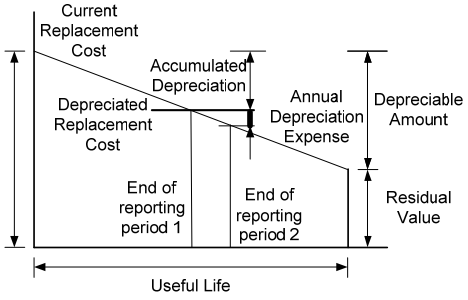
Table 5.1.3: Simple Condition Grading Model

Condition Grading	Description of Condition
1	**Very Good**: only planned maintenance required
2	**Good**: minor maintenance required plus planned maintenance
3	**Fair**: significant maintenance required
4	**Poor**: significant renewal/rehabilitation required
5	**Very Poor**: physically unsound and/or beyond rehabilitation

5.1.4 Asset valuations

The value of assets recorded in the asset register as at 30 June 2014 covered by this asset management plan is shown below. Assets were last revalued at "[Enter revaluation date]" . Assets are valued at greenfield rates for replacement cost as per Victorian legislative requirements.

Current Replacement Cost	343,298,000
Depreciable Amount	343,298,000
Depreciated Replacement Cost8	$103,932,000
Annual Depreciation Expense	$2,967,000



Key assumptions made in preparing the valuations were:

- Useful lives based on broad industry standards.
- Common unit rates for infrastructure groups.

Major changes from previous valuations are due to existing assets not previously recognised and existing records being reviewed and updated after verification

7 IPWEA, 2011, IIMM, Sec 2.5.4, p 2|79.
8 Also reported as Written Down Current Replacement Cost (WDCRC).

Various ratios of asset consumption and expenditure have been prepared to help guide and gauge asset management performance and trends over time.

Rate of Annual Asset Consumption (Depreciation/Depreciable Amount) 0.90%

Rate of Annual Asset Renewal (Capital renewal exp/Depreciable amount) 0.10% (Year 1)

Rate of Annual Asset Upgrade/New (Capital upgrade expenditure/Depreciable amount) 0.20% (Year 1)

Rate of Annual Asset Upgrade/New (Including contributed assets) 1.20% (Year 1)

In 2015 council plans to renew assets at 8.60% of the rate they are being consumed and will be increasing its asset stock by 1.20% in the year.

To provide services in a financially sustainable manner, Council will need to ensure that it is renewing assets at the rate they are being consumed over the medium-long term and funding the life cycle costs for all new assets and services in its long term financial plan.

5.2 Infrastructure Risk Management Plan

An assessment of risks9 associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the organisation. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.2. These risks are reported to management and Council.

Table 5.2: Critical Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Channels	Total failure (collapse of open channel). Asset at end of useful life.	H	Program of inspections for open channel condition.	L	Not currently resourced.
Pipes	Pipe capacity exceeded. Change in catchment characteristics	H	Undertake catchment analysis as required.	Mod	Not currently resourced.

9 Council's Infrastructure Risk Management Plan

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Pits	Property Damage (Social, Legal Criterion). Where the condition of the pit has the potential to cause property damage such as damage to buildings and landscape due to pit blockages, undersized pit capacity and misdirected flows.	H	1. Treatment works identified in floodplain studies, listing of priority sites for capital works funding for improvement works. 2. Program of inspections for pit condition.	M	Internal staff resources

Note * The residual risk is the risk remaining after the selected risk treatment plan is operational.

5.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, eg cleansing, street sweeping, grass mowing and street lighting.

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

5.3.1 Operations and Maintenance Plan

Operations activities affect service levels including quality and function through street sweeping and grass mowing frequency, intensity and spacing of street lights and cleaning frequency and opening hours of building and other facilities.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating, e.g. sediment, debris and litter removal from inlets, outlets and channels. Maintenance may be classified into reactive, planned and specific maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions.

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Specific maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacing air conditioning units, etc. This work falls below the capital/maintenance threshold but may require a specific budget allocation.

Actual past maintenance expenditure is shown in Table 5.3.1.

Table 5.3.1: Maintenance Expenditure Trends

Year	Maintenance Expenditure	
	Planned and Specific	Unplanned
2011/12	Unavailable	Unavailable
2012/13	Unavailable	Unavailable
2013/14	Unavailable	Unavailable

The percentage of planned and specific maintenance work as a percentage of the total maintenance expenditure is unavailable however current processes suggest the majority of maintenance is undertaken in response to customer requests suggesting the majority maintenance is reactive or unplanned.

Maintenance expenditure levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance expenditure levels are such that will result in a lesser level of service, the service consequences and service risks have been identified and service consequences highlighted in this AM Plan and service risks considered in the Infrastructure Risk Management Plan.

Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement.

5.3.2 Operations and Maintenance Strategies

The organisation will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities include:

- Scheduling operations activities to deliver the defined level of service in the most efficient manner,
- Undertaking maintenance activities through a planned maintenance system to reduce maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost),
- Maintain a current infrastructure risk register for assets and present service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council,
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs,
- Review asset utilisation to identify underutilised assets and appropriate remedies, and over utilised assets and customer demand management options,
- Maintain a current hierarchy of critical assets and required operations and maintenance activities,
- Develop and regularly review appropriate emergency response capability,
- Review management of operations and maintenance activities to ensure Council is obtaining best value for resources used.

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

The organisation's service hierarchy is shown is Table 5.3.2.

Table 5.3.2: Asset Service Hierarchy

Service Hierarchy	Service Level Objective
Drainage, Pits, Inlet	Manage stormwater collected from local sub-catchment in to the pipe or open channel network.
Drainage, Pits, Outlet	Manage stormwater being conveyed from pipe or open channel network in to the natural environment, watercourse etc.

Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. By identifying critical assets and critical failure modes, organisations can target and refine investigative activities, maintenance plans and capital expenditure plans at the appropriate time.

Operations and maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc. Critical assets failure modes and required operations and maintenance activities are detailed in Table 5.3.2.1.

Table 5.3.2.1: Critical Assets and Service Level Objectives

Critical Assets	Critical Failure Mode	Operations & Maintenance Activities
Drainage, Pits, inlet and outlet	Blockage, breach, collapse, undersized	Ongoing routine condition inspections and reporting. Program of scheduled pipeline inspections.
Pipes	Tree roots egressing pipe joints	Inspect & jet pipes where deficiencies occur.

Standards and specifications

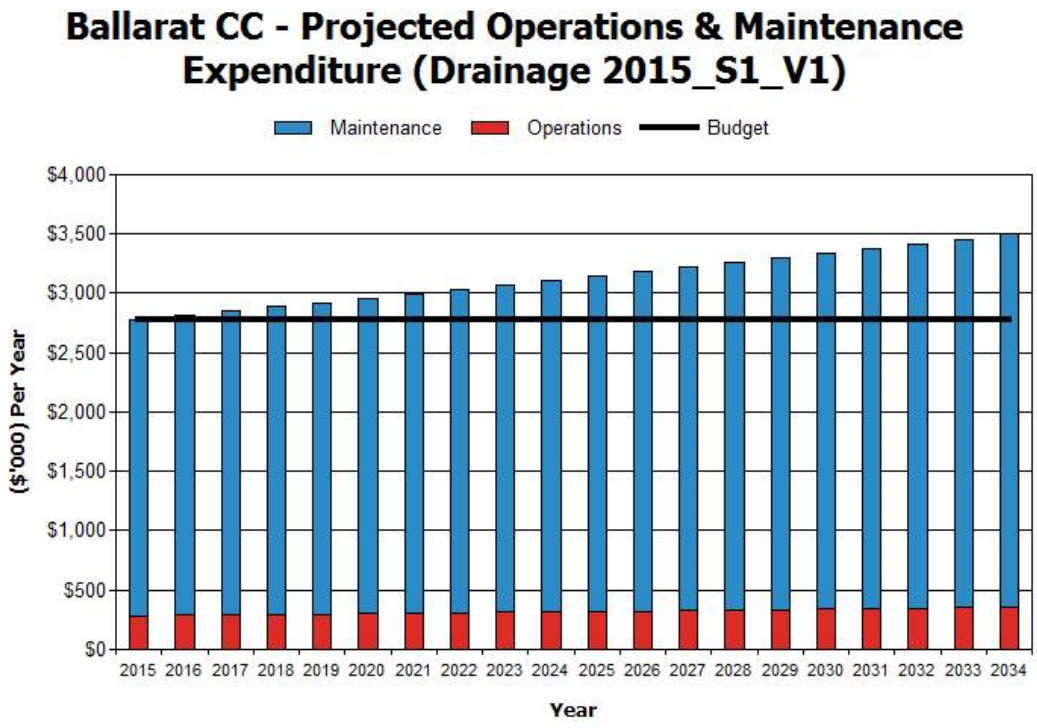
Maintenance work is carried out in accordance with the following Standards and Specifications.

- Relevant engineering standards and specifications for road and transport related works.

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the acquisition of new assets as shown in Figure 4. Note that all costs are shown in current 2014/15 dollar values (i.e. real values net of inflation).

Figure 4: Projected Operations and Maintenance Expenditure



Deferred maintenance, ie works that are identified for maintenance and unable to be funded are to be included in the risk assessment and analysis in the infrastructure risk management plan.

Maintenance is funded from the operating budget where available. This is further discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal and replacement expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

5.4.1 Renewal plan

Assets requiring renewal/replacement are identified from one of three methods provided in the 'Expenditure Template'.

- Method 1 uses Asset Register data to project the renewal costs using acquisition year and useful life to determine the renewal year, or
- Method 2 uses capital renewal expenditure projections from external condition modelling systems (such as Pavement Management Systems), or
- Method 3 uses a combination of average *network renewals* plus *defect repairs* in the *Renewal Plan* and *Defect Repair Plan* worksheets on the 'Expenditure template'.

Method 1 was used for this asset management plan.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed on "[Enter date of review of useful lifes]" .

Table 5.4.1: Useful Lives of Assets

Asset (Sub)Category	Useful life
Detention Basins	95 – 105 years
Channels	200 years
Culverts	120 years
Pipes	120 years
Pits	40 – 150 years

5.4.2 Renewal and Replacement Strategies

The organisation will plan capital renewal and replacement projects to meet level of service objectives and minimise infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner,
- Undertaking project scoping for all capital renewal and replacement projects to identify:
    - the service delivery 'deficiency', present risk and optimum time for renewal/replacement,
    - the project objectives to rectify the deficiency,
    - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
    - and evaluate the options against evaluation criteria adopted by the organisation, and
    - select the best option to be included in capital renewal programs,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,
- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council,
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required ,
- Review management of capital renewal and replacement activities to ensure Council is obtaining best value for resources used.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate, or
- To ensure the infrastructure is of sufficient quality to meet the service requirements.10

It is possible to get some indication of capital renewal and replacement priorities by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have a high utilisation and subsequent impact on users would be greatest,
- The total value represents the greatest net value to the organisation,
- Have the highest average age relative to their expected lives,
- Are identified in the AM Plan as key cost factors,
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.11

- The ranking criteria used to determine priority of identified renewal and replacement proposals is normally detailed in Table 5.4.2 however at this stage an agreed and adopted prioritisation framework is yet to be developed and is included in the improvement plan. Therefore the projected capital renewal and replacement projects are currently being prioritised in an ad-hoc informal manner using basic parameters such as condition and risk.

- ***Table 5.4.2: Renewal and Replacement Priority Ranking Criteria***

Criteria	Weighting
To be determined in the next revision of this AM Plan.	

Renewal and replacement standards

Renewal work is carried out in accordance with the following Standards and Specifications.

- Relevant engineering standards
- Relevant standards and specifications for drainage related works.

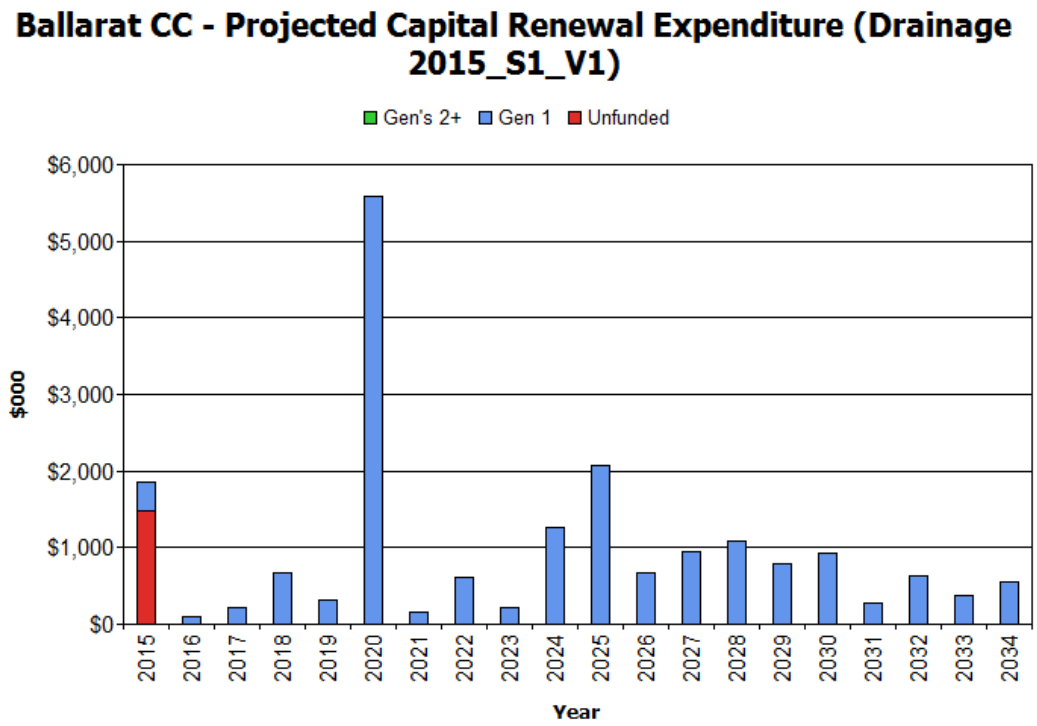
5.4.3 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock increases from growth. The expenditure is summarised in Fig 5. Note that all amounts are shown in real values.

The projected capital renewal and replacement program is shown in Appendix B.

10 IPWEA, 2011, IIMM, Sec 3.4.4, p 3|60.
11 Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3|66.

Fig 5: Projected Capital Renewal and Replacement Expenditure



The renewal projection (forecast) in Scenario 1 (using the asset register) shows a backlog of renewals of $1.86M. This represents the value of assets that are past their useful life indicating they are fully depreciated.

Whilst the long term averages and total values from this register may be useful, the shorter term renewal forecasts are clearly not, and are inconsistent with the known (and funded) capital renewal plans and condition profiles. This indicates that further refinement of the asset register is required before it is valuable as a capital renewal planning tool and should be given a high priority in the asset management improvement plan. The review is particularly important with respect to the useful lives in the asset register and function and utilisation data and knowledge and aligning these with the required expenditure pattern for renewals and partial renewals.

Deferred renewal and replacement, ie those assets identified for renewal and/or replacement and not scheduled in capital works programs are to be included in the risk analysis process in the risk management plan.

Renewals and replacement expenditure in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the organisation from land development. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor/director or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is normally detailed in Table 5.5.1 below however at this stage an agreed and adopted prioritisation framework is yet to be developed and is included in the improvement plan for action. Consequently the projected new and capital

upgrade/expansion projects are currently being prioritised in an ad-hoc informal manner using basic parameters such as demand, function and those identified in the Council Plan.

Table 5.5.1: New Assets Priority Ranking Criteria

Criteria	Weighting
To be determined in the next revision of this AM Plan.	

5.5.2 Capital Investment Strategies

The organisation will plan capital upgrade and new projects to meet level of service objectives by:

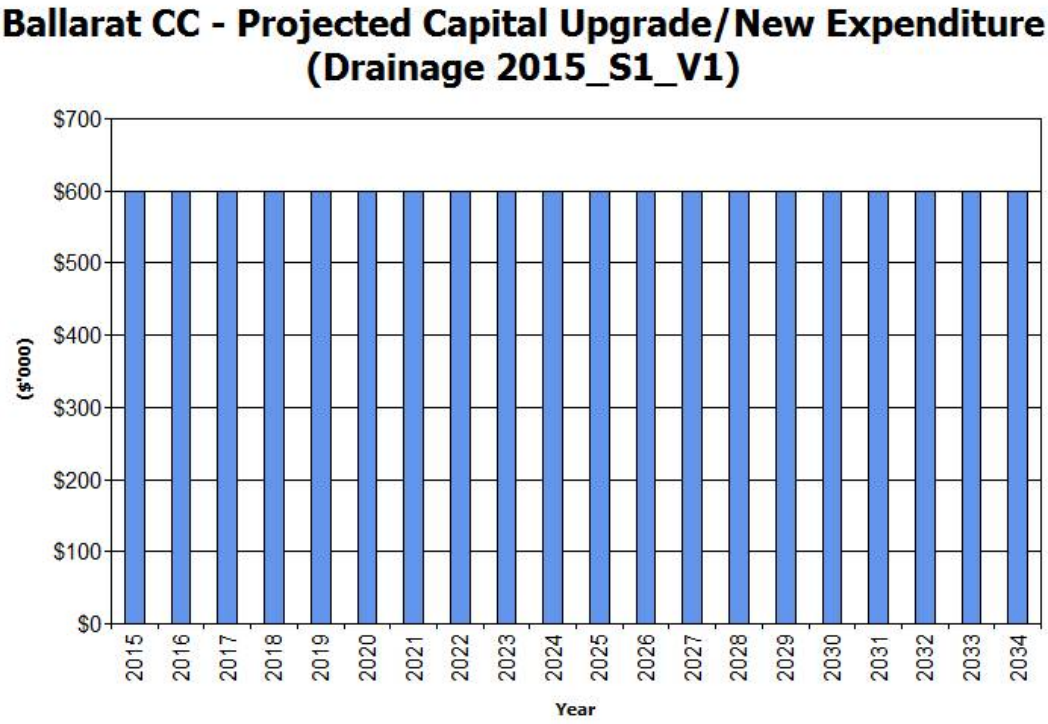
- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
    - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset,
    - the project objectives to rectify the deficiency including value management for major projects,
    - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
    - management of risks associated with alternative options,
    - and evaluate the options against evaluation criteria adopted by Council, and
    - select the best option to be included in capital upgrade/new programs,
- Review current and required skills base and implement training and development to meet required construction and project management needs,
- Review management of capital project management activities to ensure Council is obtaining best value for resources used.

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

5.5.3 Summary of future upgrade/new assets expenditure

Projected upgrade/new asset expenditures are summarised in Fig 6. The projected upgrade/new capital works program is shown in Appendix C. All amounts are shown in real values.

Fig 6: Projected Capital Upgrade/New Asset Expenditure



Expenditure on new assets and services in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6, together with estimated annual savings from not having to fund operations and maintenance of the assets. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any. Any revenue gained from asset disposals is accommodated in Council's long term financial plan.

Where cash flow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

Table 5.6: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Expenditure	Operations & Maintenance Annual Savings
No assets have been identified for disposal in this AM Plan.				

5.7 Service Consequences and Risks

The organisation has prioritised decisions made in adopting this AM Plan to obtain the optimum benefits from its available resources. Decisions ideally should be made based on the development of 3 scenarios of AM Plans.

Scenario 1 - What we would like to do based on asset register data

Scenario 2 – What we should do with existing budgets and identifying level of service and risk consequences (i.e. what are the operations and maintenance and capital projects we are unable to do, what is the service and risk consequences associated with this position). This may require several versions of the AM Plan.

Scenario 3 – What we can do and be financially sustainable with AM Plans matching long-term financial plans.

The development of scenario 1 and scenario 2 AM Plans provides the tools for discussion with the Council and community on trade-offs between what we would like to do (scenario 1) and what we should be doing with existing budgets (scenario 2) by balancing changes in services and service levels with affordability and acceptance of the service and risk consequences of the trade-off position (scenario 3).

5.7.1 What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- Inspect and monitor all drainage systems other than identified trunk infrastructure within the planning period.
- Monitor the performance of every drainage component including pit and pipe.
- Operations and Maintenance activities will be directed by available funding and the focus will continue to be on reactive maintenance in response to customer service requests and other reporting mechanisms.

5.7.2 Service consequences

Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. These include:

- Operations and Maintenance activities will be directed by available funding and the focus will continue to be on reactive maintenance in response to customer service requests and other reporting mechanisms.

5.7.3 Risk consequences

The operations and maintenance activities and capital projects that cannot be undertaken may maintain or create risk consequences for the organisation. These include:

- Continued potential risk of property damage and localised flooding due to the condition of the pipe or open channel network and budgetary constraints on provision of renewed, upgraded or new assets.

These risks have been included with the Infrastructure Risk Management Plan summarised in Section 5.2 and risk management plans actions and expenditures included within projected expenditures.

6. FINANCIAL SUMMARY

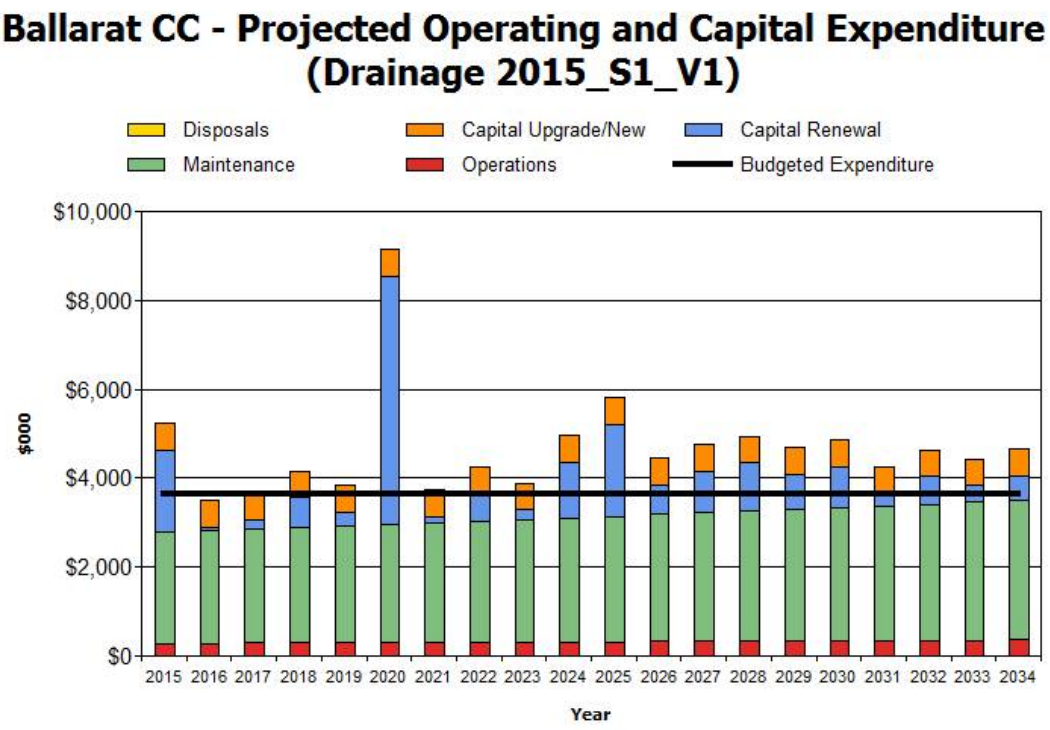
This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

Projections are based on best available information and are aimed at providing a likely forecast for the future and indicate priority asset and financial management and planning tasks. Confidence levels around the reliability and accuracy of the data used to prepare the financial projections exist, however, it is important that the projections be based on best available information and improved over time as information becomes available on current and desired levels of service and current and projected future asset performance.

