ATTACHMENT 1

SHIRE OF DUMBLEYUNG
FOOTPATH STRATEGY

Operations Management Manual

for Footpaths

TERMS ACRONYMS AND DEFINITIONS

The following outlines the terms used in this manual and provides a definition for each.

Term	Definition
Accumulated Depreciation	The amount of depreciation over the time since the asset was created.
Actual Construction Date	The date when an asset was known to be created / acquired.
Current Replacement Cost (CRC)	The cost the Shire would incur to replace an asset at the end of the reporting period.
Depreciated Replacement Cost (DRC)	The Current Replacement Cost of an asset less Accumulated Depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset. This is equal to the “Fair Value” of a non-current infrastructure asset.
Depreciation	The systematic allocation of the depreciable amount of an asset over its useful life or, where applicable the period until the intervention level has been reached.
Estimated Construction Date	When the actual construction date isn’t known it is estimated by adding the Remaining Life to the assessment year and subtracting the Useful Life.
Intervention Life	The point at which the Shire would seek to intervene and repair, renew or replace the asset to be fit for purpose.
IPRF	Integrated Planning and Reporting Framework
LGA	Local Government Area
Remaining Life	The period from the year of assessment to when the Useful Life is expected to expire.
R2R	Roads to Recovery
Renewals	The replacement of existing assets with equivalent capacity or performance as opposed to the acquisition of new assets.
Routine Maintenance	Activities that seek to repair minor defects in the footpath.
SAM	Strategic Asset Management.
Useful Life	The period over which an asset is expected to be available for use.

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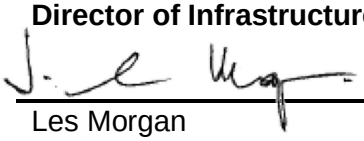

Les Morgan 11 / 03 / 2025

Chief Executive Officer **Date**

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Gavin Treasure

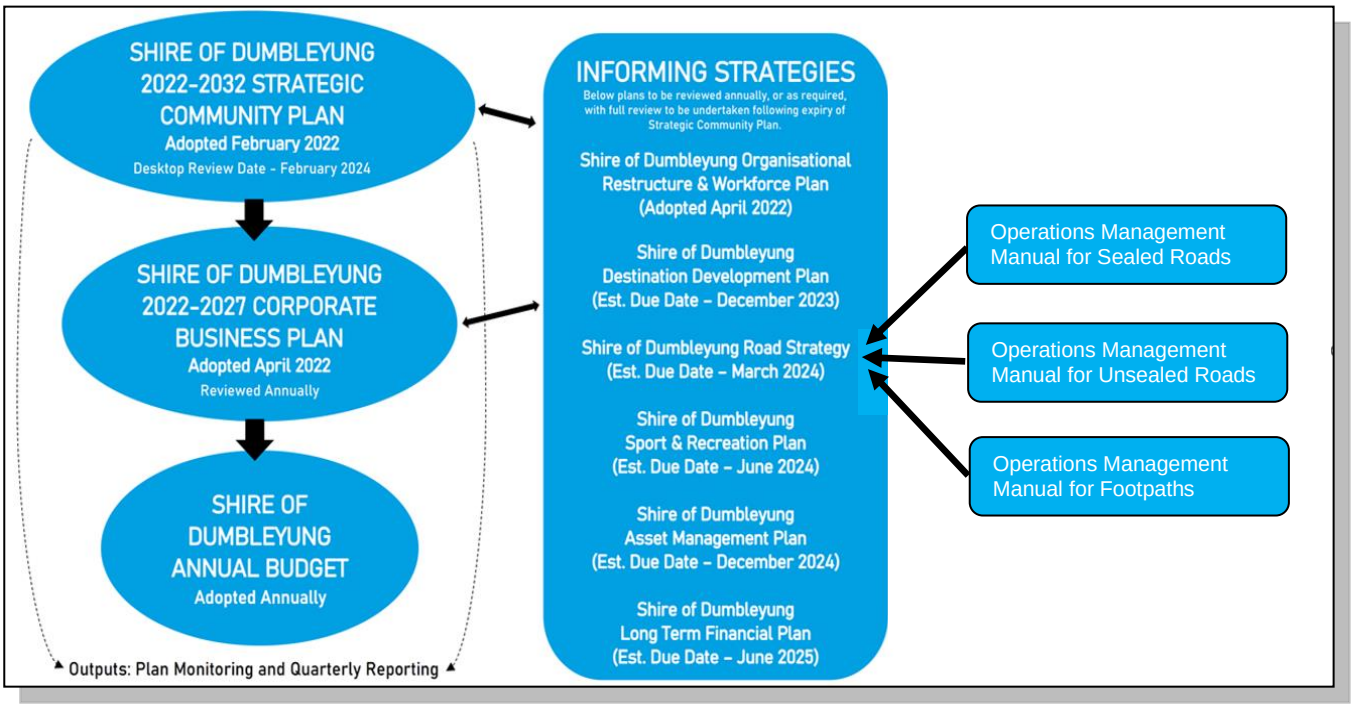
1.0 INTRODUCTION

It is the Shire of Dumbleyung's challenge to maintain the footpath network within its Local Government Area in a manner that is acceptable to the community and sustainable in the long term.

To address this, the Shire has undertaken strategic asset management modelling of its footpath network to develop a strategy that provides the minimum levels of service needed to maintain the current condition of the footpath network in the short, medium and long term and compare this to the long term trend of its current levels of service, condition and associated costs.

Using this modelling as a guide, the Shire is in the process of developing and implementing documents to govern how it manages its footpath network and the resources needed to sustainably provide this network for both present and future generations. These documents also inform the Shire's "Integrated Planning and Reporting" suite of documents.

The relationship between each of these documents is shown in the figure below. This document is focused on footpaths within the Shire and provides the methodology of how these integrated processes are carried out and the development of works programs and their implementation.



1.1 Objective

Through the use of Strategic Asset Management, this document seeks to show how the Shire of Dumbleyung will continue to deliver an acceptable footpath network on a short, medium and long term basis through addressing the following questions to ensure that adequate funds and resources are available to renew the footpaths before they start to fail.

Additionally to the above, this document also seeks to identify locations that new footpaths are waranted and to incorporate these footpaths into the strategic model to ensure that these new footpaths can also be sustainably provided.

1.2 Scope

This manual applies to all footpaths under the care and control of the Shire of Dumbleyung. This manual also applies to those activities that are focused on maintaining the footpath network in a fit for purpose condition and renewing footpaths in a manner that brings consistency in footpath type across the entire network.

2.0 THE STRATEGIC ASSET MANAGEMENT APPROACH