6.1 Financial Statements and Projections

The financial projections are shown in Fig 7 for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets). Note that all costs are shown in real values.

Fig 7: Projected Operating and Capital Expenditure



6.1.1 Sustainability of service delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the asset renewal funding ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period.

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio12 23%

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 23% of the funds required for the optimal renewal and replacement of its assets, according to the asset register.

Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense). The life cycle cost for the services covered in this asset management plan is $5.9M per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is $3M per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is -$2.9M per year (-ve = gap, +ve = surplus).

12 AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

Life cycle expenditure is 51% of life cycle costs.

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the life cycle expenditure is less than that life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist organisations in providing services to their communities in a financially sustainable manner. This is the purpose of the asset management plans and long term financial plan.

Medium term – 10 year financial planning period

This asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. In a core asset management plan, a gap is generally due to increasing asset renewals for ageing assets.

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is $4M on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $3M on average per year giving a 10 year funding shortfall of $1M per year. This indicates that Council expects to have 75% of the projected expenditures needed to provide the services documented in the asset management plan.

Medium Term – 5 year financial planning period

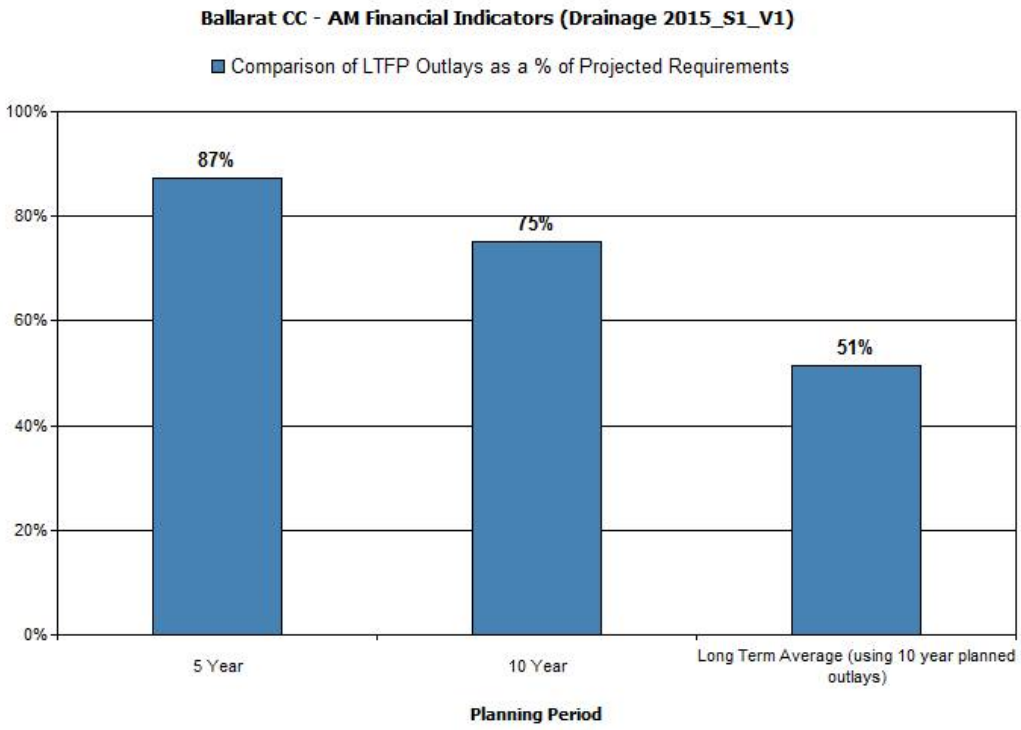
The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is $3.5M on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $3M on average per year giving a 5 year funding shortfall of $0.5M. This indicates that Council expects to have 87% of projected expenditures required to provide the services shown in this asset management plan.

Asset management financial indicators

Figure 7A shows the asset management financial indicators over the 10 year planning period and for the long term life cycle.

Figure 7A: Asset Management Financial Indicators



Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.0 for the first years of the asset management plan and ideally over the 10 year life of the Long Term Financial Plan.

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the AM Plan. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan

Figure 8: Projected and LTFP Budgeted Renewal Expenditure

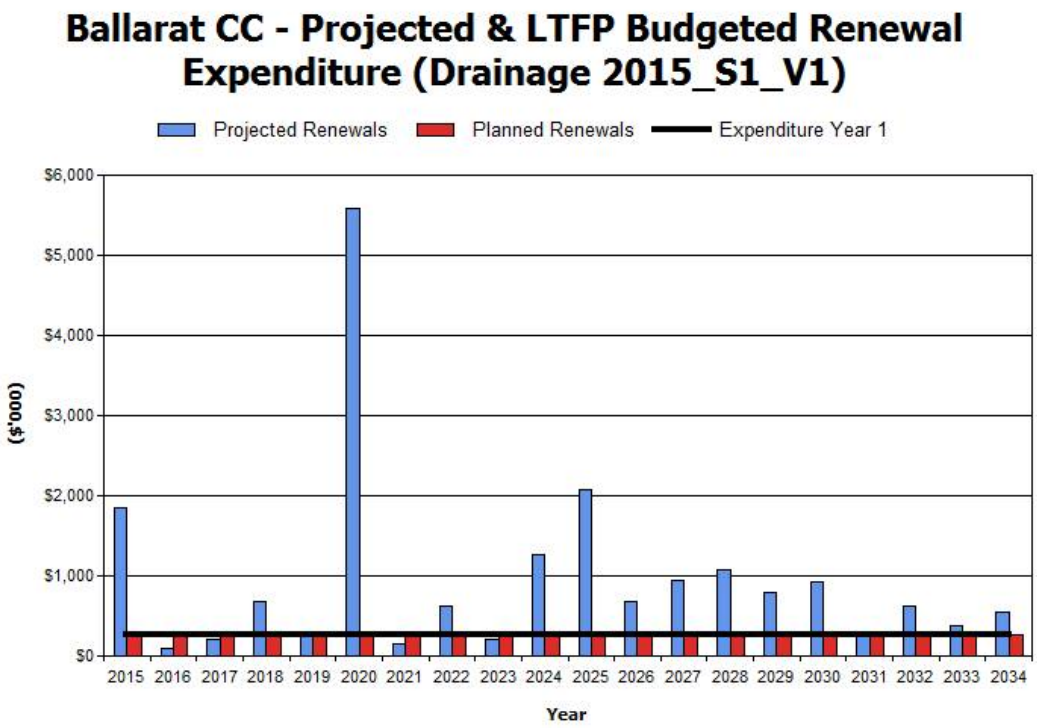


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year	Projected Renewals ($000)	LTFP Renewal Budget ($000)	Renewal Financing Shortfall ($000) (-ve Gap, +ve Surplus)	Cumulative Shortfall ($000) (-ve Gap, +ve Surplus)
2015	$1,857	$257	-$1,601	-$1,601
2016	$90	$257	$167	-$1,434
2017	$210	$257	$47	-$1,388
2018	$678	$257	-$421	-$1,809
2019	$311	$257	-$54	-$1,863
2020	$5,589	$257	-$5,333	-$7,196
2021	$152	$257	$105	-$7,091
2022	$614	$257	-$358	-$7,448
2023	$217	$257	$40	-$7,408
2024	$1,265	$257	-$1,009	-$8,417
2025	$2,070	$257	-$1,814	-$10,230
2026	$671	$257	-$415	-$10,645
2027	$940	$257	-$684	-$11,329
2028	$1,082	$257	-$825	-$12,154
2029	$797	$257	-$541	-$12,695
2030	$933	$257	-$676	-$13,371
2031	$277	$257	-$20	-$13,391
2032	$627	$257	-$371	-$13,762

Year	Projected Renewals ($000)	LTFP Renewal Budget ($000)	Renewal Financing Shortfall ($000) (-ve Gap, +ve Surplus)	Cumulative Shortfall ($000) (-ve Gap, +ve Surplus)
2033	$372	$257	-$116	-$13,878
2034	$554	$257	-$297	-$14,175

Note: A negative shortfall indicates a financing gap, a positive shortfall indicates a surplus for that year.

Providing services in a sustainable manner will require matching of projected asset renewal and replacement expenditure to meet agreed service levels with **the corresponding** capital works program accommodated in the long term financial plan.

A gap between **projected asset renewal/replacement expenditure and amounts accommodated in the LTFP** indicates that **further work is required on reviewing service levels in the AM Plan (including possibly revising the LTFP)** before finalising the asset management plan to manage required service levels and funding **to eliminate any funding gap**.

We will manage the 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and review future services, service levels and costs with the community.

6.1.2 Projected expenditures for long term financial plan

Table 6.1.2 shows the projected expenditures for the 10 year long term financial plan.

Expenditure projections are in 2014/15 real values.

Table 6.1.2: Projected Expenditures for Long Term Financial Plan ($000)

Year	Operations ($000)	Maintenance ($000)	Projected Capital Renewal ($000)	Capital Upgrade/ New ($000)	Disposals ($000)
2015	$284.06	$2,497.69	$1,857.14	$599.00	$0.00
2016	$287.60	$2,528.77	$89.98	$599.00	$0.00
2017	$291.17	$2,560.14	$209.92	$599.00	$0.00
2018	$294.77	$2,591.80	$677.51	$599.00	$0.00
2019	$298.40	$2,623.75	$310.94	$599.00	$0.00
2020	$302.07	$2,655.99	$5,589.04	$599.00	$0.00
2021	$305.77	$2,688.54	$151.62	$599.00	$0.00
2022	$309.51	$2,721.38	$614.07	$599.00	$0.00
2023	$313.28	$2,754.53	$216.52	$599.00	$0.00
2024	$317.08	$2,787.99	$1,265.07	$599.00	$0.00

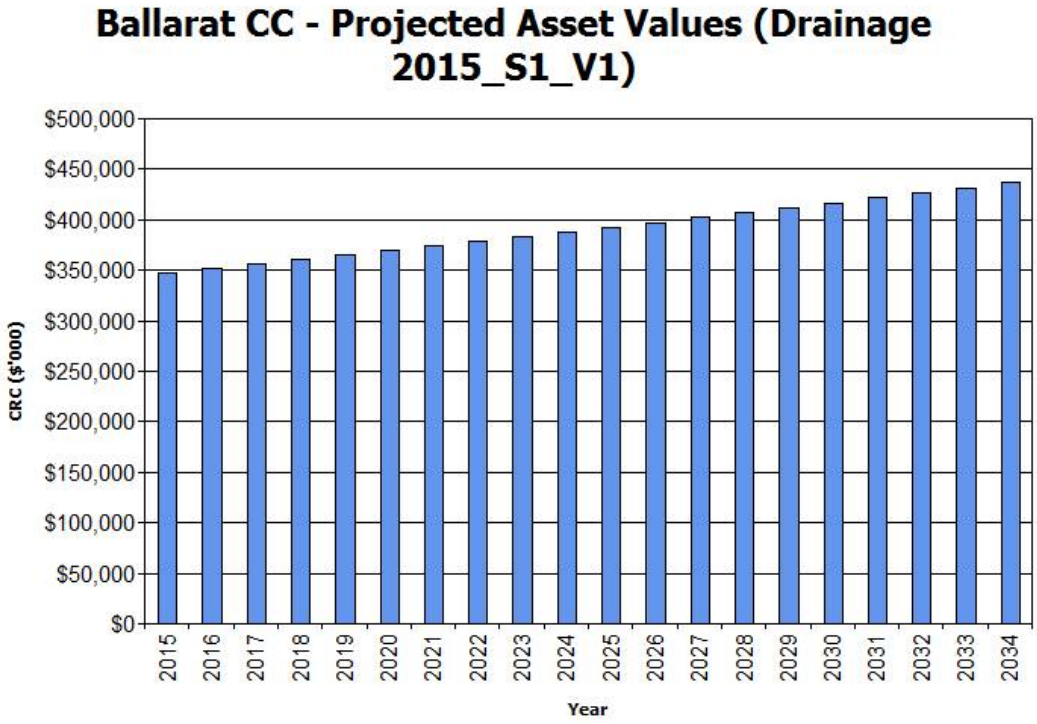
6.2 Funding Strategy

After reviewing service levels, as appropriate to ensure ongoing financial sustainability projected expenditures identified in Section 6.1.2 will be accommodated in the Council's 10 year long term financial plan.

6.3 Valuation Forecasts

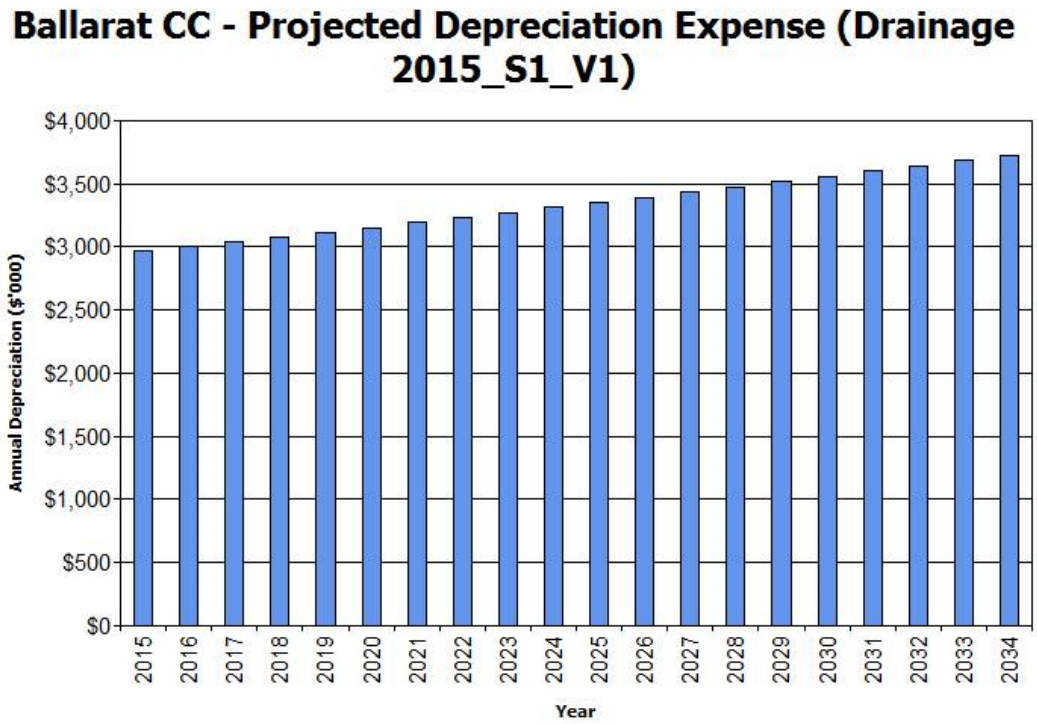
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Figure 9 shows the projected replacement cost asset values over the planning period in real values.

Figure 9: Projected Asset Values



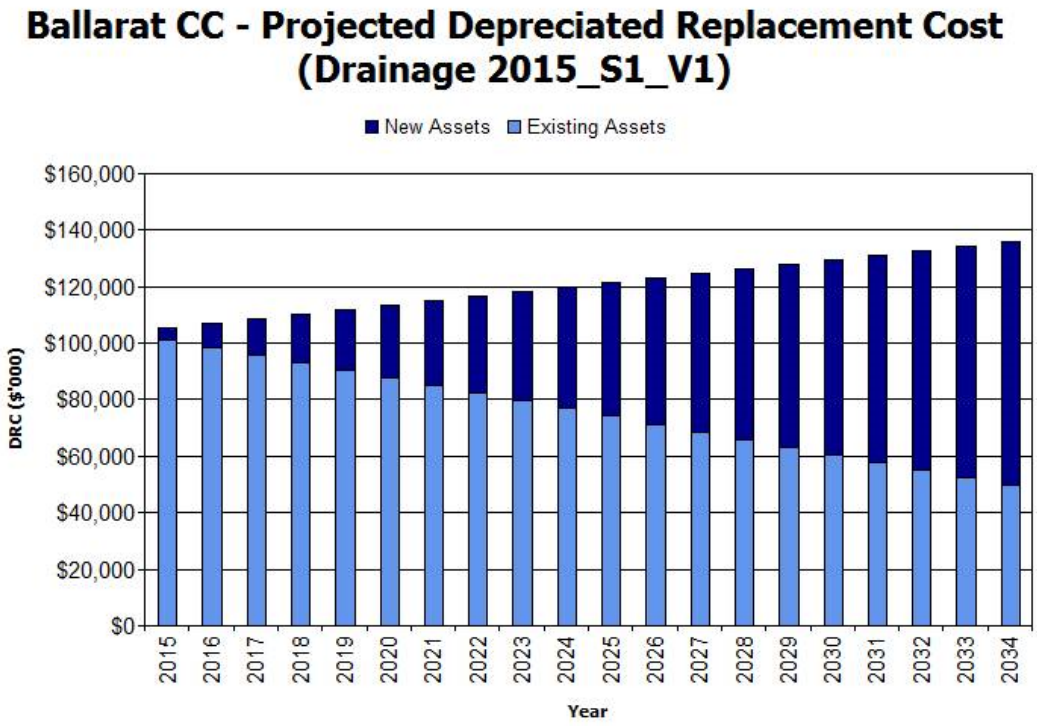
Depreciation expense values are forecast in line with asset values as shown in Figure 10.

Figure 10: Projected Depreciation Expense



The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 11. The depreciated replacement cost of contributed and new assets is shown in the darker colour and in the lighter colour for existing assets.

Figure 11: Projected Depreciated Replacement Cost



From the data supplied, the current renewal rate of existing assets will need to be monitored and increased to sustain the increasing accumulated depreciation costs. This is demonstrated by the steadily declining depreciated replacement cost of existing assets as shown by the light coloured bars. A constant value for the DRC illustrates that Council is maintaining its infrastructure capital.

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in AM Plan and Risks of Change

Key Assumptions	Risks of Change to Assumptions
The assets will remain in the organisations ownership and control throughout the planning period.	Low
Planned and reactive maintenance is to take place in accordance with relevant guidelines/standards.	Low
All expenditure stated is in 2014/15 dollar values.	Low
Financial projections are based on historical expenditure and revenue trends and assume there will no significant change.	Medium
Regulations/standards relating to operations will remain the same over the planning period.	Medium

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale13 in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy ± 40%
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.1.

Table 6.5.1: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	B Reliable	Based on local corporate knowledge and State government projections.
Growth projections	B Reliable	Estimated, however further substantiation required for next revision of the AM Plan
Operations expenditures	A Highly reliable	Direct from 2014/15 budget, expenses split into operations and maintenance.
Maintenance expenditures	A Highly reliable	Direct from 2014/15 budget, expenses split into operations and maintenance
Projected Renewal exps. - Asset values	A Highly reliable	Sourced from Confirm database and 2014/15 audited financial statements.
- Asset residual values	A Highly reliable	Sourced from Confirm database and 2014/15 audited financial statements.
- Asset useful lives	B Reliable	Based on last revaluation.
- Network renewals	C Uncertain	Based on asset register as at 30 June 2014.
- Defect repairs	C Uncertain	Based on asset register as at 30 June 2014.
Upgrade/New expenditures	C Uncertain	Based on low confidence needs analysis.
Disposal expenditures	B Reliable	No disposals proposed.

Over all data sources the data confidence is assessed as low confidence level for data used in the preparation of this AM Plan.

13 IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

"[Enter summary of accounting & financial systems]"

Accountabilities for financial systems

The Responsible Accounting Officer is the Chief Financial Officer.

Accounting standards and regulations

Financial statements are general purpose financial statements and are prepared in accordance with

- Australian Accounting Standards,
- Other authoritative pronouncements of the Australian Accounting Standards Board,
- Urgent Issues Group Interpretations,
- the Local Government Act (1989) and Regulation, and
- the Local Government Code of Accounting Practice and Financial Reporting.

Capital/maintenance threshold

Items of infrastructure, property, plant and equipment are not capitalised unless their cost of acquisition exceeds $5,000.

Required changes to accounting financial systems arising from this AM Plan

None identified

7.1.2 Asset management system

The following systems are used for asset management within the City of Ballarat:

Confirm – Asset management System

MapInfo – Mapping of assets

Asset registers

There is currently an interface between the Confirm Asset Management System and MapInfo.

Linkage from asset management to financial system

There is currently no direct link between the Financial Asset Register and the Asset Management System. A direct interface will be implemented as part of the Asset Management System improvement program.

Accountabilities for asset management system and data maintenance

The Coordinator for Asset Management is responsible for

- Data maintenance
- Developing targets and frequency for asset condition inspections

- Maintaining matching data within MapInfo
- Developing asset hierarchy within the Asset Management System including any changes or additions required to existing hierarchy
- Determining required system improvements
- Auditing data

Operations staff complete asset condition inspections and input data in accordance with established business protocols.

Required changes to asset management system arising from this AM Plan

- Completion of linkages to other systems

7.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1				
1	**Asset Register** Assess the Remaining Life of all assets on a priority basis and align with up to date performance data and knowledge.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
2	Review and update data for the year of acquisition or date of last renewal and replacement cost in the asset register for the years 1900, 1905, 1915, 1970 and 1974 as a priority.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
3	**Infrastructure Risk Management** Assess transport infrastructure risks and report to the audit committee.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
4	**Forward Projections** Ensure funding models reflect the resources required meeting the timely renewal of existing assets and those identified and implemented under the Strategic Plan.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
5	Develop and adopt a prioritisation framework for renewal and upgrade/new projects.			
6	Increase confidence and prioritise renewal and upgrade/new estimates based on risk.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
7	**Levels of Service** Develop and confirm current and desired community and technical levels of service to understand and report on a sustainable service delivery model.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
8	**AM Plan** Maintain an annual review of the plan incorporating an update of service level performance, financial projections and risk.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
9	Implement a continuous improvement strategy to assess and report on the performance of JSC controlled assets.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015

7.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The AM Plan will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the organisation's long term financial plan.

The AM Plan has a life of 4 years (Council election cycle) and is due for complete revision and updating within 1 year of each Council election.

7.4 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into Council's long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans,
- **The Asset Renewal Funding Ratio achieving the target of 1.0.**

8. REFERENCES

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9. APPENDICES

Appendix A Maintenance Response Levels of Service

Appendix B Projected 10 year Capital Renewal and Replacement Works Program

Appendix C Projected 10 year Capital Upgrade/New Works Program

Appendix D LTFP Budgeted Expenditures Accommodated in AM Plan

Appendix E Abbreviations

Appendix F Glossary

Appendix A Maintenance Response Levels of Service

To be developed.

Appendix B Projected 10 year Capital Renewal and Replacement Works Program

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
104021	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-65	1950	$8,338	50
112024	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-65	1950	$1,668	50
110150	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-65	1950	$4,971	50
Subtotal							$14,976	
104441	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-56	1959	$1,668	50
Subtotal							$1,668	
110090	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-50	1965	$1,668	50
111253	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-50	1965	$1,668	50
112923	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-50	1965	$1,668	50
112141	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-50	1965	$1,668	50
111998	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-50	1965	$1,668	50
112003	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-50	1965	$1,668	50
107233	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-50	1965	$1,668	50
106360	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-50	1965	$3,335	50
Subtotal							$15,008	
109855	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-49	1966	$1,668	50
109874	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-49	1966	$1,668	50
Subtotal							$3,335	
107567	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
107572	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
107008	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
106109	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
106138	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
104384	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
108812	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
108813	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
110238	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
110241	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
108024	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
112056	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
107227	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
107228	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-45	1970	$1,668	50
110152	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-45	1970	$14,912	50
Subtotal							$38,258	
109693	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-39	1976	$4,971	50
109694	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-39	1976	$4,971	50
Subtotal							$9,942	

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
108814	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-35	1980	$1,668	50
103981	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-35	1980	$1,668	50
107161	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-35	1980	$1,668	50
Subtotal							$5,003	
105585	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$1,668	50
108609	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$1,668	50
108610	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$1,668	50
112719	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$1,668	50
103890	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$1,668	50
106950	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$1,668	50
108604	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$1,668	50
108605	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$3,335	50
108606	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$3,335	50
110140	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$3,335	50
104324	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$1,668	50
107591	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$1,668	50
109001	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-33	1982	$1,668	50
104030	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-33	1982	$9,942	50
108607	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-33	1982	$4,971	50
108608	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-33	1982	$4,971	50
Subtotal							$46,564	
111914	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-32	1983	$1,668	50
105844	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-32	1983	$1,668	50
111908	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-32	1983	$1,668	50
111910	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-32	1983	$1,668	50
111911	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-32	1983	$4,971	50
Subtotal							$11,641	
104322	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-31	1984	$4,971	50
Subtotal							$4,971	
104192	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-30	1985	$3,335	50
105668	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-30	1985	$1,668	50
111419	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-30	1985	$1,668	50
111921	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-30	1985	$1,668	50
109204	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-30	1985	$1,668	50
109203	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-30	1985	$14,912	50
Subtotal							$24,918	
108574	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-29	1986	$1,668	50
108343	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-29	1986	$1,668	50

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
104208	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-29	1986	$1,668	50
104207	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-29	1986	$1,668	50
111463	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-29	1986	$3,335	50
111464	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-29	1986	$5,003	50
110754	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-29	1986	$1,668	50
Subtotal							$16,676	
109849	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-28	1987	$1,668	50
Subtotal							$1,668	
105440	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-27	1988	$1,668	50
105415	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-27	1988	$1,668	50
105409	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-27	1988	$1,668	50
110550	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-27	1988	$1,668	50
107814	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-27	1988	$1,668	50
Subtotal							$8,338	
105537	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-26	1989	$11,673	50
105592	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-26	1989	$1,668	50
Subtotal							$13,340	
112951	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-25	1990	$1,668	50
106140	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-25	1990	$3,335	50
106145	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-25	1990	$1,668	50
109856	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-25	1990	$1,668	50
106683	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-25	1990	$1,668	50
106684	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-25	1990	$1,668	50
103892	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-25	1990	$1,668	50
103891	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-25	1990	$1,668	50
108573	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-25	1990	$1,668	50
109838	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-25	1990	$3,335	50
107175	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-25	1990	$1,668	50
109839	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-25	1990	$4,971	50
106146	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-25	1990	$4,971	50
106384	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-25	1990	$4,971	50
106380	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-25	1990	$4,971	50
Subtotal							$41,561	
106381	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-24	1991	$1,668	50
106918	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-24	1991	$1,668	50
106919	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-24	1991	$1,668	50
111888	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-24	1991	$1,668	50
103987	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-24	1991	$1,668	50
106998	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-24	1991	$4,971	50

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Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
107000	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-24	1991	$4,971	50
Subtotal							$18,279	
111139	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-23	1992	$1,668	50
110231	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-23	1992	$10,005	50
105745	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-23	1992	$3,335	50
107186	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-23	1992	$1,668	50
107187	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-23	1992	$1,668	50
104350	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-23	1992	$1,668	50
105533	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-23	1992	$6,670	50
110001	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-23	1992	$5,003	50
110021	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-23	1992	$6,670	50
110037	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-23	1992	$5,003	50
110039	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-23	1992	$5,003	50
110066	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-23	1992	$4,971	50
104354	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-23	1992	$4,971	50
Subtotal							$58,301	
110041	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-22	1993	$4,971	50
Subtotal							$4,971	
112843	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-20	1995	$1,668	50
112270	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-20	1995	$1,668	50
105482	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-20	1995	$1,668	50
105470	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-20	1995	$1,668	50
112499	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-20	1995	$1,668	50
112271	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-20	1995	$4,971	50
112841	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-20	1995	$4,971	50
Subtotal							$18,279	
112107	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-19	1996	$1,668	50
112108	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-19	1996	$1,668	50
111823	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-19	1996	$1,668	50
111824	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-19	1996	$1,668	50
111826	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-19	1996	$1,668	50
111827	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-19	1996	$1,668	50
111828	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-19	1996	$1,668	50
Subtotal							$11,673	
104654	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-18	1997	$1,668	50
112947	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-18	1997	$4,971	50
Subtotal							$6,638	
109614	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-16	1999	$1,668	50

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Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
109611	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-16	1999	$1,668	50
104428	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-16	1999	$4,971	50
104377	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-16	1999	$4,971	50
Subtotal							$13,277	
106124	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-15	2000	$1,668	50
104047	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-15	2000	$1,668	50
104963	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-15	2000	$1,668	50
109850	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-15	2000	$1,668	50
109857	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-15	2000	$1,668	50
103880	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-15	2000	$1,668	50
109241	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-15	2000	$1,668	50
104885	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-15	2000	$1,668	50
109613	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-15	2000	$1,668	50
106026	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-15	2000	$1,668	50
106027	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-15	2000	$1,668	50
109617	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-15	2000	$4,971	50
112424	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-15	2000	$4,971	50
104876	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-15	2000	$4,971	50
109242	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-15	2000	$4,971	50
Subtotal							$38,226	
106397	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-14	2001	$3,335	50
110230	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-14	2001	$10,005	50
111349	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-14	2001	$1,668	50
112295	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-14	2001	$1,668	50
112300	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-14	2001	$1,668	50
107380	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-14	2001	$1,668	50
105219	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-14	2001	$4,971	50
Subtotal							$24,981	
105454	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-13	2002	$1,668	50
110480	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-13	2002	$1,668	50
110740	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-13	2002	$1,668	50
110742	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-13	2002	$1,668	50
Subtotal							$6,670	
108278	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-11	2004	$1,668	50
108287	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-11	2004	$1,668	50
105719	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-11	2004	$1,668	50
109072	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-11	2004	$1,668	50
110195	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-11	2004	$1,668	50
106704	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-11	2004	$1,668	50
109220	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-11	2004	$1,668	50

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Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
104388	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-11	2004	$1,668	50
Subtotal							$13,340	
109418	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$1,668	50
109419	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$3,335	50
109420	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$3,335	50
109421	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$1,668	50
112562	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$3,335	50
106890	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$1,668	50
109461	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$1,668	50
112551	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$5,003	50
112552	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$3,335	50
112553	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$1,668	50
112554	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$1,668	50
112555	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$1,668	50
112556	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$1,668	50
112557	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$3,335	50
112558	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$1,668	50
112559	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$3,335	50
112560	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$3,335	50
111125	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$1,668	50
109562	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$3,335	50
109564	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$1,668	50
109565	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$3,335	50
109566	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$5,003	50
110646	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-10	2005	$6,670	50
109563	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-10	2005	$4,971	50
112561	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-10	2005	$9,942	50
Subtotal							$79,947	
108116	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-9	2006	$1,668	50
108117	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-9	2006	$1,668	50
112790	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-9	2006	$1,668	50
112791	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-9	2006	$1,668	50
106962	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-9	2006	$1,668	50
110641	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-9	2006	$1,668	50
103916	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-9	2006	$4,971	50
112382	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-9	2006	$4,971	50
Subtotal							$19,947	
109968	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-8	2007	$1,668	50
104453	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-8	2007	$3,335	50
Subtotal							$5,003	

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Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
109918	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
109478	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
109480	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
109481	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
103899	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
112867	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$3,335	50
112869	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
106956	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
112289	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$3,335	50
105485	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$3,335	50
111462	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
106676	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
103908	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
103896	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
113056	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-7	2008	$1,668	50
106016	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-7	2008	$4,971	50
Subtotal							$34,987	
103900	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
113069	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
106337	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
112716	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
112717	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
112740	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
112742	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
112748	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
112749	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
112750	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
108571	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
112862	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
105097	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$3,335	50
105095	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$3,335	50
109062	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$3,335	50
109065	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$5,003	50
109096	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$3,335	50
109109	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$3,335	50
105876	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-6	2009	$1,668	50
109920	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-6	2009	$4,971	50
Subtotal							$48,327	
110539	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
110540	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
110541	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
110542	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
110543	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
107949	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
108201	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
107951	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
108160	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
103935	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$3,335	50
106437	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
106438	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
106439	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
106440	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
106459	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
103887	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
109082	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
111150	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
111736	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$3,335	50
111738	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
111936	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$3,335	50
107609	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
107614	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
108228	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
108230	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
108232	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
108233	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
107601	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
107602	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$5,003	50
107603	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
107604	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
108716	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
108717	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
108719	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
109458	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
109459	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$3,335	50
106891	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
104212	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
111510	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$3,335	50
106107	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
106120	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
111269	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
111271	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$3,335	50
111272	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$5,003	50
111274	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
111275	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
111277	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
111282	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$3,335	50

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
111284	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
111285	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
111286	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
105889	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
104022	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$3,335	50
108711	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
104619	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
110104	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
109840	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
109258	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
109259	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$3,335	50
109260	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
112679	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$3,335	50
112680	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-5	2010	$1,668	50
106674	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-5	2010	$4,971	50
107837	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-5	2010	$4,971	50
107111	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-5	2010	$4,971	50
107116	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-5	2010	$9,942	50
112620	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-5	2010	$14,912	50
103888	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-5	2010	$4,971	50
107950	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-5	2010	$4,971	50
Subtotal							$176,442	
112104	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
107441	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
107445	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
107453	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
107562	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
107563	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$3,335	50
107564	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$3,335	50
107565	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$5,003	50
109969	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109970	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109971	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109972	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
106828	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
106829	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
106830	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
106831	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
106832	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
110051	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$3,335	50
107226	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109863	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109073	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$3,335	50

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
109074	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$5,003	50
109075	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$3,335	50
109397	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109398	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109399	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109400	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109401	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
107440	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
107027	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
107028	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
107029	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$3,335	50
110652	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109762	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109764	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
109765	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	50
106047	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-4	2011	$1,668	41
104553	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-4	2011	$9,942	50
104551	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-4	2011	$4,971	50
106843	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-4	2011	$4,971	50
108588	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-4	2011	$4,971	50
112105	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-4	2011	$4,971	50
104552	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-4	2011	$9,942	50
Subtotal							$118,141	
108771	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
109408	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
109409	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
109412	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
109413	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
109414	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
109415	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
109416	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108293	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108296	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108297	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108298	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108299	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
110759	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108305	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108306	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108307	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108312	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108321	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
103982	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
106074	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
106075	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
106076	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
106077	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
107002	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
107003	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
107004	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
107005	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
104557	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
113072	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
112473	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
112481	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
112482	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
112483	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
112484	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
112485	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
105807	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
105803	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
110970	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
111155	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$5,003	50
111156	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$5,003	50
110756	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
110757	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$16,676	50
110762	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
110763	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
110764	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
110765	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
110766	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$18,343	50
110767	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
110768	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$18,343	50
108397	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108400	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108401	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$5,003	50
108439	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108843	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$5,003	50
108844	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$5,003	50
107818	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
107275	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
106269	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
106270	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
106271	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
106272	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
111565	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
110786	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
110792	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108039	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$5,003	50
108076	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
111388	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
111389	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
111390	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
111475	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
112754	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
112762	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
112778	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108079	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$8,338	50
106678	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$8,338	50
107120	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
107128	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
106681	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$6,670	50
111959	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$13,340	50
110866	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$6,670	50
108614	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
108615	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$5,003	50
108624	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108625	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108626	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108627	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
108628	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
108630	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
108631	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
108632	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$5,003	50
108633	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108634	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
108635	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
108636	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$3,335	50
108638	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$5,003	50
108708	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$5,003	50
108709	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$5,003	50
108407	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108409	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$6,670	50
108410	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108411	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108413	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108414	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-3	2012	$1,668	50
108412	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-3	2012	$4,971	50
108946	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-3	2012	$4,971	50
108629	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-3	2012	$9,942	50
107132	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-3	2012	$4,971	50

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
107118	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-3	2012	$4,971	50
110758	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-3	2012	$4,971	50
110760	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-3	2012	$4,971	50
110761	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-3	2012	$4,971	50
108304	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-3	2012	$4,971	50
109405	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-3	2012	$4,971	50
109407	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-3	2012	$4,971	50
Subtotal							$381,487	
112683	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$5,003	50
108358	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
108359	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
110965	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$3,335	50
109975	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
109976	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
108148	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
108712	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
108714	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
108759	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
108760	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
108761	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
108762	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
108763	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
108765	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
112611	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
112612	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
112613	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
107867	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
107868	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-2	2013	$1,668	50
108142	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-2	2013	$14,912	50
108143	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-2	2013	$4,971	50
108147	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-2	2013	$4,971	50
108125	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-2	2013	$4,971	50
108126	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-2	2013	$4,971	50
103859	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-2	2013	$4,971	50
Subtotal							$78,120	
111465	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
105058	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
105055	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
111701	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
110074	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
110075	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
107619	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$8,338	50

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
104751	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$6,670	50
107612	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
107613	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
109870	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
109878	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
104257	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
112457	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
112460	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
112487	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
112488	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
107590	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
107592	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
107225	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
104418	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$3,335	50
107107	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
110631	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
110640	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
106133	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
106142	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			-1	2014	$1,668	50
112486	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-1	2014	$4,971	50
107324	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			-1	2014	$4,971	50
Subtotal							$66,638	
111202	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
111342	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
105591	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
111646	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
111647	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
105499	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
110610	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
110611	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107820	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108242	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108247	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108252	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
105878	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
109844	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
109846	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
103881	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107600	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107606	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107607	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107610	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107611	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50

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Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
106494	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
112985	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
112986	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
112387	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
112388	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
111836	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
111020	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
111021	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107965	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108110	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
103910	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$11,673	50
107059	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107060	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107061	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
104497	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
104496	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107133	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107134	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
107135	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
107136	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
107140	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$5,003	50
106894	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
106895	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
106128	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$5,003	50
106131	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
111270	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$5,003	50
111276	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
112721	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
112953	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
105631	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
105784	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
105775	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
105774	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
105770	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
105769	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
105768	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108161	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108162	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$5,003	50
108163	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108166	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
108168	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
108171	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108181	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
108182	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
108597	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108598	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108603	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
106273	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
110912	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
110913	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
110926	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
110935	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
109994	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$3,335	50
110604	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
110632	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
109919	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
103898	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108118	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108944	Drainage	DR-Pits-DR-Pit <=900x900 and <=1.5m			0	2015	$1,668	50
108945	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
103945	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108815	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108817	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108818	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
104062	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
104806	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
107137	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
107138	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
107139	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
104494	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$9,942	50
108111	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108112	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108113	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108114	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108115	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108101	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108102	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108103	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108104	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$19,883	50
108105	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108106	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108107	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108108	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
112987	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108109	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
107819	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$9,942	50
109843	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
108821	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50

Ballarat CC - Report 6 - Appendix B 10 year Renewal & Replacement Program (Drainage 2015_S1_V1)								
Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
109487	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
111344	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$9,942	50
111345	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
105369	Drainage	DR-Pits-DR-Pit >900x900 or >1.5m deep			0	2015	$4,971	50
Subtotal							$375,624	
Year 1 Program Total							$1,857,165	
10 Year Program Total							$10,981,894	

Appendix C Projected Upgrade/Exp/New 10 year Capital Works Program

Category	Capex Program	Project/Sub-Program	Work Type	2014/15 Year 1 $000	2015/16 Year 2 $000	2016/17 Year 3 $000	2017/18 Year 4 $000	2018/19 Year 5 $000	2019/20 Year 6 $000	2020/21 Year 7 $000	2021/22 Year 8 $000	2022/23 Year 9 $000	2023/24 Year 10 $000	
Drainage	Capital Road Program	Major & Minor Drainage	Upgrade/New	$599	$599	$599	$599	$599	$599	$599	$599	$599	$599	**$5,985**
				$599	**$599**	**$599**	**$599**	**$599**	**$599**	**$599**	**$599**	**$599**	**$599**	**$5,985**

Appendix D Budgeted Expenditures Accommodated in LTFP

NAMS.PLUS3 Asset Management **Ballarat CC**

Drainage 2015_S1_V1 Asset Management Plan

First year of expenditure projections **2015** (financial yr ending)

Drainage 2015

Asset values at start of planning period

			Calc CRC from Asset Register	
Current replacement cost	$343,298	(000)	$343,288	(000)
Depreciable amount	$343,298	(000)	This is a check for you.	
Depreciated replacement cost	$103,932	(000)		
Annual depreciation expense	$2,967	(000)		

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	0.08%
Additional maintenance	0.73%
Additional depreciation	0.86%

Planned renewal budget (information only)

You may use these values calculated from your data or overwrite the links.

Planned Expenditures from LTFP

20 Year Expenditure Projections Note: Enter all values in current **2015** values

Financial year ending	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure Outlays included in Long Term Financial Plan (in current $ values)										
Operations										
Operations **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Management **budget**	$84	$84	$84	$84	$84	$84	$84	$84	$84	$84
AM systems **budget**	$201	$201	$201	$201	$201	$201	$201	$201	$201	$201
Total operations	$284	$284	$284	$284	$284	$284	$284	$284	$284	$284
Maintenance										
Reactive maintenance **budget**	$2,498	$2,498	$2,498	$2,498	$2,498	$2,498	$2,498	$2,498	$2,498	$2,498
Planned maintenance **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Specific maintenance items **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total maintenance	$2,498	$2,498	$2,498	$2,498	$2,498	$2,498	$2,498	$2,498	$2,498	$2,498
Capital										
Planned renewal **budget**	$257	$257	$257	$257	$257	$257	$257	$257	$257	$257
Planned upgrade/new **budget**	$599	$599	$599	$599	$599	$599	$599	$599	$599	$599
Non-growth contributed asset value	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Asset Disposals										
Est Cost to dispose of assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Carrying value (DRC) of disposed assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan)

Additional Expenditure Outlays required and not included above	2015 $000	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Capital Renewal to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used)

Capital Upgrade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
User Comments #2										

Forecasts for Capital Renewal using Methods 2 & 3 (Form 2A & 2B) & Capital Upgrade (Form 2C)

	2015 $000	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000
Forecast Capital Renewal from Forms 2A & 2B	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Forecast Capital Upgrade from Form 2C	$599	$599	$599	$599	$599	$599	$599	$599	$599	$599

Appendix E Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ARI	Average recurrence interval
ASC	Annual service cost
CRC	Current replacement cost
DA	Depreciable amount
DRC	Depreciated replacement cost
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
LTFP	Long term financial plan
RV	Residual value
SoA	State of the Assets
WDCRC	Written down current replacement cost

Appendix F Glossary

Annual service cost (ASC)

1) Reporting actual cost
   The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.
2) For investment analysis and budgeting
   An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset category

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset hierarchy

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

Asset management (AM)

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Asset renewal funding ratio

The ratio of the net present value of asset renewal funding accommodated over a 10 year period in a long term financial plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMG Financial Sustainability Indicator No 8].

Average annual asset consumption (AAAC)*

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

Borrowings

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided**.**

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the organisation's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure - new
Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operations and maintenance expenditure.

Capital expenditure - renewal
Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

Capital expenditure - upgrade
Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operations and maintenance expenditure in the future because of the increase in the organisation's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility.

Capital funding
Funding to pay for capital expenditure.

Capital grants
Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure
See capital expenditure definition

Capitalisation threshold
The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

Carrying amount
The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets
See asset class definition

Component
Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

Core asset management
Asset management which relies primarily on the use of an asset register, maintenance management systems, job resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cashflow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decision- making).

Cost of an asset
The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, including any costs necessary to place the asset into service. This includes one-off design and project management costs.

Critical assets
Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.

Current replacement cost (CRC)
The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Deferred maintenance
The shortfall in rehabilitation work undertaken relative to that required to maintain the service potential of an asset.

Depreciable amount
The cost of an asset, or other amount substituted for its cost, less its residual value.

Depreciated replacement cost (DRC)
The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset.

Depreciation / amortisation
The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life
See useful life definition.

Expenditure
The spending of money on goods and services. Expenditure includes recurrent and capital outlays.

Expenses
Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or increases in liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

Fair value
The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Financing gap
A financing gap exists whenever an entity has insufficient capacity to finance asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current financing gap means service levels have already or are currently falling. A projected financing gap if not addressed will result in a future diminution of existing service levels**.**

Heritage asset
An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss
The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets
Physical assets that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no separate market value.

Investment property
Property held to earn rentals or for capital appreciation or both, rather than for:
(a) use in the production or supply of goods or services or for administrative purposes; or
(b) sale in the ordinary course of business.

Key performance indicator
A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

Level of service
The defined service quality for a particular service/activity against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental impact, acceptability and cost.

Life Cycle Cost *
1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure
The Life Cycle Expenditure (LCE) is the average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

Loans / borrowings
See borrowings.

Maintenance
All actions necessary for retaining an asset as near as practicable to an appropriate service condition, including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

- **Planned maintenance**
  Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.
- **Reactive maintenance**
  Unplanned repair work that is carried out in response to service requests and management/ supervisory directions.
- **Specific maintenance**
  Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.
- **Unplanned maintenance**
  Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance expenditure *
Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality
The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset
Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

Net present value (NPV)
The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from eg the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

Non-revenue generating investments
Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operations
Regular activities to provide services such as public health, safety and amenity, eg street sweeping, grass mowing and street lighting.

Operating expenditure
Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, eg power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

Operating expense
The gross outflow of economic benefits, being cash and non cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

Operating expenses
Recurrent expenses continuously required to provide a service, including power, fuel, staff, plant equipment, maintenance, depreciation, on-costs and overheads.

Operations, maintenance and renewal financing ratio
Ratio of estimated budget to projected expenditure for operations, maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Operations, maintenance and renewal gap
Difference between budgeted expenditures in a long term financial plan (or estimated future budgets in absence of a long term financial plan) and projected expenditures for operations, maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

Pavement management system (PMS)
A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

PMS Score
A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption *
The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

Rate of annual asset renewal *
The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade/new *
A measure of the rate at which assets are being upgraded and expanded per annum with capital upgrade/new expenditure expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Recoverable amount
The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure
Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operations and maintenance expenditure.

Recurrent funding
Funding to pay for recurrent expenditure.

Rehabilitation
See capital renewal expenditure definition above.

Remaining useful life
The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining useful life is useful life.

Renewal
See capital renewal expenditure definition above.

Residual value
The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

Revenue generating investments
Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management
The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment
A self-contained part or piece of an infrastructure asset.

Service potential
The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit sector/public sector to value assets, particularly those not producing a cash flow.

Service potential remaining
A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (Depreciated Replacement Cost/Depreciable Amount).

Specific Maintenance
Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Strategic Longer-Term Plan
A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the Council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

Sub-component
Smaller individual parts that make up a component part.

Useful life
Either:
(a) the period over which an asset is expected to be available for use by an entity, or
(b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council.

Value in Use
The present value of future cash flows expected to be derived from an asset or cash generating unit. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown *

CITY OF BALLARAT

Transport

Asset Management Plan

Insert photo of relevant asset

Scenario 1, 2 & 3 Version 2

April 2015

Document Control	

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1. EXECUTIVE SUMMARY

Context

Located 110km north-west of Melbourne, the City of Ballarat municipality covers an area of 740 km² and has a population of 100,550[1] people and is forecast to grow by 30% (or 1.7% per year) to 130,000 by 2031.

A significant proportion of the council's infrastructure assets have been in existence for many years. These assets originated from a combination of Council, State and Federally funded construction programs plus developer contributed assets from town planning approvals.

Council is responsible for approximately 1,323 km[2] servicing the main centre of Ballarat, four outlying townships and the wider region.

Community expectations and importance for transport assets are high, particularly in regards to the ongoing provision of safe and fit for purpose road networks such as accessible and clean footpaths, unsealed road maintenance and sealing, timely sealed road surface repairs and maintained roadside verges.

This document provides the framework to deliver optimum performance of council's road infrastructure assets in the most cost effective manner and to ensure roads are safe to use and provide a comfortable and reliable means of travel for all road users.

The Transport Service
The Transport network comprises:

- 993 km Sealed Roads
- 330 km Unsealed Roads
- 220 Bridge & Major Culverts
- 672 km Footpaths
- 1,072 km Kerb & Channel
- 88 Roundabouts
- 16 Signal installations
- 47 Traffic control devices

These infrastructure assets have a depreciated replacement value (written down value) of $583M and a current replacement cost of $931M as reported at 30 June 2014.

The Aim

The aim of this plan is to forecast the timing and cost to replace existing assets over a 20 year planning period commencing in the 2014/15 financial year to an agreed service level. This is to ensure lifecycle costs are kept to a minimum and service levels are provided at an acceptable and sustainable level. In addition, it is important the provision of new infrastructure is duly considered in respect to impacts on service levels, resources, finances and risk.

It is these impacts that need to be assessed as part of this plan and where the residual risk is considered high, due processes and control measures are employed to ensure exposure is accepted and/or minimised in consultation with the community.

The Approach

For transport assets, three modelling scenarios have been considered when developing these forecasts.

Scenario 1 projects future renewal timing and costs using the acquisition year (or date of last renewal) and useful life from Council's asset register. This is an important aspect as it communicates what is being stated in Council's Financial Statements and should reflect the state of assets and remaining service potential. Instances can occur where remaining lives can be under and/or over stated which can impact valuations and the subsequent depreciation expense allocated to the Operating Statement.

Scenario 2 is aimed at sustaining existing assets over the long term at current service levels. The needs are based on technical knowledge and expertise from officers and existing modelling systems. This is the best available measure of renewal need at the present time ensuring confidence is increased over time via an improvement plan.

Scenario 3 balances the operating, maintenance and capital renewal and upgrade/new expenditure projections identified in Scenario 2 with the available funds in the Long-term Financial Plan (LTFP) and discusses the likely service implications and risks should there be a shortfall.

The difference between Scenario 2 and 3 represents "what we can't do". This enables a discussion about the 'gap' in service delivery and will lead to a more informed discussion about what are achievable and acceptable service levels, while giving a focus on managing risk. In time, with increased knowledge of

[1] 2011 Census

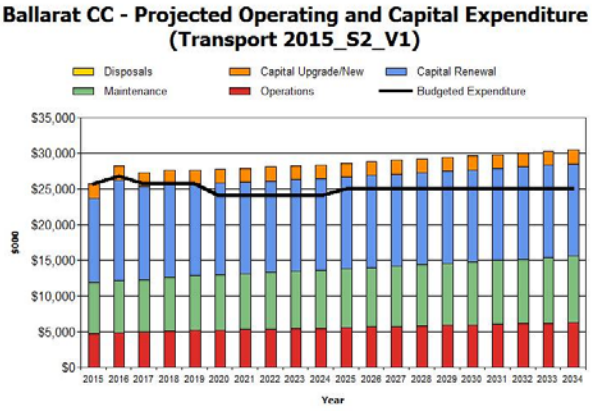
[2] Transport Asset Register as at 30 June 2014 (Confirm)

the asset stock and future needs Council will be in a more effective position to communicate these risks to the community.

What does it Cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is $277M or $27.7M on average per year.

Estimated available funding for this period is $250M or $25M on average per year which is 90% of the cost to provide the service. This is a funding shortfall of $2.7M on average per year. Projected expenditure required to provide services in the AM Plan compared with planned expenditure currently included in the Long Term Financial Plan are shown in the graph below.



Projected expenditure to sustain current service levels against the budgeted LTFP

The Findings

Results from Scenario 1 indicate that approximately 6% of the assets (in value) have reached the end of their life according to the asset register. This has two consequences:

1. There is an understatement of useful lives for some assets. The asset register indicate assets to the value of approximately $54.5M have passed their designated required renewal date. This is shown in figure 5.1.

2. Consequently, the forward projection of depreciation cannot be used as a reliable measure of asset consumption because it excludes the material amount of road assets that have been fully depreciated. (i.e. representing approximately 6% of asset value)

Scenario 2 determined $129M is required for asset renewal to sustain service levels at current levels for the next 10 years. These medium to long term renewal estimates exceed the LTFP over the 10 year planning period by $14M. Subsequently, ongoing if not improved monitoring of ageing and significant assets is crucial to ensure services can be sustained and risk of asset 'failure' is minimised.

Scenario 3 balances the above needs with the 10 year Long-term Financial Plan. At the City of Ballarat, this means the likely reduction of service levels in some areas. Given the $14M shortfall in renewals over the next 10 years it is likely footpath renewal, maintenance grading, gravel re-sheeting, pavement rehabilitations and/or resealing frequencies and a number of major culverts replacements will need to be reduced in order to meet the revenue projections in the LTFP.

There is limited function and utilisation knowledge and reporting of road assets combined with the likely demands in these areas due to growth (an estimated $120M of additional assets is forecast in the next ten years) will pose a risk for Council. Increased investment in monitoring and reporting of the roads performance will enable a more valued decision support mechanism ensuring risk is being duly managed.

What we will do

We plan to provide road asset transport services for the following:

- Operation, maintenance, renewal and upgrade of all road assets to meet service levels set by Council in annual budgets.
- Sustain an $11.9M annual operational budget over the 10 year planning period.
- Sustain an $11.5M average renewal program over the 10 year planning period.
- Sustain a $16.3M upgrade program over the 10 year planning period.
- We will assess remaining life of our existing assets and align with up to date condition data of critical assets as a priority.
- Improve confidence in the forward renewal needs in the next revision of this plan.

What we cannot do

We do **not** have enough funding to provide all services at the desired service levels or provide new services. Works and services that cannot be provided under present funding levels are:

- An estimated $14M funding shortfall in priority renewals over the next 10 years, and
- An estimated $3.2M funding shortfall in priority upgrade and new projects over the next 10 years.

This can equate to less maintenance grading, re-sheeting, resealing and pavement rehabilitation of some roads when they fall due.

Managing the Risks

There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:

- Increased traffic volumes and loading accelerating deterioration leading to premature asset failure.
- Maintenance and servicing costs increasing beyond forecast revenue projections.
- Failure of corrugated steel culverts on unsealed roads.
- Some roads deteriorating to a lower service standard resulting in a higher risk situation.

We will endeavour to manage these risks within available funding by:

- Re-allocate finances to priority assets to sustain current services where possible.
- Ensure preventative maintenance schedules are maintained and enhanced where possible.
- Investigate procurement strategies and alternative cost effective treatments to reduce replacement and lifecycle costs.
- Improve management and prioritisation of capital renewal and upgrade projects.
- Undertake targeted condition, function and capacity audits to better understand performance and report status to the community.

Confidence Levels

This AM Plan is based on medium level of confidence information. The expenditure and valuations projections are based on best available data and knowledge from systems and key staff.

The Next Steps

The actions resulting from this asset management plan are:

- Implement a continuous improvement strategy to assess and report on the condition, function and capacity of council controlled assets.
- Develop and confirm current and desired levels of service in consultation with the community to understand sustainable levels of service.
- Assess remaining life of our assets and align with up to date performance data and knowledge.
- Develop and adopt a prioritisation framework for renewal and upgrade/new projects.
- Assess transport infrastructure risks and report to the audit committee.
- Ensure the Asset Management Plan is updated on an annual basis incorporating an annual review and update of service level performance, financial projections and risk.

Questions you may have

What is this plan about?

This asset management plan covers the road infrastructure assets that serve the City of Ballarat community's transport needs. These assets include sealed and unsealed roads, footpaths and street furniture throughout the community area that enable people and goods to move safely and efficiently within the city and to and from areas outside the city boundaries by a range of modes – either on foot, by bicycle, by public transport or by motor vehicle.

Managing services from ageing and long-lived infrastructure is a challenge for many Councils and this plan focuses on the needs, challenges and risks attributed to managing road assets over the next 20 years.

What is an Asset Management Plan?

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

An asset management plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services.

Why is there a funding shortfall?

Most of the Council's transport network was constructed by developers and from government grants, often provided and accepted without consideration of ongoing operations, maintenance and replacement needs.

Many of these assets are approaching the later years of their life and require replacement, services from the assets are decreasing and maintenance costs are increasing.

Our present funding levels are insufficient to continue to provide existing services at current levels in the medium term.

What options do we have?

Resolving the funding shortfall involves several steps:

1. Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels,
2. Improving our efficiency in operating, maintaining, renewing and replacing existing assets to optimise life cycle costs,
3. Identifying and managing risks associated with providing services from infrastructure,
4. Making trade-offs between service levels and costs to ensure that the community receives the best return from infrastructure,
5. Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs,
6. Consulting with the community to ensure that transport services and costs meet community needs and are affordable,
7. Developing partnership with other bodies, where available to provide services,
8. Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

What happens if we don't manage the shortfall?

It is likely that we will have to reduce service levels in some areas, unless new sources of revenue are found. For the transport asset category, the service level reduction may include:

- Accelerated asset deterioration,
- Increasing pressure to effectively allocate available funds, and
- Higher risk.

What can we do?

We can develop options, costs and priorities for future transport services, consult with the community to plan future services to match the community service needs with ability to pay for services and maximise community benefits against costs.

What can you do?

We will be pleased to consider your thoughts on the issues raised in this asset management plan and suggestions on how we may change or reduce its transport mix of services to ensure that the appropriate level of service can be provided to the community within available funding.

2. INTRODUCTION

2.1 Background

This asset management plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding needed to provide the required levels of service over a 20 year planning period.

The asset management plan follows the format for AM Plans recommended in Section 4.2.6 of the International Infrastructure Management Manual[3].

The asset management plan is to be read with the organisation's Asset Management Policy, Asset Management Strategy and the following associated planning documents:

- City of Ballarat, 2014, 'Council Plan 2014/15'
- City of Ballarat, 2014, 'Strategic Resource Plan 2014 – 2015'

The infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide transport services to the community.

Table 2.1: Assets covered by this Plan

Asset category	Dimension	Replacement Value
Earthworks	1,985 segments	$47,031,445
Sealed roads	993 km	$536,735,639
Unsealed roads	330 km	$51,517,378
Bridge & Major Culverts	222	$43,388,276
Footpaths	672 km	$65,326,963
Kerb & Channel	1,072 km	$155,820,678
Roundabouts	88	$27,228,365
Bus Shelters	193	$2,464,500
Signal installations	16	$1,372,400
Traffic control devices	47	$180,500
TOTAL		**$931,066,144**

Key stakeholders in the preparation and implementation of this asset management plan are: Shown in Table 2.1.1.

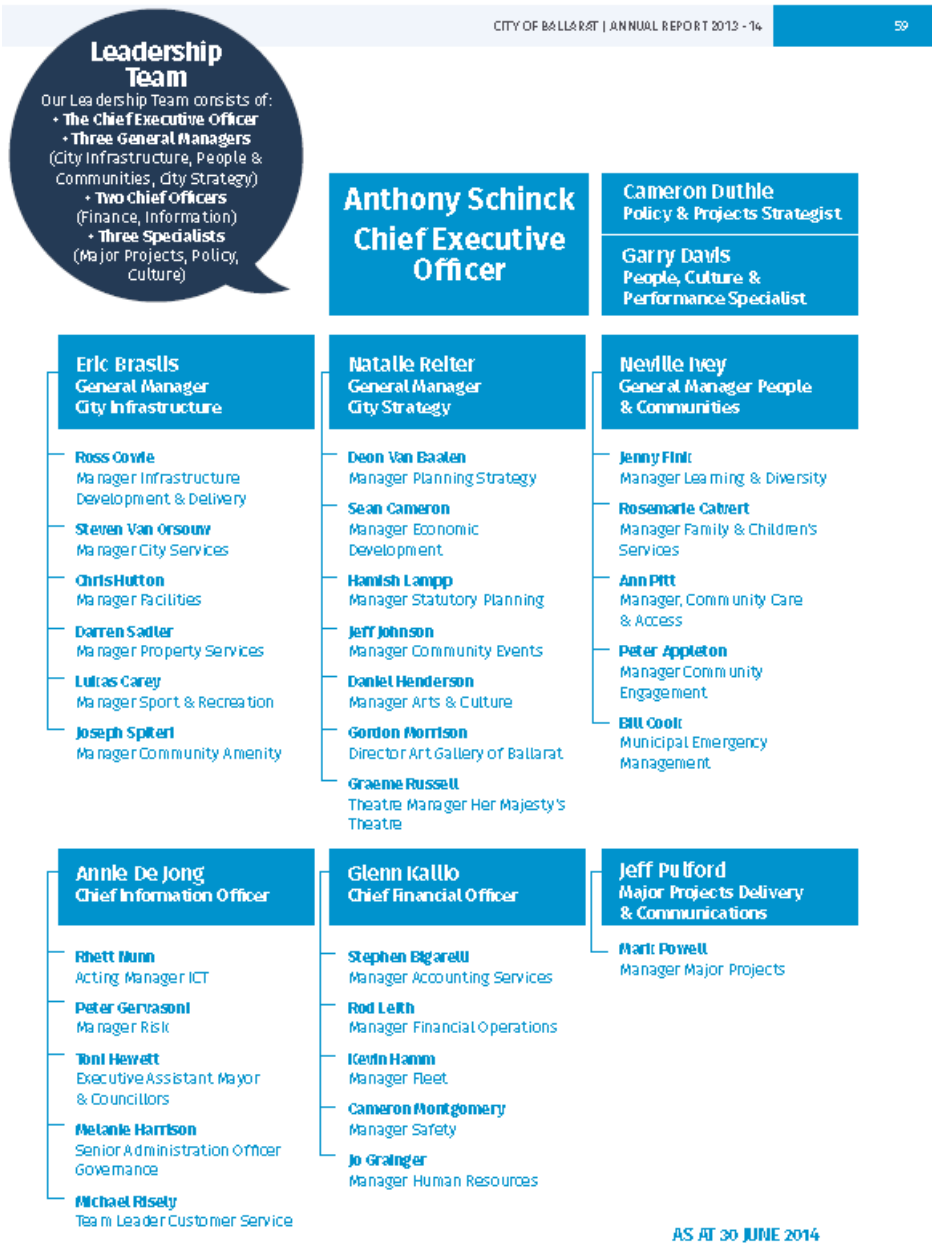
Table 2.1.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Councillors	• Represent needs of community/shareholders, • Allocate resources to meet the organisation's objectives in providing services while managing risks, • Ensure organisation is financially sustainable.
CEO	Overall responsibility for developing the asset management strategy, plans and procedures and reporting on the status and effectiveness of asset management within the organisation.
General Manager City Infrastructure	• Managerial oversight of inspection regime, identification of and

[3] IPWEA, 2011, Sec 4.2.6, *Example of an Asset Management Plan Structure*, pp 4|24 – 27.

Key Stakeholder	Role in Asset Management Plan
	timely and effective response to risks. Ensure annual review and update of service levels. • Ensure forward expenditure projections are based on delivering at least two service level scenarios (i.e. aspirational and affordable).
Chief Financial Officer	• Managerial oversight of asset funding model and Long Term Financial Plan. • Ensure capitalisation process is managed effectively.
Coordinator Asset Management	• Provide forward expenditure projections based on delivering various service level scenarios. • Annual review and update of service levels.
Supervisors and field service staff	• Provide local knowledge level detail on assets. Verify the size, location and performance of assets. • Describe the maintenance standards employed and Council's ability to meet technical and customer levels of service.
Specialist asset management consultants	• Provide capacity building and mentoring initiatives to achieve core maturity compliance with the national framework for financial and asset management planning and reporting. • Independently peer review plans and revaluation methodology.

Our organisational structure for service delivery from infrastructure assets is detailed below,



2.2 Goals and Objectives of Asset Management

The organisation exists to provide services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', by contract, construction by our staff and by donation of assets constructed by developers and others to meet increased levels of service.

Our goal in managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and

- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.[4]

2.3 Plan Framework

Key elements of the plan are

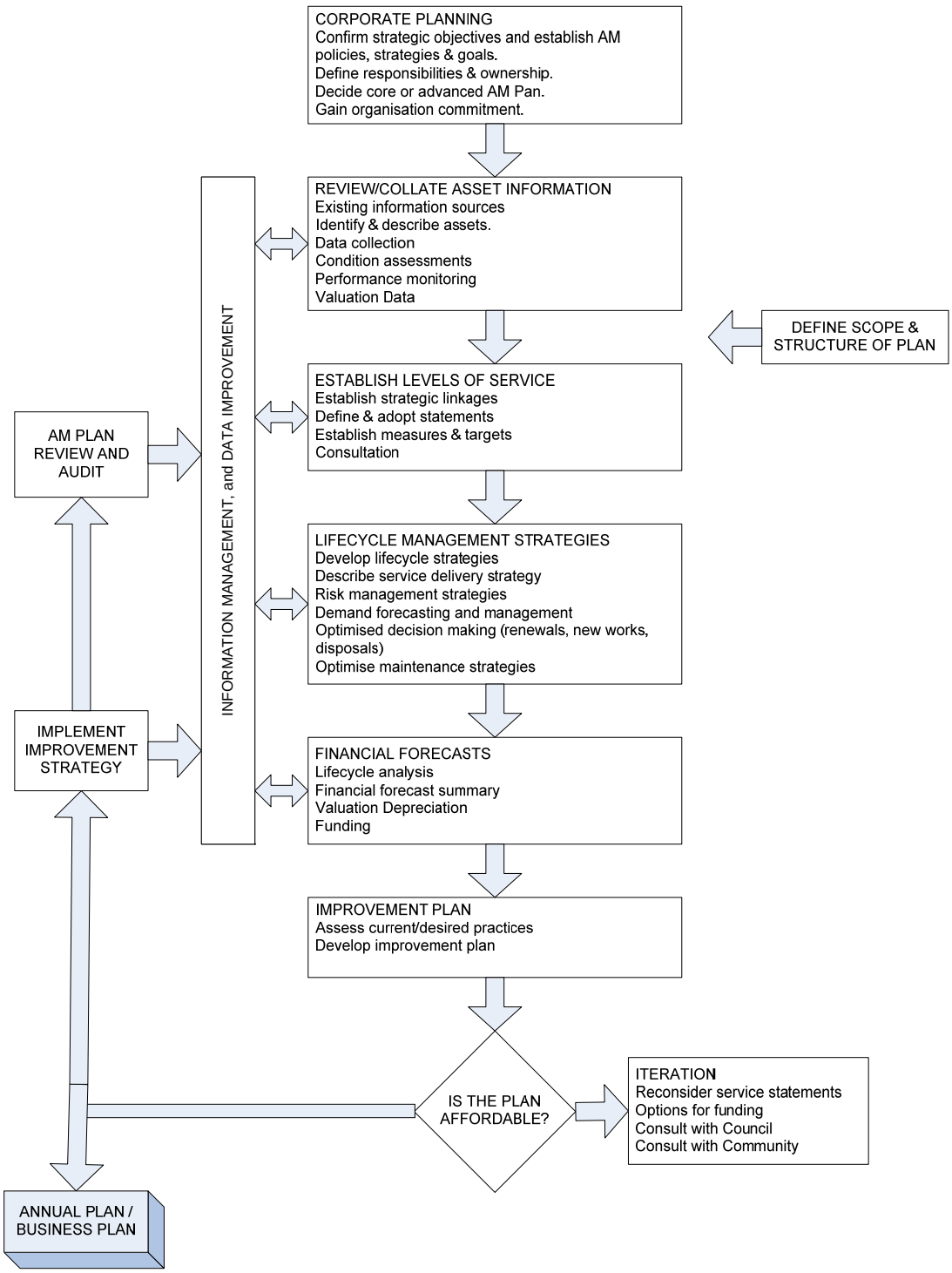
- Levels of service – specifies the services and levels of service to be provided by the organisation,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Life cycle management – how Council will manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices,
- Monitoring – how the plan will be monitored to ensure it is meeting organisation's objectives,
- Asset management improvement plan.

A road map for preparing an asset management plan is shown below.

[4] Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

Road Map for preparing an Asset Management Plan

Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11.



2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 20 year planning period in accordance with the International Infrastructure Management Manual[5]. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels in a financially sustainable manner.

2.5 Community Consultation

This 'core' asset management plan is prepared to facilitate community consultation initially through feedback on public display of draft asset management plans prior to adoption by the Council. Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service. This will assist the Council and the community in matching the level of service needed by the community, service risks and consequences with the community's ability and willingness to pay for the service.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

We participate in the Victorian Local Government Community Satisfaction Survey. The community satisfaction survey is a state-wide telephone survey used to collect direct feedback from the community about councils, covering five main areas:

- council's overall performance
- community consultation and engagement
- advocacy – lobbying on behalf of the community
- customer service
- overall council direction

The survey is conducted by the Department of Environment, Land, Water and Planning on behalf of participating councils. A minimum of 400 local residents and ratepayers in each municipality over 18 years of age are selected at random.

The most recent community satisfaction survey results will be reported in a future revision of this plan and used in developing council's Strategic Resource Plan.

[5] IPWEA, 2011, IIMM.

3.2 Strategic and Corporate Goals

This asset management plan is prepared under the direction of the organisation's Council Plan goals and objectives including the long-term vision and strategy – *The Ballarat Strategy*.

The Ballarat Strategy will address an emerging gap in the long-term planning for Ballarat's future – this gap is the result of Ballarat's greater than expected population growth in the past decade and strong projected population growth over the next 25 years.

Relevant organisational goals and objectives and how these are addressed in this asset management plan are:

Table 3.2: Organisational Goals and how these are addressed in this Plan

Goal	Objective	How Goal and Objectives are addressed in AM Plan
Engaging our Community	To enable council gain a strong understanding of the community's values, aspirations, ideas and concerns, and to use this understanding to plan for Ballarat's short-term and long-term future.	The AM Plan provides information on the Service Aims and the existing condition and the proposed mechanisms to manage Transportation Assets
		Development of the service levels provided by Road assets, and the balancing of this with the available funding and acceptable risk will require communication and consultation with the community.
Deliver financial management responsibly to ensure long-term sustainability of the organisation and its assets.	4.8.1 Ensure Council remains in the medium financial risk category (as a minimum). 4.8.2 Manage Ballarat's services and assets to the best of Council's ability in line with Asset Management Plans. 4.8.3 Optimise and rationalise Council assets across all asset classes for the greater community and organisation benefit	Ensuring that Council operations align with the Long Term Financial Strategy (LTFS) which sees Council in the Medium Risk category. Council continues to receive an annual state of the assets report prior to the adoption of its annual budget. Asset management plans are to be used to guide Councils decision making in providing community facilities.

The organisation will exercise its duty of care to ensure public safety is accordance with the infrastructure risk management plan prepared in conjunction with this AM Plan. Management of infrastructure risks is covered in Section 5.2

3.3 Legislative Requirements

The organisation has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act, 1989	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Australian Accounting Standards	Set out the financial reporting standards relating to infrastructure assets.AASB116, AASB136, AASB1121, AAS1001, AASB1041, AAS1015 and AASB1051.
OH&S Acts 1986 & 2000	Protect the public against risks to health or safety arising out of or in connection with the activities of persons at work or the use of operation of various types of plant.
Road Management Act 2004	Set out the powers, duties and functions of the road authorities in relation to public roads. This act enables the Council to develop and publish a Road Management Plan setting out the standards of inspection, maintenance and repair of all public roads in the Public Road Register of which Council is the Co-ordinating Road Authority.
Code of Practice for Operational Responsibility for Public Roads 2004	Sets out role and responsibilities for the management of State and municipal roads. Published in Government Gazette no. s267 17/12/2004.
Road Safety Act 1986	This act empowers council with regard to parking issues such as the power to erect major and minor traffic control items on roads other than declared main roads.
Crown Lands Act 1989	Sets out the objectives and principles for Crown Land management.
Austroads Guides, Standards and Reports	Austroads works with Australian Local Government bodies to improve Australia's roads and transport systems.
Road Management Plan 2013 (draft)	Review of Plan every four (4) years is a statutory obligation.
Other relevant state and federal acts and regulations. Australian Standards and VicRoads guidelines	As appropriate.

The organisation will exercise its duty of care to ensure public safety in accordance with the infrastructure risk management plan linked to this AM Plan. Management of risks is discussed in Section 5.2.

3.4 Community Levels of Service

Service levels are defined service levels in two terms, customer levels of service and technical levels of service.

Community Levels of Service measure how the community receives the service and whether the organisation is providing community value.

Community levels of service measures used in the asset management plan are:

Condition	How good is the service?
Function	Does it meet users' needs?
Capacity/Utilisation	Is the service over or under used?

The organisation's current and expected community service levels are detailed in Tables 3.4 and 3.5. Table 3.4 shows the agreed expected community levels of service based on resource levels in the current long-term financial plan and community consultation/engagement.

Table 3.4: Community Level of Service

Service Attribute	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTFP
COMMUNITY LEVELS OF SERVICE				
Condition	Road infrastructure meets intended service level.	% of road infrastructure in poor/very poor condition including confidence assessment.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.
Function	Road infrastructure is 'fit for purpose'.	% of road infrastructure in poor/very poor function.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.
Capacity/ Utilisation	Road infrastructure has the ability to meet service needs.	% of road infrastructure in poor/very poor capacity.	To be developed in future revisions of this Plan.	To be developed in future revisions of this Plan.

3.5 Technical Levels of Service

Technical Levels of Service - Supporting the community service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities that the organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services such as cleaning, slashing road shoulders, inspections, etc.
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition (e.g. road patching, unsealed road grading, building and structure repairs),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (e.g. frequency and cost of road resurfacing and pavement reconstruction, pipeline replacement and building component replacement),
- Upgrade – the activities to provide a higher level of service (e.g. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library).

Service and asset managers plan, implement and control technical service levels to influence the customer service levels.[6]

Technical service levels are unavailable at present and are recognised as one of the priority tasks in the Improvement Plan.

[6] IPWEA, 2011, IIMM, p 2.22

4. FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

4.2 Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation of assets were identified and are documented in Table 4.3.

4.3 Demand Impact on Assets

The impact of demand drivers that may affect future service delivery and utilisation of assets are shown in Table 4.3.

Table 4.3: Demand Drivers, Projections and Impact on Services

Demand drivers	Present position	Projection	Impact on services
Population	100,550	The population is forecast to grow to 130,000 by 2031.	Population growth will increase traffic volumes and demand for more shared use paths and transport related assets.
Residential & Commercial development.	Increasing demand.	Further increases likely given the growth projections.	Increasing demand on services and infrastructure.

4.4 Demand Management Plan

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

Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures[7]. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.4: Demand Management Plan Summary

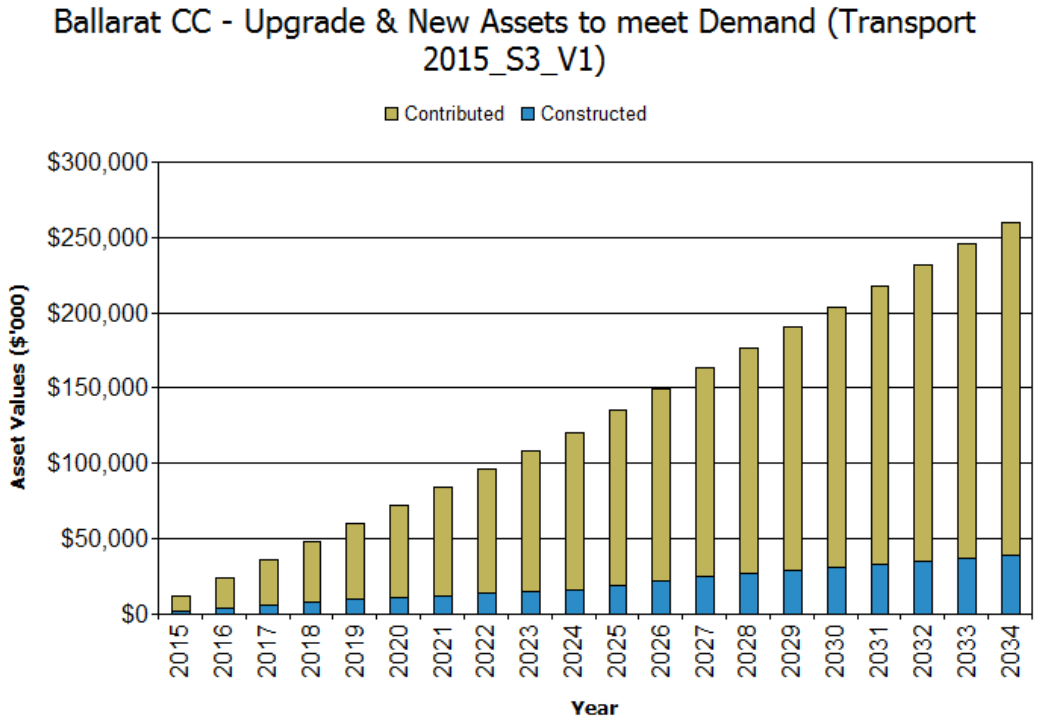
Demand Driver	Impact on Services	Demand Management Plan
Population Increase	Increasing demand for services.	Under development
Ageing Population	DDA compliance becomes a requirement for new works.	Increased budget and DDA implementation Plan
Residential & Commercial development.	Increasing demand on services and infrastructure.	

[7] IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.

4.5 Asset Programs to meet Demand

The new assets required to meet growth will be acquired free of cost from land developments and constructed/acquired by council. These new assets constructed/acquired by the organisation are discussed in Section 5.5. The cumulative value of new contributed and constructed asset values are summarised in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand



An estimated cumulative amount of $120M is forecast to be added in the first 10 years of the planning period (i.e. the Long-term Financial Plan) specifically for upgrading and/or provision of new assets. A similar amount has been forecast for the remaining 10 years of the planning period bringing the total to $260M over 20 years. In percentage terms, Council is increasing its asset value by 28% over the next 20 years.

Acquiring these new assets will commit the organisation to fund ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs in Section 5.

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the organisation plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while optimising life cycle costs.

5.1 Background Data

The data and forecasts are based on assets recorded in the financial asset register, known service deficiencies from routine inspections and customer requests. It is important careful monitoring of those assets with poor to very poor performance at a detailed component level is maintained to manage appropriate service provision and associated risk.

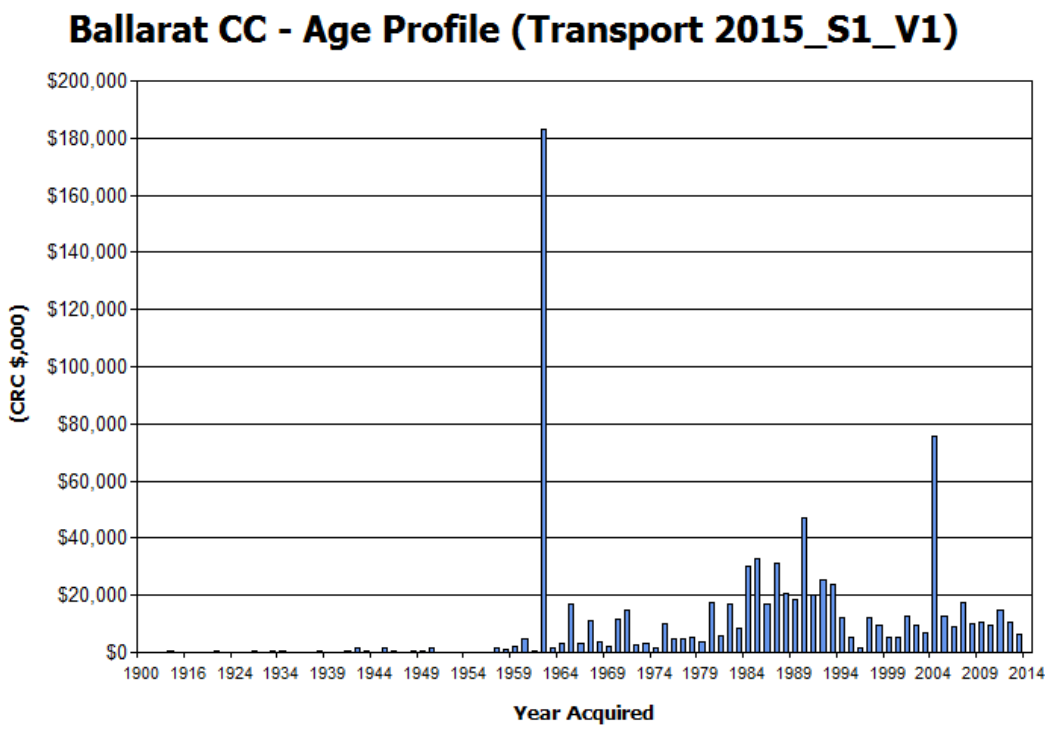
5.1.1 Physical parameters

The assets covered by this asset management plan are shown in Table 2.1.

The transport asset category comprises a complex mix of asset types, age, function and condition.

The age profile of the assets included in this AM Plan is shown in Figure 2 sourced from the financial asset register based on the date of construction/acquisition or date of last renewal against the current replacement cost.

Figure 2: Asset Age Profile by Current Replacement Cost



According to the asset register the majority of the transport assets were constructed or last replaced in 1962 ($183M), 1990 ($47M) and 2005 ($76M) accounting for 35% of the total asset value suggesting there may be data errors in the register of assets.

The asset register provides essential information not only for asset management plans and the long-term financial plan for financial reporting it is also used to calculate depreciation in the operating statement therefore it is important the supporting data is of high confidence (± 10%) to report whether we have enough revenue to support our capital investment in infrastructure.

Given the high value of replacement costs in 1962, 1990 and 2005 suggests a review of costs and acquisition dates is required and is included in the Improvement Plan in Section 7.2.

5.1.2 Asset capacity and performance

The organisation's services are generally provided to meet design standards where these are available.

Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

Location	Service Deficiency
Sealed pavements	A small number of sealed pavements have failed prematurely as a result of increased traffic loading.
Unsealed pavements	There is an increasing number of low order unsealed roads surpassing acceptable intervention levels subsequently increasing community dissatisfaction.
Bluestone kerbing	Damaged sections of kerb obstruct stormwater runoff and cause ponding and road safety hazards. There are a number of kerb ramps which do not comply with Disability Discrimination Act (DDA) requirements.
Sealed surfaces	Sealed surface renewal is being managed through sufficient funding and maintenance programs.
Traffic Devices	There is a growing demand for more efficient/effective traffic control devices and local areas traffic management schemes.
Signage	Reflectivity has not been tested for compliance.
Bridges & Major Culverts	Some steel corrugated culverts on unsealed roads are experiencing accelerated deterioration due to either poor construction and/or ground conditions.
Bus Shelters	There are a number of old bus shelters which do not comply with DDA.
Footpaths	Trees are impacting on footpath faults and are contributing to a continuing increase in the number of trip hazards.

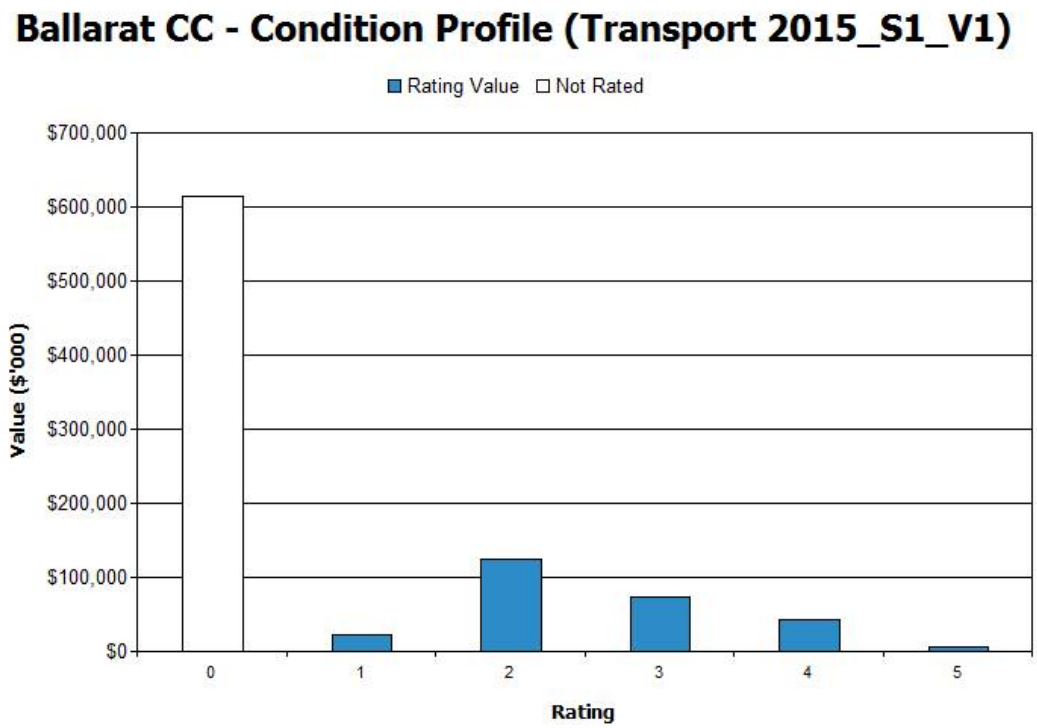
The above service deficiencies were identified from customer requests, programmed safety and existing asset inspection programs.

5.1.3 Asset condition

Condition is monitored and managed at an operational level, and the information used to prepare the condition profile is based on regular assessments every year dependant on known asset and service deficiencies of the transport network.

The condition profile of our assets is shown in Figure 3.

Fig 3: Asset Condition Profile



Condition is measured using a 1 – 5 grading system[8] as detailed in Table 5.1.3.

Table 5.1.3: Simple Condition Grading Model

Condition Grading	Description of Condition
1	**Very Good**: only planned maintenance required
2	**Good**: minor maintenance required plus planned maintenance
3	**Fair**: significant maintenance required
4	**Poor**: significant renewal/rehabilitation required
5	**Very Poor**: physically unsound and/or beyond rehabilitation

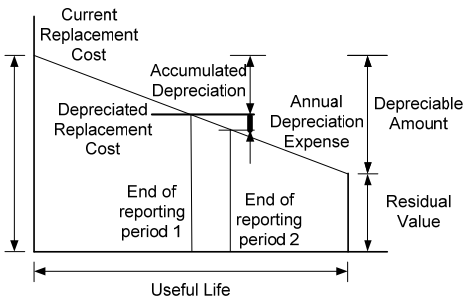
There is $615M of transport assets, predominately rural and urban flexible pavements that are not currently assessed and their performance is unknown. These assets account for 70% of the depreciable asset stock suggesting a high level assessment of the remaining life of these assets be commissioned as a priority.

Of the known condition assessed assets 18% ($49M) is performing in a poor to very poor state of repair highlighting the importance of resourcing ongoing monitoring.

5.1.4 Asset valuations

The value of assets recorded in the asset register as at 30 June 2014covered by this asset management plan is shown below. Assets were last revalued at "[Enter revaluation date]". Assets are valued at greenfield rates for replacement cost as per Victorian legislative requirements.

Current Replacement Cost	$938,408,822
Depreciable Amount	$861,206,000



[8] IPWEA, 2011, IIMM, Sec 2.5.4, p 2|79.

Depreciated Replacement Cost[9]	$560,489,029
Annual Depreciation Expense	$13,649,727

Useful lives are based on broad industry averages.

Key assumptions made in preparing the valuations were:

- Use of existing valuation data

Major changes from previous valuations are due to existing assets not previously recognised and existing records being reviewed and updated after verification

Various ratios of asset consumption and expenditure have been prepared to help guide and gauge asset management performance and trends over time.

Rate of Annual Asset Consumption (Depreciation/Depreciable Amount)	1.60%
Rate of Annual Asset Renewal (Capital renewal exp/Depreciable amount)	1.40% (Year 1)
Rate of Annual Asset Upgrade/New (Capital upgrade expenditure/Depreciable amount)	0.20% (Year 1)
Rate of Annual Asset Upgrade/New (Including contributed assets)	4.50% (Year 1)

In 2015 council plans to renew assets at 86.70% of the rate they are being consumed and will be increasing its asset stock by 4.50% in the year.

To provide services in a financially sustainable manner, Council will need to ensure that it is renewing assets at the rate they are being consumed over the medium-long term and funding the life cycle costs for all new assets and services in its long term financial plan.

5.2 Infrastructure Risk Management Plan

An assessment of risks[10] associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the organisation. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.2. These risks are reported to management and Council via the audit committee.

[9] Also reported as Written Down Current Replacement Cost (WDCRC).
[10] Council's Infrastructure Risk Management Plan

Table 5.2: Critical Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Bridges & Major Culverts	Failure of corrugated steel culverts on unsealed roads.	High	Maintain or increase where required inspections and understanding of asset condition and performance. Investigate strategies and costs to extend life in conjunction with replacement alternatives.	High	Within existing budget. Staff time.
All road assets	Increasing financial pressure to adequately sustain current service levels. Some roads deteriorating to a lower service standard resulting in a higher risk situation. Premature failure of some assets.	High	Continue to improve data and knowledge by carrying our targeted inspections. Required renewal of road components may be achieved in the short to medium term Future planning improvements can be made by documenting service level risks and utilisation of these in establishing future renewal priorities.	Medium	Within existing budget. Staff time
	Damage to assets as a consequence of a significant natural event.	Very High	At present cannot be managed within councils resourcing strategy. Reliant on external assistance such as NDRRA. Ensure resources are redirected to manage the NDRRA process when an event is declared.	Medium	Within existing budget. Staff time

Note * The residual risk is the risk remaining after the selected risk treatment plan is operational.

Note, transport infrastructure risk is currently being assessed as part of the Improvement Plan (Section 7.2) and will be made available as part of the next revision of this plan.

5.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, eg cleansing, street sweeping, grass mowing and street lighting.

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

5.3.1 Operations and Maintenance Plan

Operations activities affect service levels including quality and function through street sweeping and grass mowing frequency, intensity and spacing of street lights and cleaning frequency and opening hours of building and other facilities.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. Maintenance may be classified into reactive, planned and specific maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions.

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Specific maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacing air conditioning units, etc. This work falls below the capital/maintenance threshold but may require a specific budget allocation.

Actual past maintenance expenditure is shown in Table 5.3.1.

Table 5.3.1: Maintenance Expenditure Trends

Year	Maintenance Expenditure		
	Planned and Specific	Unplanned	Total
2011/12	Unavailable	Unavailable	Unavailable
2012/13	Unavailable	Unavailable	Unavailable
2013/14	Unavailable	Unavailable	Unavailable

The percentage of planned and specific maintenance work as a percentage of the total maintenance expenditure is unavailable.

Maintenance expenditure levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels is some areas. Where maintenance expenditure levels are such that will result in a lesser level of service, the service consequences and service risks have been identified and service consequences highlighted in this AM Plan and service risks considered in the Infrastructure Risk Management Plan.

Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement.

5.3.2 Operations and Maintenance Strategies

The organisation will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities include:

- Scheduling operations activities to deliver the defined level of service in the most efficient manner,
- Undertaking maintenance activities through a planned maintenance system to reduce maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost),
- Maintain a current infrastructure risk register for assets and present service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council,
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs,
- Review asset utilisation to identify underutilised assets and appropriate remedies, and over utilised assets and customer demand management options,
- Maintain a current hierarchy of critical assets and required operations and maintenance activities,
- Develop and regularly review appropriate emergency response capability,
- Review management of operations and maintenance activities to ensure Council is obtaining best value for resources used.

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

The organisation's service hierarchy is shown is Table 5.3.2.

Table 5.3.2: Asset Service Hierarchy

Service Hierarchy	Service Level Objective
To be developed in a future revision of this plan.	To be developed in a future revision of this plan.

Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. By identifying critical assets and critical failure modes, organisations can target and refine investigative activities, maintenance plans and capital expenditure plans at the appropriate time.

Operations and maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc. Critical assets failure modes and required operations and maintenance activities are detailed in Table 5.3.2.1.

Table 5.3.2.1: Critical Assets and Service Level Objectives

Critical Assets	Critical Failure Mode	Operations & Maintenance Activities
Major culverts with steel rib construction.	Invert scouring and collapse due to poor construction and/or ground conditions.	Inspection and monitoring.
High order collector and arterial seals and pavements.	Rutting, cracking and local surface defects.	Intervention maintenance (reactive and planned)

Standards and specifications

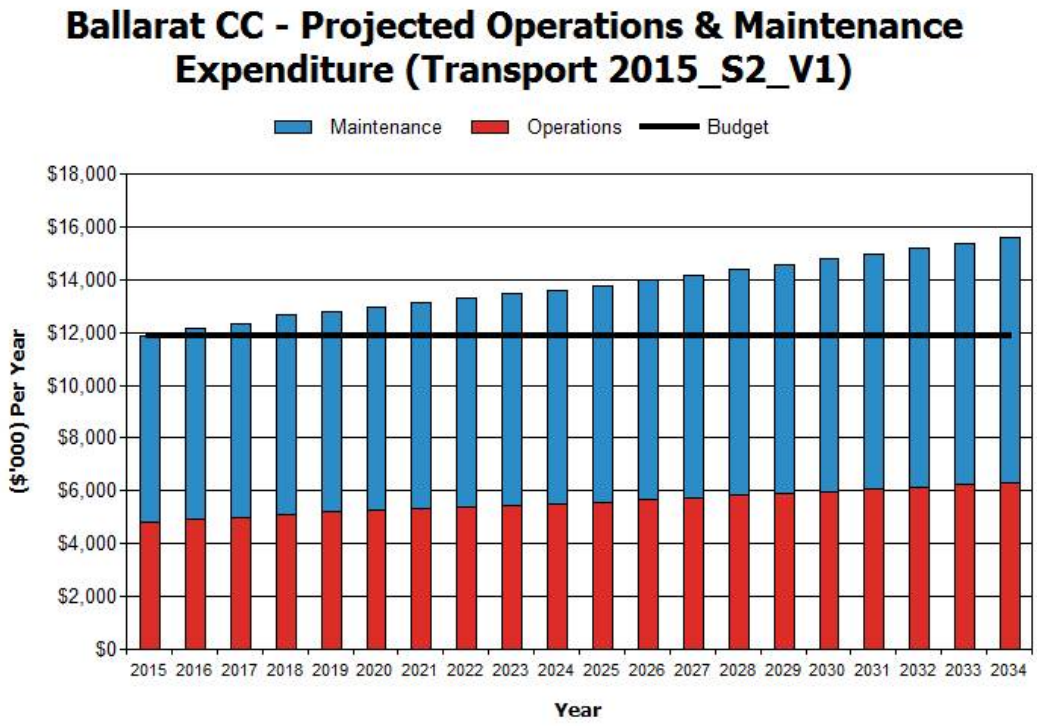
Maintenance work is carried out in accordance with the following Standards and Specifications.

- Relevant engineering standards and specifications for road and transport related works.

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the acquisition of new assets as shown in Figure 4. Note that all costs are shown in current 2014/15 dollar values (i.e. real values net of inflation).

Figure 4: Projected Operations and Maintenance Expenditure



The current year operations and maintenance budget is $12M and the projected requirements are expected to increase to $13.6M by 2024 and $15.6M by 2034 due to operating and maintenance needs of contributed assets from development and upgrade/new assets constructed by Council.

Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment and analysis in the infrastructure risk management plan.

Maintenance is funded from the operating budget where available. This is further discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal and replacement expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

Examples of renewal include:

- Resurfacing roads
- Rehabilitating road pavements
- Resheeting unsealed gravelled roads
- Remove and replace bluestone or concrete kerb & channelling
- Replacing bridges & major culverts

5.4.1 Renewal plan

Assets requiring renewal/replacement are identified from one of three methods provided in the IPWEA NAMS.PLUS 'Expenditure Template' used to create the forward projections.

- Method 1 uses Asset Register data to project the renewal costs using acquisition year and useful life to determine the renewal year, or
- Method 2 uses capital renewal expenditure projections from external condition modelling systems (such as Pavement Management Systems), or
- Method 3 uses a combination of average *network renewals* plus *defect repairs* in the *Renewal Plan* and *Defect Repair Plan* worksheets on the 'Expenditure template' using best available knowledge of officers.

A combination of all three methods was used for this asset management plan. It is common that the asset register used in Method 1 is not developed to a level of maturity where it is reliable for producing a realistic renewal forecast. Ideally when this asset register is sorted by remaining life from 1 to 10 years it should be consistent with the capital renewal program. This is not the case at the City of Ballarat and the refinement of the asset register to achieve this situation should become an important part of the asset management improvement plan.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed on "[Enter date of review of useful lifes]".

Table 5.4.1: Useful Lives of Assets

Asset (Sub)Category	Useful life
Major culverts	44 - 109 years
Foot bridges	48 - 92 years
Road bridges	62 - 189 years
Bus shelters	9 - 34 years
Footpaths	7 – 135 years
Bluestone kerb & channel	20 – 250 years
Concrete kerb & channel	10 – 185 years
Sealed pavements	80 years
Unsealed pavements	15 years
Sprayed seals	26 years
Asphalt surfacing	23 years
Concrete surfacing	80 – 87 years
Paving	40 years
Roundabouts	40 years
Rumble strips	10 – 11 years
Signal installations	27 – 31 years
Speed humps	15 – 21 years

5.4.2 Renewal and Replacement Strategies

The organisation will plan capital renewal and replacement projects to meet level of service objectives and minimise infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner,
- Undertaking project scoping for all capital renewal and replacement projects to identify:
    - the service delivery 'deficiency', present risk and optimum time for renewal/replacement,
    - the project objectives to rectify the deficiency,
    - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
    - and evaluate the options against evaluation criteria adopted by the organisation, and
    - select the best option to be included in capital renewal programs,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,

- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council,
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required ,
- Review management of capital renewal and replacement activities to ensure Council is obtaining best value for resources used.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replacing a bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. roughness of a road).[11]

It is possible to get some indication of capital renewal and replacement priorities by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have a high utilisation and subsequent impact on users would be greatest,
- The total value represents the greatest net value to the organisation,
- Have the highest average age relative to their expected lives,
- Are identified in the AM Plan as key cost factors,
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.[12]

The ranking criteria used to determine priority of identified renewal and replacement proposals is normally detailed in Table 5.4.2 however at this stage an agreed and adopted prioritisation framework is yet to be developed and is included in the improvement plan. Therefore the projected capital renewal and replacement projects are currently being prioritised in an ad-hoc informal manner using basic parameters such as condition and risk.

Table 5.4.2: Renewal and Replacement Priority Ranking Criteria

Criteria	Weighting
To be determined in the next revision of this AM Plan.	

Renewal and replacement standards

Renewal work is carried out in accordance with the following Standards and Specifications.

- Relevant engineering standards
- Relevant standards and specifications for road and transport related works.

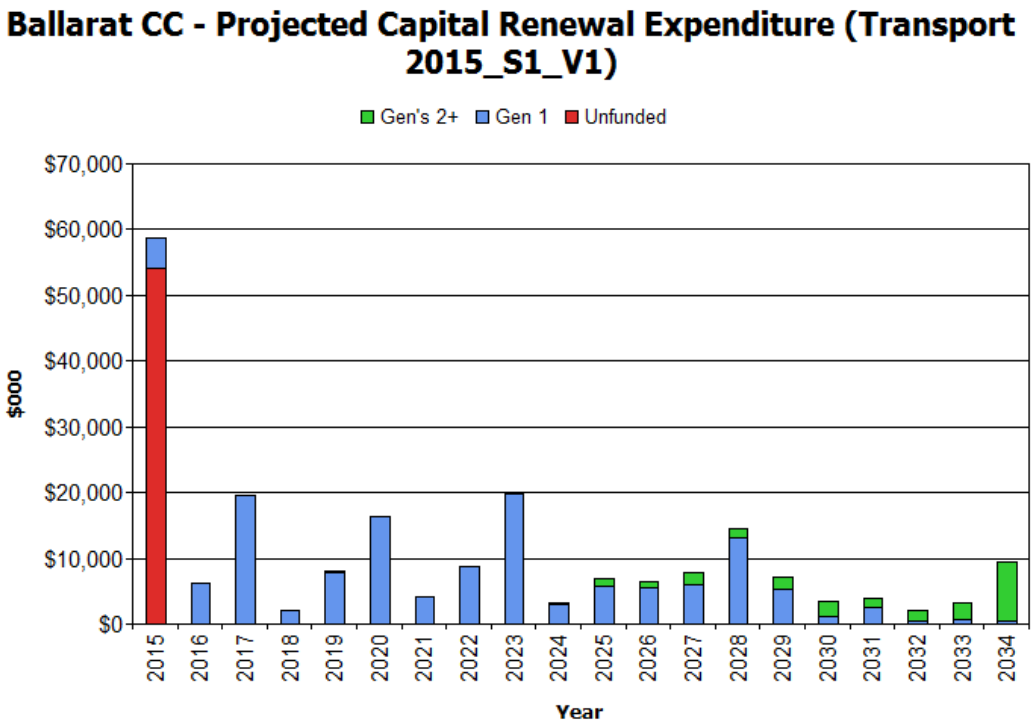
[11] IPWEA, 2011, IIMM, Sec 3.4.4, p 3|60.
[12] Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3|66.

5.4.3 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the existing asset stock ages and increases from growth. The projected capital renewal and replacement program is shown in Appendix A & B for Scenario 2 & 3 respectively .

The projected 20 year capital renewal expenditures developed for each of the three Scenarios are shown below. All amounts are shown in real values (net of inflation).

Fig 5.1: Projected Capital Renewal and Replacement Expenditure (Scenario1 from Asset Register)



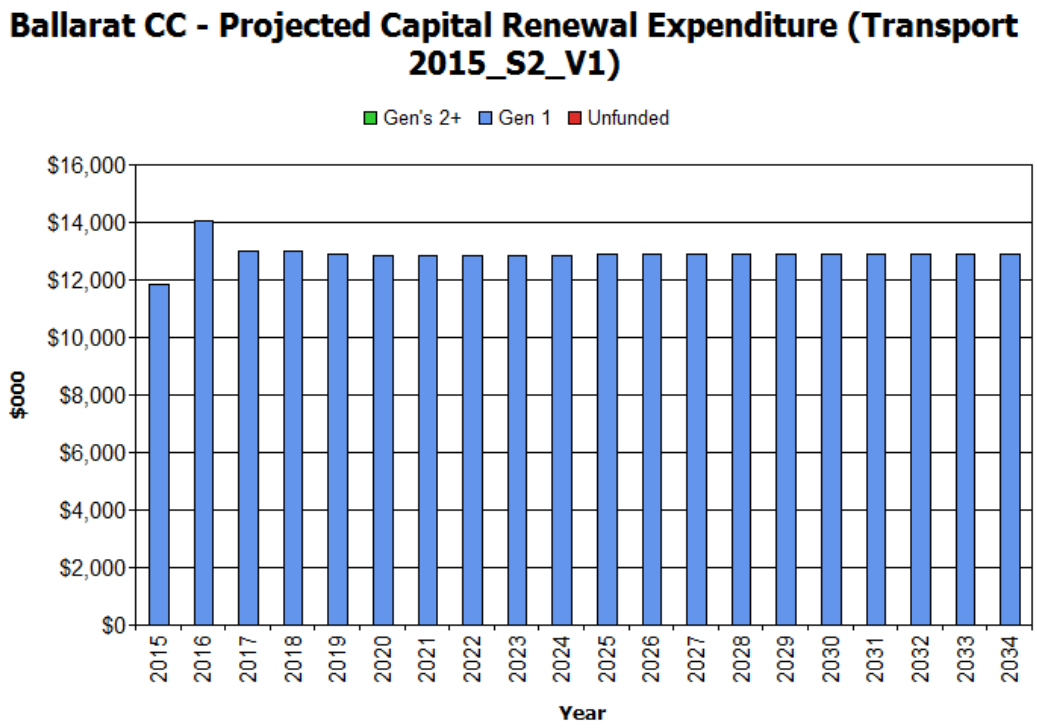
The renewal projection (forecast) in Scenario 1 (using the asset register) shows a backlog of renewals of $54.5M. This is a significant value of assets (6%) that are past their useful life indicating they are fully depreciated.

Whilst the long term averages and total values from this register may be useful, the shorter term renewal forecasts are clearly not, and are inconsistent with the known (and funded) capital renewal plans and condition profiles. This indicates that further refinement of the asset register is required before it is valuable as a capital renewal planning tool and should be given a high priority in the asset management improvement plan. The review is particularly important with respect to the useful lives in the asset register and function and utilisation data and knowledge and aligning these with the required expenditure pattern for renewals and partial renewals.

Deferred renewal and replacement, i.e. those assets identified for renewal and/or replacement and not scheduled in capital works programs are to be included in the risk analysis process in the risk management plan.

Renewals and replacement expenditure in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

Fig 5.2: Projected Capital Renewal and Replacement Expenditure
(Scenario 2 – sustaining current assets and services over the planning period)



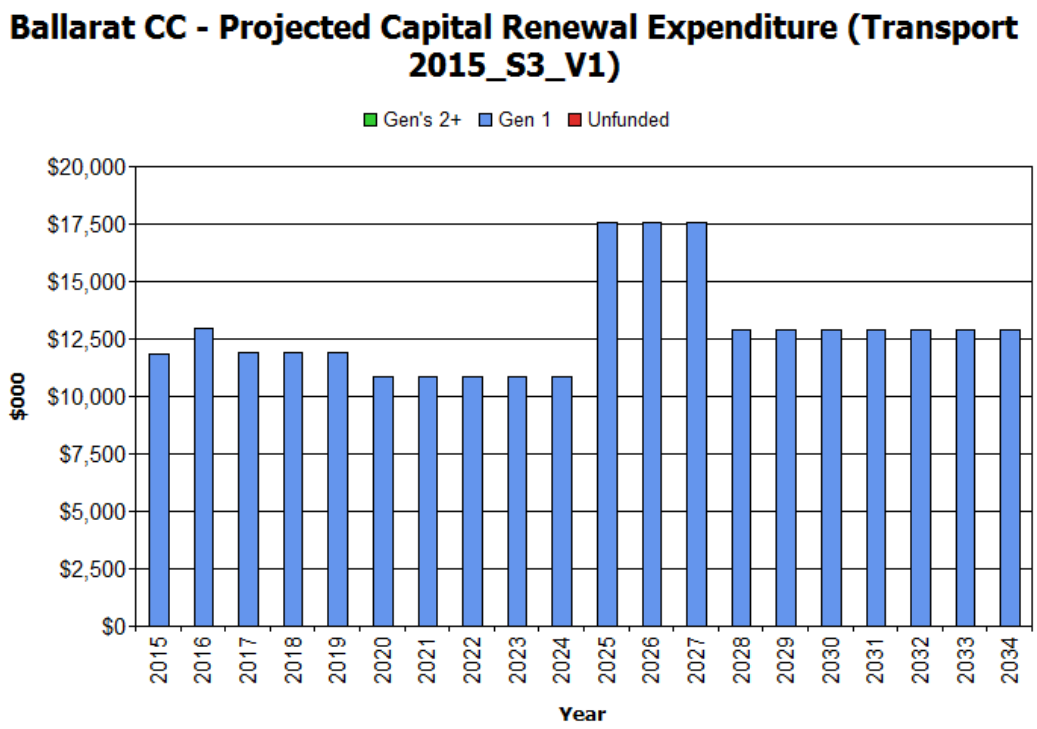
The above Scenario 2 chart shows the 20-year capital renewal expenditure projections based on sustaining current service levels.

At present, the short to medium 10-year outlook suggests $129M is required to sustain current service levels. This is the best available measure of renewal need at the present time. The LTFP suggests $115M will be made available.

Given an ageing asset stock and the 1.1% growth projections combined with limited function and capacity data and knowledge the risks that may arise during the planning period could be significant and will need to be carefully monitored. With increased investment in monitoring, auditing and reporting of the infrastructure supporting the services a more reliable estimate of renewal will assist with evaluating future risks.

Given the current knowledge the projections present a position to determine what cannot be done when projections are balanced to the long-term financial plan (LTFP) in Scenario 3.

Fig 5.3: Projected Capital Renewal and Replacement Expenditure (Scenario 3 - Balanced with LTFP)



Scenario 3 balances the projections identified in Scenario 2 to the current 10 year LTFP budget figures. The result suggests a $14M deferral of capital renewal works is required over the first 10 years however, caution should be applied and due assessment made of the risk this may create before proceeding with any significant measures to 'reel' in the shortfall. By doing so, Council will be in a more effective position to communicate these risks to the community.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the organisation from land development or state asset transfer deals such as the Ballarat Western Link Road. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is normally detailed in Table 5.5.1 below however at this stage an agreed and adopted prioritisation framework is yet to be developed and is included in the improvement plan for action. Consequently the projected new and capital upgrade/expansion projects are currently being prioritised in an ad-hoc informal manner using basic parameters such as demand, function and those identified in the Council Plan.

Table 5.5.1: New Assets Priority Ranking Criteria

Criteria	Weighting
To be determined in the next revision of this AM Plan.	

5.5.2 Capital Investment Strategies

The organisation will plan capital upgrade and new projects to meet level of service objectives by:

- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
    - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset,
    - the project objectives to rectify the deficiency including value management for major projects,
    - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
    - management of risks associated with alternative options,
    - and evaluate the options against evaluation criteria adopted by Council, and
    - select the best option to be included in capital upgrade/new programs,
- Review current and required skills base and implement training and development to meet required construction and project management needs,
- Review management of capital project management activities to ensure Council is obtaining best value for resources used.

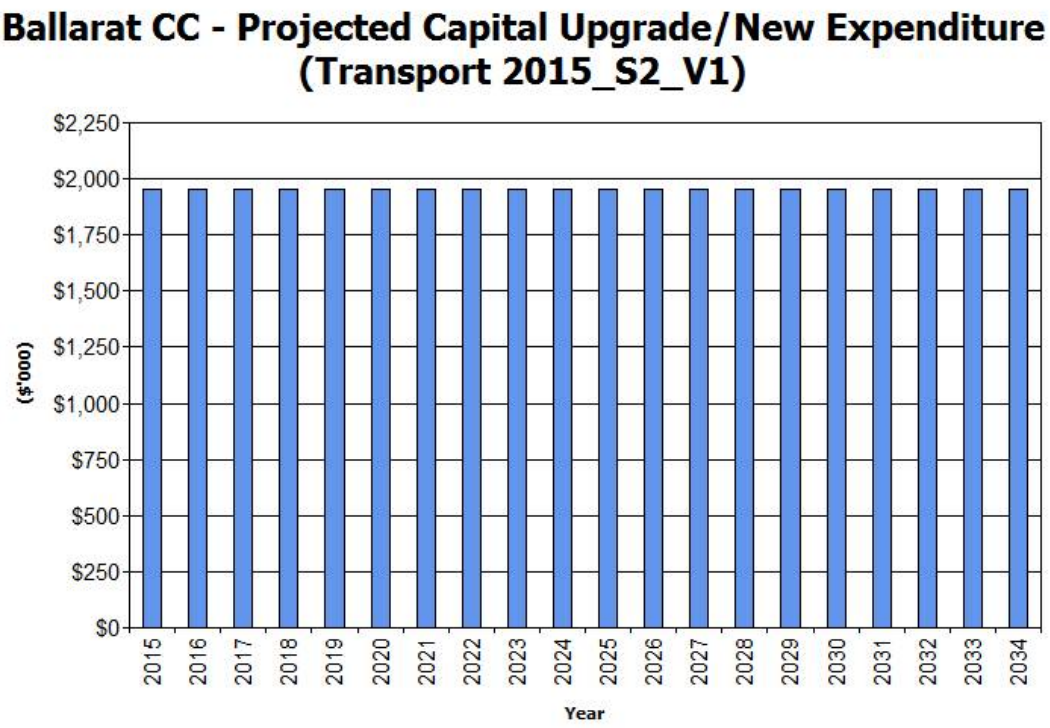
Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

5.5.3 Summary of future upgrade/new assets expenditure

The projected 20 year capital upgrade/new expenditures have been developed for Scenario 2 & 3 and are shown below. All amounts are shown in real values (i.e. today's dollars) and net of inflation.

Figure 6.1 below shows the prioritised delivery of projects and programs over the 20-year planning period for **Scenario 2** estimated to be $1.95M per year. The first ten years to 2024 includes in excess of $19.5M worth of upgrade projects.

Fig 6.1: Scenario 2 - Projected Capital Upgrade/New Asset Expenditure
(Sustaining assets and services over the planning period whilst delivering priority upgrade and new projects)



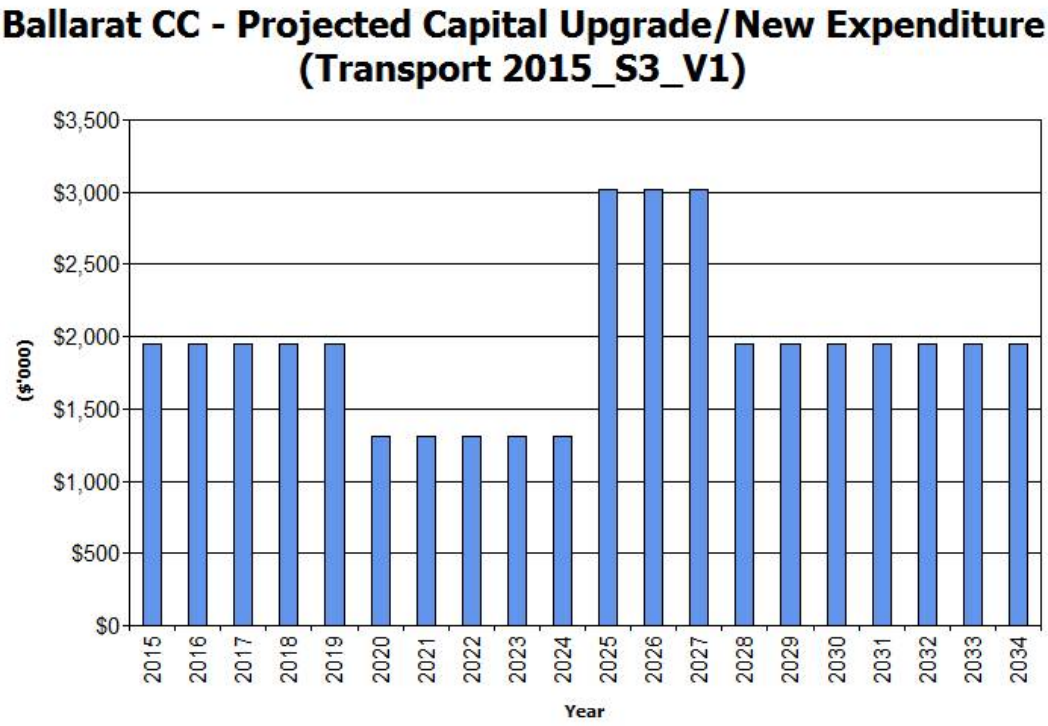
The $19.5M short to medium (10-year) priority upgrade/new projects include:

• LATM Traffic Management	$1,300,000
• New Bus Shelters	$800,000
• Bicycle Paths	$1,200,000
• Footpaths Construction	$3,115,000
• Footpath Disability Access	$650,000
• Major New Capital Road Projects	$6,070,000
• Federal Blackspot projects	$6,390,000
Total	**$19,525,000**

The projected capital upgrade/new program accommodated in the 10 year Long-Term Financial Plan is estimated at $16.33M, identifying a $3.2M shortfall. This is based on historical funding allocations to capital upgrade/new works and acknowledges the shortfall of $640,000 typically received from the Federal Blackspot program which is not guaranteed from 2019.

Scenario 3 is shown in Figure 6.2 below with project estimates listed in Appendix B.

Fig 6.2: Scenario 3 - Projected Capital Upgrade/New Asset Expenditure (Balanced with the LTFP)



The chart above shows the $16.33M projected for road upgrade/new projects over the first 10 years according the LTFP. The deferral of the $3.2M worth of Federal Blackspot projects is represented in the years 2025 – 2027.

Expenditure on new assets and services in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6, together with estimated annual savings from not having to fund operations and maintenance of the assets. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any. Any revenue gained from asset disposals is accommodated in Council's long term financial plan.

Where cash flow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

Table 5.6: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Expenditure	Operations & Maintenance Annual Savings
No assets have been identified for disposal in this AM Plan.				

5.7 Service Consequences and Risks

The organisation has prioritised decisions made in adopting this AM Plan to obtain the optimum benefits from its available resources. Decisions were made based on the development of 3 scenarios of AM Plans.

Scenario 1 - What we would like to do based on asset register data

Scenario 2 – What we should do with existing budgets and identifying level of service and risk consequences (i.e. what are the operations and maintenance and capital projects we are unable to do, what is the service and risk consequences associated with this position). This may require several versions of the AM Plan.

Scenario 3 – What we can do and be financially sustainable with AM Plans matching long-term financial plans.

The development of scenario 1 and scenario 2 AM Plans provides the tools for discussion with the Council and community on trade-offs between what we would like to do (scenario 1) and what we should be doing with existing budgets (scenario 2) by balancing changes in services and service levels with affordability and acceptance of the service and risk consequences of the trade-off position (scenario 3).

5.7.1 What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- An estimated $14M funding shortfall in priority renewals over the next 10 years, and
- An estimated $3.2M funding shortfall in priority upgrade and new projects over the next 10 years.
- Anticipated gradual reduction in maintenance grading and road resealing frequency for some roads.

5.7.2 Service consequences

Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. These include:

- Increased number of potholes and corrugations on unsealed roads.
- Longer response time to service requests.

5.7.3 Risk consequences

The operations and maintenance activities and capital projects that cannot be undertaken may maintain or create risk consequences for the organisation. These include:

- Increased maintenance and servicing costs.
- Accelerated ageing and general deterioration of assets.

These risks have been included with the Infrastructure Risk Management Plan summarised in Section 5.2 and risk management plans actions and expenditures included within projected expenditures.

6. FINANCIAL SUMMARY

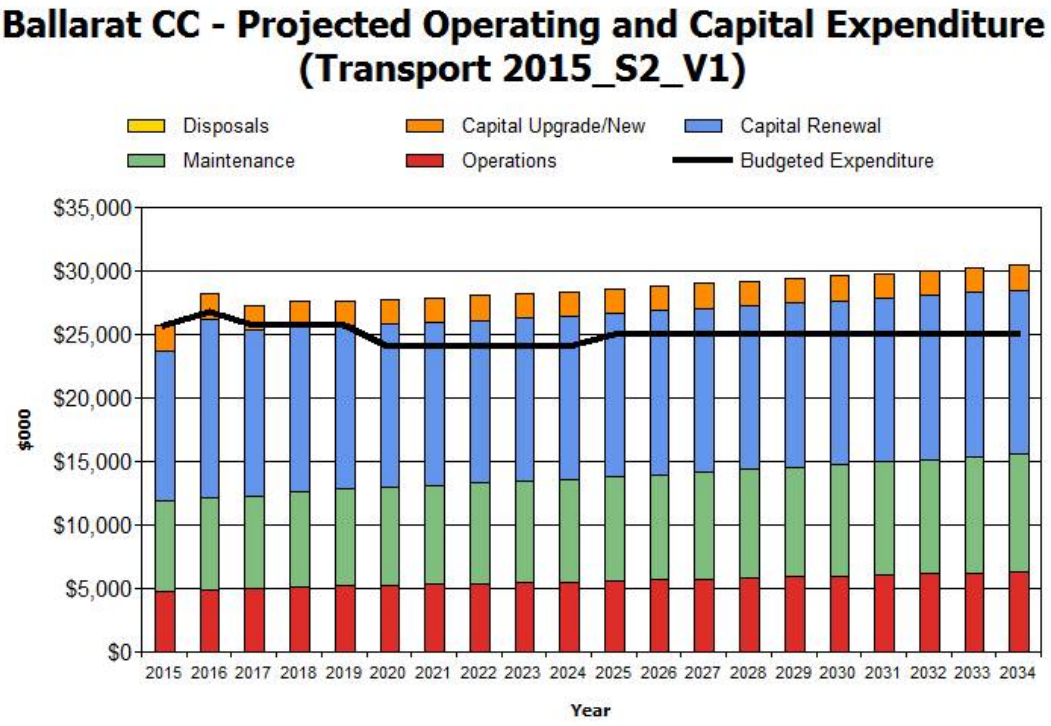
This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

Projections are based on best available information and are aimed at providing a likely forecast for the future and indicate priority asset and financial management and planning tasks. Confidence levels around the reliability and accuracy of the data used to prepare the financial projections exist, however, it is important that the projections be based on best available information and improved over time as information becomes available on current and desired levels of service and current and projected future asset performance.

6.1 Financial Statements and Projections

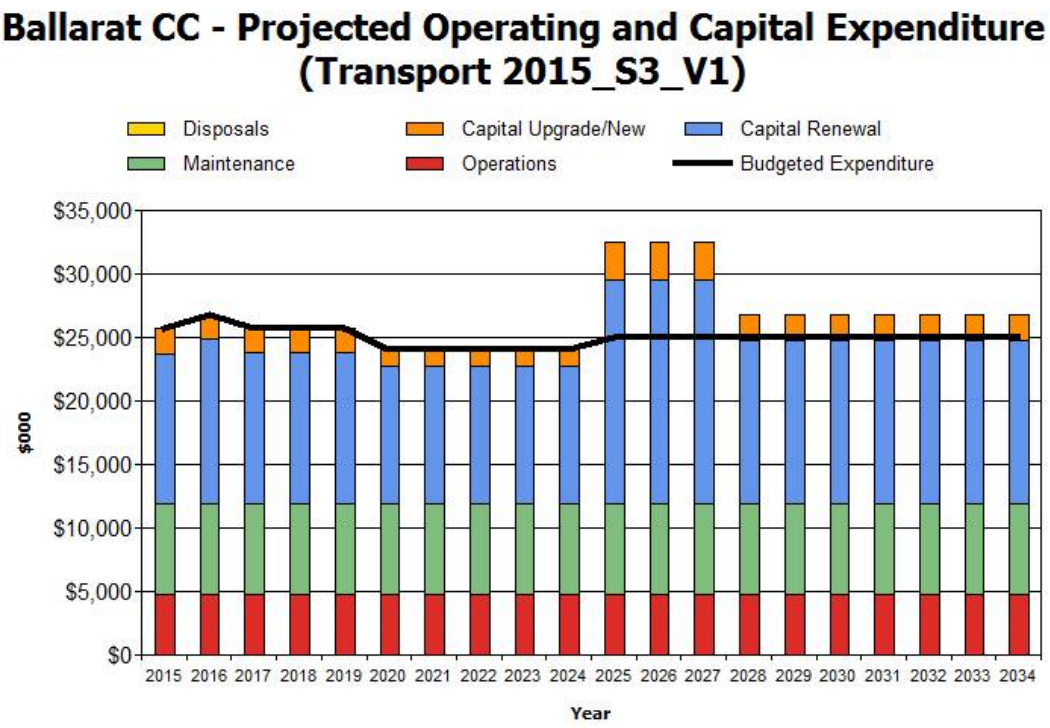
The combined 20 year financial projections for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets) for Scenario 2 & 3 are shown below. All amounts are shown in real values (i.e. 2014/15 dollars and net of inflation).

Fig 7.1: Scenario 2 - Projected Operating and Capital Expenditure
(Sustaining assets and services over the planning period at current levels)



Scenario 2 requirements are based on an amount sustaining existing assets over the long term at current service levels. This level of funding estimated at $276M over the next 10 years is not currently being achieved in the Long Term Financial Plan (current projections suggest $250M is allocated). This means the deferral of $26M priority operational, replacement and upgrade/new works and activities past the 10 year LTFP timeframe which is represented in Figure 7.2 below.

Fig 7.2: Scenario 3 - Projected Operating and Capital Expenditure (Balanced with the LTFP)



The mix of operational and capital activities and projects in the $26M deferral past the first 10 years of the plan is a question for the Executive and Council to determine. Clearly there will be implications and the service and risk consequences of this should form the basis of reviewing priorities in subsequent updates of the asset management program as part of the ongoing improvement plan.

6.1.1 Sustainability of service delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the asset renewal funding ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period.

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[13] 90%

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 90% of the funds required for the renewal and replacement of its assets to sustain current services.

Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense). The life cycle cost for the services covered in this asset management plan is 27.6M per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

[13] AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is $23.4M per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is $4.2M per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 85% of life cycle costs.

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the life cycle expenditure is less than that life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist council in providing services to their communities in a financially sustainable manner. This is the purpose of asset management plans and long term financial plan.

Medium term – 10 year financial planning period

This asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. In a core asset management plan, a gap is generally due to increasing asset renewals for ageing assets.

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is $25.7M on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $23.4M on average per year giving a 10 year funding shortfall of $2.3M per year. This indicates that Council expects to have 91% of the projected expenditures needed to provide the services documented in the asset management plan.

Medium Term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is $25.3M on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $24M on average per year giving a 5 year funding shortfall of $1.3M. This indicates that Council expects to have 95% of projected expenditures required to provide the services shown in this asset management plan.

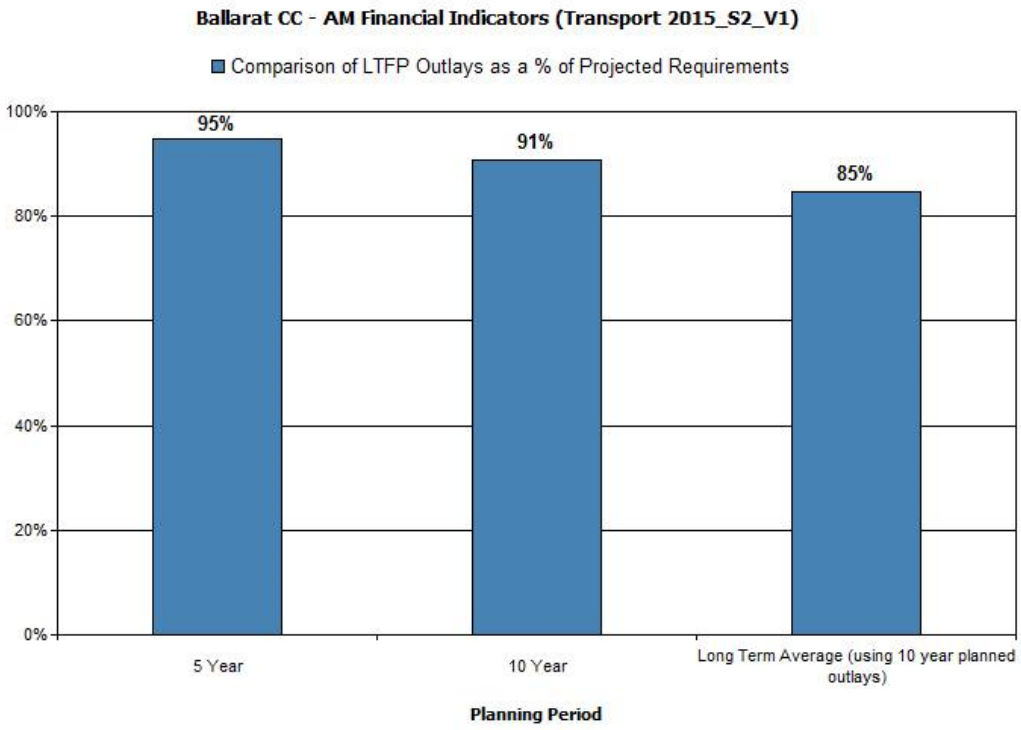
Asset management financial indicators

Figure 7A shows the long term life cycle costs/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period expressed as a percentage.

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 100% for the first few years of the asset management plan and ideally over the 10 year life of the Long Term Financial Plan. Anything less than this in the 5-10 year period would suggest funding levels below that required to sustain existing service levels.

The following chart summarises the ratios for Scenario 2 - Sustaining assets and services at current levels over the planning period.

Figure 7A: Asset Management Financial Indicators



The chart illustrates that funding remains below what is required to sustain existing service levels for the short to medium term (5 to 10 years). It shows council have 95% of the funds required to operate, maintain and replace assets in the next 5 years, 91% for the next 10 years and 85% over the assets life cycle.

For the 5 year planning period, the projected and planned expenditures should be almost the same to demonstrate sustainability, the gap should be close to zero and the sustainability indicator should be nearing 1.0 or 100% as this is the period most under the control of Council.

At 95% this is not cause for immediate concern and improvements in data quality plus a review of services and service levels and financing options will lead to a more sustainable position over time.

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the AM Plan. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan

Figure 8: Projected and LTFP Budgeted Renewal Expenditure

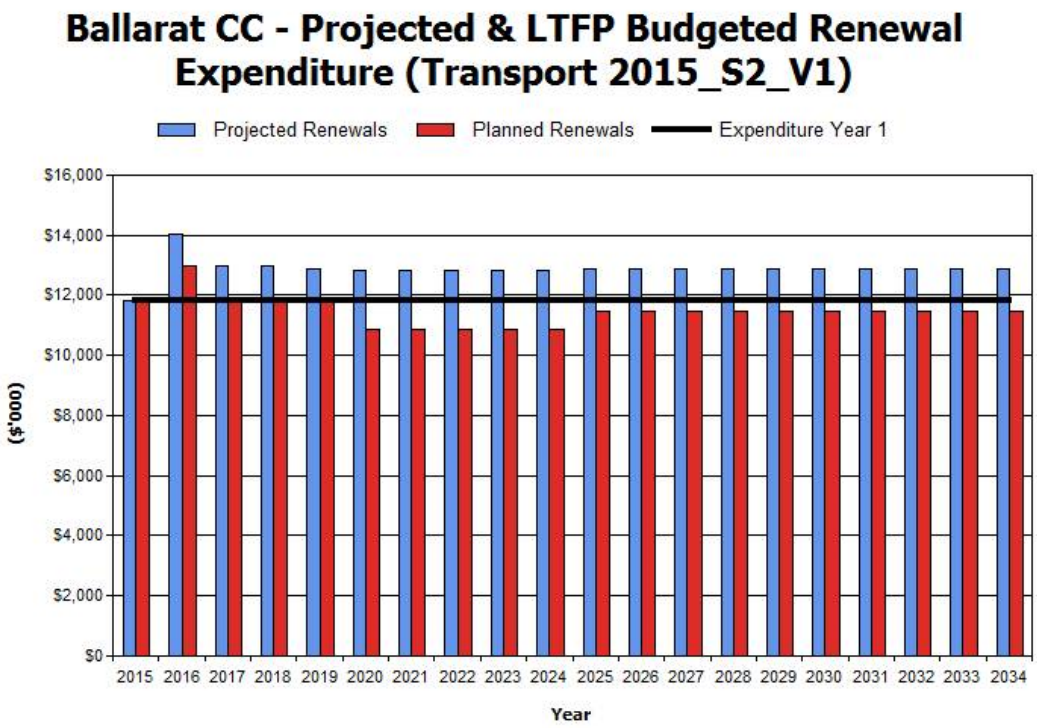


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix C.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year	Projected Renewals ($000)	LTFP Renewal Budget ($000)	Renewal Financing Shortfall ($000) (-ve Gap, +ve Surplus)	Cumulative Shortfall ($000) (-ve Gap, +ve Surplus)
2015	$11,829	$11,829	$0	$0
2016	$14,055	$12,960	-$1,095	-$1,095
2017	$13,005	$11,910	-$1,095	-$2,190
2018	$13,005	$11,910	-$1,095	-$3,285
2019	$12,905	$11,910	-$995	-$4,281
2020	$12,825	$10,860	-$1,965	-$6,246
2021	$12,825	$10,860	-$1,965	-$8,211
2022	$12,825	$10,860	-$1,965	-$10,177
2023	$12,825	$10,860	-$1,965	-$12,142
2024	$12,825	$10,860	-$1,965	-$14,107
2025	$12,892	$11,482	-$1,411	-$15,518
2026	$12,892	$11,482	-$1,411	-$16,929
2027	$12,892	$11,482	-$1,411	-$18,339
2028	$12,892	$11,482	-$1,411	-$19,750
2029	$12,892	$11,482	-$1,411	-$21,161
2030	$12,892	$11,482	-$1,411	-$22,572
2031	$12,892	$11,482	-$1,411	-$23,982
2032	$12,892	$11,482	-$1,411	-$25,393

Year	Projected Renewals ($000)	LTFP Renewal Budget ($000)	Renewal Financing Shortfall ($000) (-ve Gap, +ve Surplus)	Cumulative Shortfall ($000) (-ve Gap, +ve Surplus)
2033	$12,892	$11,482	-$1,411	-$26,804
2034	$12,892	$11,482	-$1,411	-$28,214

Note: A negative shortfall indicates a financing gap, a positive shortfall indicates a surplus for that year.

Providing services in a sustainable manner will require matching of projected asset renewal and replacement expenditure to meet agreed service levels with **the corresponding** capital works program accommodated in the long term financial plan.

A gap between **projected asset renewal/replacement expenditure and amounts accommodated in the LTFP** indicates that **further work is required on reviewing service levels in the AM Plan (including possibly revising the LTFP)** before finalising the asset management plan to manage required service levels and funding **to eliminate any funding gap**.

We will manage the 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and review future services, service levels and costs with the community.

6.1.2 Projected expenditures for long term financial plan

Table 6.1.2.1 & 6.1.2.2 shows the projected expenditures for the 10 year long term financial plan for Scenario 2 & 3.

Expenditure projections are in2014/15 real values.

Table 6.1.2.1: Scenario 2- Projected Expenditures for Long Term Financial Plan ($000)

Year	Operations ($000)	Maintenance ($000)	Projected Capital Renewal ($000)	Capital Upgrade/ New ($000)	Disposals ($000)
2015	$4,820.86	$7,072.37	$11,829.00	$1,952.48	$0.00
2016	$4,929.15	$7,231.24	$14,055.00	$1,952.48	$0.00
2017	$4,991.40	$7,322.56	$13,005.00	$1,952.48	$0.00
2018	$5,126.69	$7,521.03	$13,005.00	$1,952.48	$0.00
2019	$5,190.06	$7,613.99	$12,905.00	$1,952.48	$0.00
2020	$5,253.99	$7,707.79	$12,825.00	$1,952.48	$0.00
2021	$5,318.51	$7,802.43	$12,825.00	$1,952.48	$0.00
2022	$5,383.60	$7,897.93	$12,825.00	$1,952.48	$0.00
2023	$5,449.28	$7,994.29	$12,825.00	$1,952.48	$0.00
2024	$5,515.56	$8,091.52	$12,825.00	$1,952.48	$0.00

Table 6.1.2.2: Scenario 3- Projected Expenditures for Long Term Financial Plan ($000)

Year	Operations ($000)	Maintenance ($000)	Projected Capital Renewal ($000)	Capital Upgrade/ New ($000)	Disposals ($000)
2015	$4,820.86	$7,072.37	$11,829.39	$1,952.48	$0.00
2016	$4,820.86	$7,072.37	$12,959.71	$1,952.48	$0.00
2017	$4,820.86	$7,072.37	$11,909.71	$1,952.48	$0.00
2018	$4,820.86	$7,072.37	$11,909.71	$1,952.48	$0.00
2019	$4,820.86	$7,072.37	$11,909.71	$1,952.48	$0.00
2020	$4,820.86	$7,072.37	$10,859.71	$1,313.48	$0.00
2021	$4,820.86	$7,072.37	$10,859.71	$1,313.48	$0.00
2022	$4,820.86	$7,072.37	$10,859.71	$1,313.48	$0.00

Year	Operations ($000)	Maintenance ($000)	Projected Capital Renewal ($000)	Capital Upgrade/ New ($000)	Disposals ($000)
2023	$4,820.86	$7,072.37	$10,859.71	$1,313.48	$0.00
2024	$4,820.86	$7,072.37	$10,859.71	$1,313.48	$0.00

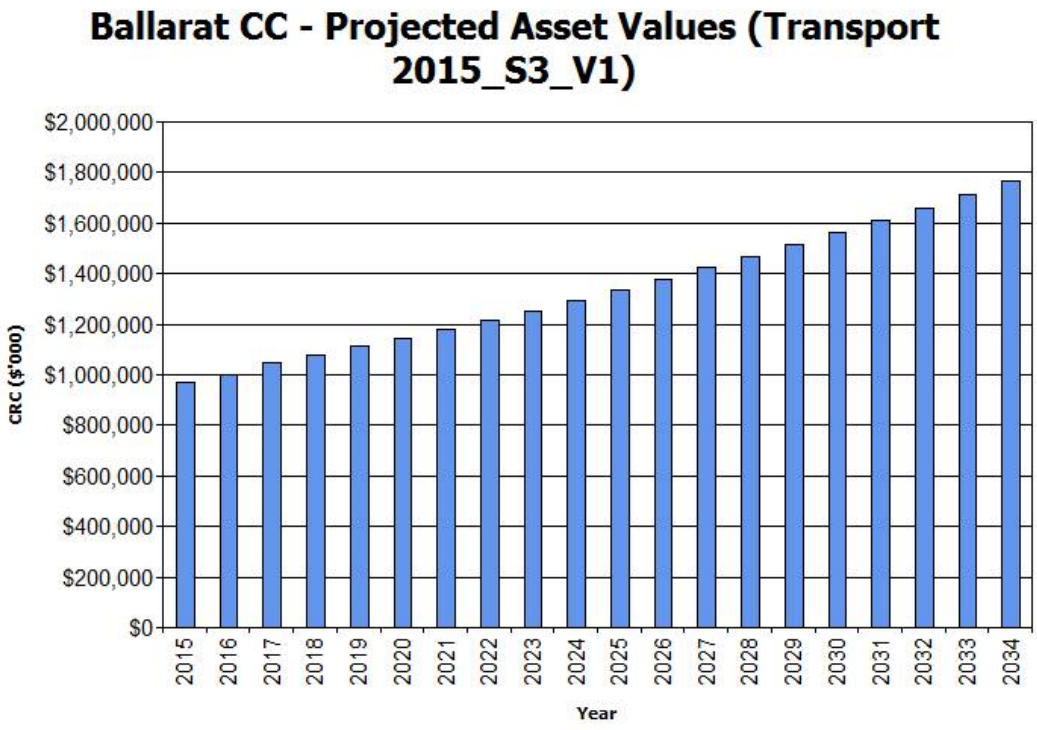
6.2 Funding Strategy

After reviewing service levels, as appropriate to ensure ongoing financial sustainability projected expenditures identified in Section 6.1.2 will be accommodated in the Council's 10 year long term financial plan.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Figure 9 shows the projected replacement cost asset values over the planning period in real values. Values are based on the 2014 Financial Statements.

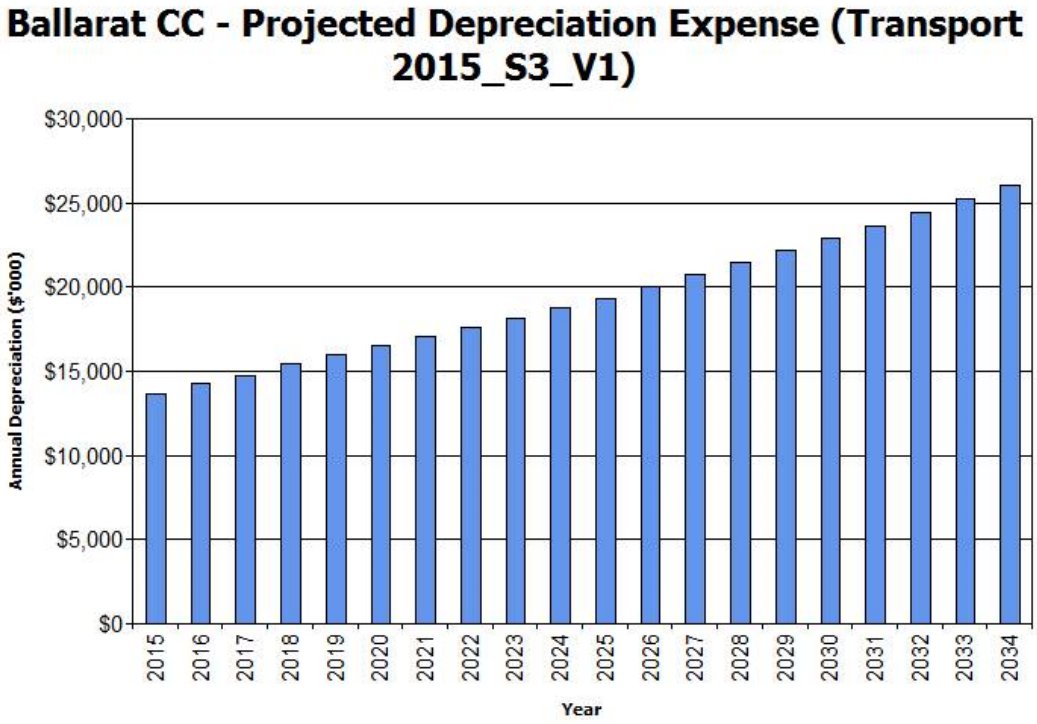
Figure 9: Projected Asset Values



The projected asset values are forecast to increase from the current value of $931M to $1.77bn by 2034.

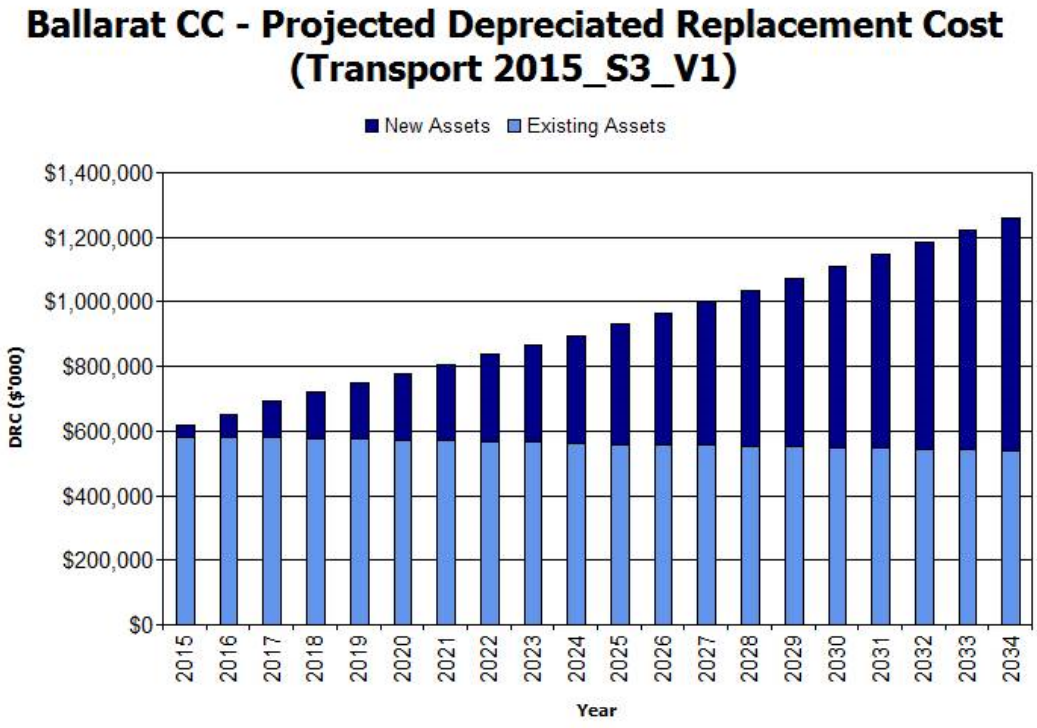
Depreciation expense values are forecast to increase in line with asset values as shown in Figure 10 from $13.7M in 2015 to $18.8M in 2034.

Figure 10: Projected Depreciation Expense



The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 11. The depreciated replacement cost of contributed and new assets is shown in the darker colour and in the lighter colour for existing assets.

Figure 11: Projected Depreciated Replacement Cost



From the data supplied, the current renewal rate of existing assets will need to be monitored and increased to sustain the increasing accumulated depreciation costs. This is demonstrated by the steadily declining depreciated replacement cost of existing assets as shown by the light coloured bars. A constant value for the DRC illustrates that Council is maintaining its infrastructure capital.

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in AM Plan and Risks of Change

Key Assumptions	Risks of Change to Assumptions
The assets will remain in the organisations ownership and control throughout the planning period.	Low
Planned and reactive maintenance is to take place in accordance with relevant guidelines/standards.	Low
All expenditure stated is in 2014/15 dollar values.	Low
Financial projections are based on historical expenditure and revenue trends and assume there will no significant change.	Medium
Regulations/standards relating to operations will remain the same over the planning period.	Medium

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale[14] in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy ± 40%
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.1.

[14] IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Table 6.5.1: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	B Reliable	Based on local corporate knowledge and State government projections.
Growth projections	B Reliable	Estimated, however further substantiation required for next revision of the AM Plan
Operations expenditures	A Highly reliable	Direct from 2014/15 budget, expenses split into operations and maintenance.
Maintenance expenditures	A Highly reliable	Direct from 2014/15 budget, expenses split into operations and maintenance
Projected Renewal exps. - Asset values	A Highly reliable	Sourced from Confirm database and 2014/15 audited financial statements.
- Asset residual values	A Highly reliable	Sourced from Confirm database and 2014/15 audited financial statements.
- Asset useful lives	B Reliable	Based on last revaluation.
- Network renewals	B Reliable	Based on asset register as at 30 June 2014 and network level modelling from expert judgement.
Upgrade/New expenditures	B Reliable	Projected proposals based on current program allocations
Disposal expenditures	B Reliable	No disposals proposed.

Over all data sources the data confidence is assessed as medium to high confidence level for data used in the preparation of this AM Plan.

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

"[Enter summary of accounting & financial systems]"

Accountabilities for financial systems

The Responsible Accounting Officer is the Chief Financial Officer.

Accounting standards and regulations

Financial statements are general purpose financial statements and are prepared in accordance with

- Australian Accounting Standards,
- Other authoritative pronouncements of the Australian Accounting Standards Board,
- Urgent Issues Group Interpretations,
- the Local Government Act (1989) and Regulation, and
- the Local Government Code of Accounting Practice and Financial Reporting.

Capital/maintenance threshold

Items of infrastructure, property, plant and equipment are not capitalised unless their cost of acquisition exceeds the following;

- Road construction & reconstruction > $5,000
- Reseal/Re-sheet & major repairs: > $5,000
- Bridge construction & reconstruction > $5,000

Required changes to accounting financial systems arising from this AM Plan

None identified

7.1.2 Asset management system

The following systems are used for asset management within the City of Ballarat:

Confirm – Asset management System

MapInfo – Mapping of assets

Asset registers

There is currently an interface between the Confirm Asset Management System and MapInfo.

Linkage from asset management to financial system

There is currently no direct link between the Financial Asset Register and the Asset Management System. A direct interface will be implemented as part of the Asset Management System improvement program.

Accountabilities for asset management system and data maintenance

The Coordinator for Asset Management is responsible for

- Data maintenance
- Developing targets and frequency for asset condition inspections
- Maintaining matching data within MapInfo
- Developing asset hierarchy within the Asset Management System including any changes or additions required to existing hierarchy
- Determining required system improvements
- Auditing data

Operations staff complete asset condition inspections and input data in accordance with established business protocols.

Required changes to asset management system arising from this AM Plan

- Completion of linkages to other systems

7.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	**Asset Register** Assess the Remaining Life of all assets on a priority basis and align with up to date performance data and knowledge.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
2	Review and update data for the year of acquisition or date of last renewal and replacement cost in the asset register for the years 1962, 1990 and 2005 as a priority.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
3	**Infrastructure Risk Management** Assess transport infrastructure risks and report to the audit committee.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
4	**Forward Projections** Ensure funding models reflect the resources required meeting the timely renewal of existing assets and those identified and implemented under the Strategic Plan.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
5	Develop and adopt a prioritisation framework for renewal and upgrade/new projects.			
6	Increase confidence and prioritise renewal and upgrade/new estimates based on risk.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
7	**Levels of Service** Develop and confirm current and desired community and technical levels of service to understand and report on a sustainable service delivery model.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
8	**AM Plan** Maintain an annual review of the plan incorporating an update of service level performance, financial projections and risk.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015
9	Implement a continuous improvement strategy to assess and report on the performance of JSC controlled assets.	Corporate (Technical & Financial)	Existing budget Staff time	Dec 2015

7.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The AM Plan will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the organisation's long term financial plan.

The AM Plan has a life of 4 years (Council election cycle) and is due for complete revision and updating within 1 year of each Council election.

7.4 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into Council's long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans,
- **The Asset Renewal Funding Ratio achieving the target of 1.0.**

8. REFERENCES

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9. APPENDICES

Appendix A Aspirational 10 year Capital Works Program (Scenario 2)

Appendix B Affordable 10 year Capital Works Program aligned to the LTFP (Scenario 3)

Appendix C Budgeted Expenditures Accommodated in the LTFP

Appendix D Abbreviations

Appendix E Glossary

Appendix A Aspirational 10 year Capital Works Program (Scenario 2 – Maintain existing service levels)

Scenario 2 - Capital Works Forecast (i.e. what we would like to do to sustain current service levels - x% in poor/very poor condition)

Categor	Capex Program	Project/Sub-Program	Work Type	2014/15 Year 1 $000	2015/16 Year 2 $000	2016/17 Year 3 $000	2017/18 Year 4 $000	2018/19 Year 5 $000	2019/20 Year 6 $000	2020/21 Year 7 $000	2021/22 Year 8 $000	2022/23 Year 9 $000	2023/24 Year 10 $000	
Transport	Capital Road Program	Bridge Rehabilitation	Renewal	$210	$500	$500	$500	$430	$430	$430	$430	$430	$430	**$4,290**
Transport	Capital Road Program	Bus Shelter Replacement	Renewal	$80	$80	$80	$80	$80	$80	$80	$80	$80	$80	**$800**
Transport	Capital Road Program	Kerb & Channel Renewal	Renewal	$230	$450	$450	$450	$450	$450	$450	$450	$450	$450	**$4,280**
Transport	Capital Road Program	Major Patching	Renewal	$425	$440	$440	$440	$425	$425	$425	$425	$425	$425	**$4,295**
Transport	Capital Road Program	New Guardrail	Renewal	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	**$550**
Transport	Capital Road Program	New Signage	Renewal	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	**$550**
Transport	Capital Road Program	Reseals/Asphalting	Renewal	$1,155	$1,400	$1,400	$1,400	$1,400	$1,400	$1,400	$1,400	$1,400	$1,400	**$13,755**
Transport	Capital Road Program	Roundabout Rehabilitation	Renewal	$115	$115	$115	$115	$115	$115	$115	$115	$115	$115	**$1,150**
Transport	Capital Road Program	Bicycle Paths	Upgrade/New	$120	$120	$120	$120	$120	$120	$120	$120	$120	$120	**$1,200**
Transport	Capital Road Program	Footpath Disability Access	Upgrade/New	$65	$65	$65	$65	$65	$65	$65	$65	$65	$65	**$650**
Transport	Capital Road Program	Footpaths Construction	Upgrade/New	$311	$311	$311	$311	$311	$311	$311	$311	$311	$311	**$3,115**
Transport	Capital Road Program	LATM Traffic Management	Upgrade/New	$130	$130	$130	$130	$130	$130	$130	$130	$130	$130	**$1,300**
Transport	Capital Road Program	New Bus Shelters	Upgrade/New	$80	$80	$80	$80	$80	$80	$80	$80	$80	$80	**$800**
Transport	Federal Blackspot Proj	Federal Blackspot projects	Upgrade/New	$639	$639	$639	$639	$639	$639	$639	$639	$639	$639	**$6,390**
Transport	Major New Capital Ro	Major New Capital Road Proje	Upgrade/New	$607	$607	$607	$607	$607	$607	$607	$607	$607	$607	**$6,070**
Transport	Major Renewal Road P	Major Road Renewal Projects	Renewal	$7,348	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	**$70,348**
Transport	Roads to Recovery	Roads to Recovery	Renewal	$970	$2,100	$1,050	$1,050	$1,050	$970	$970	$970	$970	$970	**$11,068**
Transport	Rural Road Program	Gravel Road Resheets	Renewal	$676	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	**$9,676**
Transport	Rural Road Program	Major Patching	Renewal	$145	$160	$160	$160	$145	$145	$145	$145	$145	$145	**$1,495**
Transport	Rural Road Program	Rural reseals/asphalting	Renewal	$366	$700	$700	$700	$700	$700	$700	$700	$700	$700	**$6,666**
				$13,782	**$16,007**	**$14,957**	**$14,957**	**$14,857**	**$14,777**	**$14,777**	**$14,777**	**$14,777**	**$14,777**	**$148,448**

Appendix B Affordable 10 year Capital Works Program aligned to the LTFP (Scenario 3)

	Scenario 3 - Capital Works Forecast (i.e. what is funded in the Long-term Financial Plan)													
				2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Category	Capex Program	Project/Sub-Program	Work Type	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	
Transport	Capital Road Program	Reseals/Asphalting	Renewal	$1,155	$1,155	$1,155	$1,155	$1,155	$1,155	$1,155	$1,155	$1,155	$1,155	**$11,550**
Transport	Capital Road Program	LATM Traffic Management	Upgrade/New	$130	$130	$130	$130	$130	$130	$130	$130	$130	$130	**$1,300**
Transport	Capital Road Program	Bridge Rehabilitation	Renewal	$210	$210	$210	$210	$210	$210	$210	$210	$210	$210	**$2,100**
Transport	Capital Road Program	Major Patching	Renewal	$425	$425	$425	$425	$425	$425	$425	$425	$425	$425	**$4,250**
Transport	Capital Road Program	New Signage	Renewal	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	**$550**
Transport	Capital Road Program	New Guardrail	Renewal	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	**$550**
Transport	Capital Road Program	New Bus Shelters	Upgrade/New	$80	$80	$80	$80	$80	$80	$80	$80	$80	$80	**$800**
Transport	Capital Road Program	Bus Shelter Replacement	Renewal	$80	$80	$80	$80	$80	$80	$80	$80	$80	$80	**$800**
Transport	Capital Road Program	Bicycle Paths	Upgrade/New	$120	$120	$120	$120	$120	$120	$120	$120	$120	$120	**$1,200**
Transport	Capital Road Program	Footpaths Construction	Upgrade/New	$311	$311	$311	$311	$311	$311	$311	$311	$311	$311	**$3,115**
Transport	Capital Road Program	Footpath Disability Access	Upgrade/New	$65	$65	$65	$65	$65	$65	$65	$65	$65	$65	**$650**
Transport	Capital Road Program	Kerb & Channel Renewal	Renewal	$230	$230	$230	$230	$230	$230	$230	$230	$230	$230	**$2,300**
Transport	Capital Road Program	Roundabout Rehabilitation	Renewal	$115	$115	$115	$115	$115	$115	$115	$115	$115	$115	**$1,150**
Transport	Rural Road Program	Gravel Road Resheets	Renewal	$676	$676	$676	$676	$676	$676	$676	$676	$676	$676	**$6,760**
Transport	Rural Road Program	Major Patching	Renewal	$145	$145	$145	$145	$145	$145	$145	$145	$145	$145	**$1,450**
Transport	Rural Road Program	Rural reseals/asphalting	Renewal	$366	$366	$366	$366	$366	$366	$366	$366	$366	$366	**$3,661**
Transport	Major Renewal Road P	Major Renewal Road Projects	Renewal	$7,348	$7,348	$7,348	$7,348	$7,348	$7,348	$7,348	$7,348	$7,348	$7,348	**$73,476**
Transport	Major New Capital Roa	Major New Capital Road Projec	Upgrade/New	$607	$607	$607	$607	$607	$607	$607	$607	$607	$607	**$6,070**
Transport	Roads to Recovery	Roads to Recovery	Renewal	$970	$2,100	$1,050	$1,050	$1,050	$0	$0	$0	$0	$0	**$6,220**
Transport	Federal Blackspot Proje	Federal Blackspot projects	Upgrade/New	$639	$639	$639	$639	$639	$0	$0	$0	$0	$0	**$3,195**
				$13,782	**$14,912**	**$13,862**	**$13,862**	**$13,862**	**$12,173**	**$12,173**	**$12,173**	**$12,173**	**$12,173**	**$131,147**

Appendix C Budgeted Expenditures Accommodated in the LTFP

NAMS.PLUS3 Asset Management **Ballarat CC**

Transport 2015_S2_V1 Asset Management Plan

First year of expenditure projections **2015** (financial yr ending)

Transport 2015

Asset values at start of planning period

			Calc CRC from Asset Register
Current replacement cost	$931,066	(000)	$0 (000)
Depreciable amount	$861,206	(000)	This is a check for you.
Depreciated replacement cost	$583,190	(000)	
Annual depreciation expense	$13,650	(000)	

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	0.52%
Additional maintenance	0.76%
Additional depreciation	1.58%
Planned renewal budget (information only)	

You may use these values calculated from your data or overwrite the links.

Planned Expenditures from LTFP

20 Year Expenditure Projections Note: Enter all values in current **2015** values

Financial year ending	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure Outlays included in Long Term Financial Plan (in current $ values)										
Operations										
Operations **budget**	$4,024	$4,024	$4,024	$4,024	$4,024	$4,024	$4,024	$4,024	$4,024	$4,024
Management **budget**	$195	$195	$195	$195	$195	$195	$195	$195	$195	$195
AM systems **budget**	$602	$602	$602	$602	$602	$602	$602	$602	$602	$602
Total operations	$4,821	$4,821	$4,821	$4,821	$4,821	$4,821	$4,821	$4,821	$4,821	$4,821
Maintenance										
Reactive maintenance **budget**	$7,072	$7,072	$7,072	$7,072	$7,072	$7,072	$7,072	$7,072	$7,072	$7,072
Planned maintenance **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Specific maintenance items **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total maintenance	$7,072	$7,072	$7,072	$7,072	$7,072	$7,072	$7,072	$7,072	$7,072	$7,072
Capital										
Planned renewal **budget**	$11,829	$12,960	$11,910	$11,910	$11,910	$10,860	$10,860	$10,860	$10,860	$10,860
Planned upgrade/new **budget**	$1,952	$1,952	$1,952	$1,952	$1,952	$1,313	$1,313	$1,313	$1,313	$1,313
Non-growth contributed asset value	$9,000	$0	$14,000	$0	$0	$0	$0	$0	$0	$0
Asset Disposals										
Est Cost to dispose of assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Carrying value (DRC) of disposed assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan)

Additional Expenditure Outlays required and not included above	2015 $000	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Capital Renewal to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used)

Capital Upgrade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
User Comments #2										

Forecasts for Capital Renewal using Methods 2 & 3 (Form 2A & 2B) & Capital Upgrade (Form 2C)

	2015 $000	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000
Forecast Capital Renewal from Forms 2A & 2B	$11,829	$14,055	$13,005	$13,005	$12,905	$12,825	$12,825	$12,825	$12,825	$12,825
Forecast Capital Upgrade from Form 2C	$1,952	$1,952	$1,952	$1,952	$1,952	$1,952	$1,952	$1,952	$1,952	$1,952

Appendix D Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ASC	Annual service cost
CRC	Current replacement cost
DA	Depreciable amount
DRC	Depreciated replacement cost
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
LTFP	Long term financial plan
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SoA	State of the Assets
WDCRC	Written down current replacement cost

Appendix E Glossary

Annual service cost (ASC)

1) Reporting actual cost
   The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.
2) For investment analysis and budgeting
   An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset category

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset hierarchy

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

Asset management (AM)

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Asset renewal funding ratio

The ratio of the net present value of asset renewal funding accommodated over a 10 year period in a long term financial plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMG Financial Sustainability Indicator No 8].

Average annual asset consumption (AAAC)*

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

Borrowings

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided**.**

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the organisation's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure - new
Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operations and maintenance expenditure.

Capital expenditure - renewal
Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

Capital expenditure - upgrade
Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operations and maintenance expenditure in the future because of the increase in the organisation's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility.

Capital funding
Funding to pay for capital expenditure.

Capital grants
Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure
See capital expenditure definition

Capitalisation threshold
The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

Carrying amount
The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets
See asset class definition

Component
Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

Core asset management
Asset management which relies primarily on the use of an asset register, maintenance management systems, job resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cashflow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decision- making).

Cost of an asset
The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, including any costs necessary to place the asset into service. This includes one-off design and project management costs.

Critical assets
Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.

Current replacement cost (CRC)
The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Deferred maintenance
The shortfall in rehabilitation work undertaken relative to that required to maintain the service potential of an asset.

Depreciable amount
The cost of an asset, or other amount substituted for its cost, less its residual value.

Depreciated replacement cost (DRC)
The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset.

Depreciation / amortisation
The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life
See useful life definition.

Expenditure
The spending of money on goods and services. Expenditure includes recurrent and capital outlays.

Expenses
Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or increases in liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

Fair value
The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Financing gap
A financing gap exists whenever an entity has insufficient capacity to finance asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current financing gap means service levels have already or are currently falling. A projected financing gap if not addressed will result in a future diminution of existing service levels**.**

Heritage asset
An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss
The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets
Physical assets that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no separate market value.

Investment property
Property held to earn rentals or for capital appreciation or both, rather than for:
(a) use in the production or supply of goods or services or for administrative purposes; or
(b) sale in the ordinary course of business.

Key performance indicator
A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

Level of service
The defined service quality for a particular service/activity against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental impact, acceptability and cost.

Life Cycle Cost *
1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure
The Life Cycle Expenditure (LCE) is the average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

Loans / borrowings
See borrowings.

Maintenance
All actions necessary for retaining an asset as near as practicable to an appropriate service condition, including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

- **Planned maintenance**
  Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.
- **Reactive maintenance**
  Unplanned repair work that is carried out in response to service requests and management/ supervisory directions.
- **Specific maintenance**
  Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.
- **Unplanned maintenance**
  Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance expenditure *
Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality
The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset
Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

Net present value (NPV)
The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from eg the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

Non-revenue generating investments
Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operations
Regular activities to provide services such as public health, safety and amenity, eg street sweeping, grass mowing and street lighting.

Operating expenditure
Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, eg power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

Operating expense
The gross outflow of economic benefits, being cash and non cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

Operating expenses
Recurrent expenses continuously required to provide a service, including power, fuel, staff, plant equipment, maintenance, depreciation, on-costs and overheads.

Operations, maintenance and renewal financing ratio
Ratio of estimated budget to projected expenditure for operations, maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Operations, maintenance and renewal gap
Difference between budgeted expenditures in a long term financial plan (or estimated future budgets in absence of a long term financial plan) and projected expenditures for operations, maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

Pavement management system (PMS)
A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

PMS Score
A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption *
The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

Rate of annual asset renewal *
The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade/new *
A measure of the rate at which assets are being upgraded and expanded per annum with capital upgrade/new expenditure expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Recoverable amount
The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure
Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operations and maintenance expenditure.

Recurrent funding
Funding to pay for recurrent expenditure.

Rehabilitation
See capital renewal expenditure definition above.

Remaining useful life
The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining useful life is useful life.

Renewal
See capital renewal expenditure definition above.

Residual value
The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

Revenue generating investments
Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management
The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment
A self-contained part or piece of an infrastructure asset.

Service potential
The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit sector/public sector to value assets, particularly those not producing a cash flow.

Service potential remaining
A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (Depreciated Replacement Cost/Depreciable Amount).

Specific Maintenance
Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Strategic Longer-Term Plan
A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the Council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

Sub-component
Smaller individual parts that make up a component part.

Useful life
Either:
(a) the period over which an asset is expected to be available for use by an entity, or
(b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council.

Value in Use
The present value of future cash flows expected to be derived from an asset or cash generating unit. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown *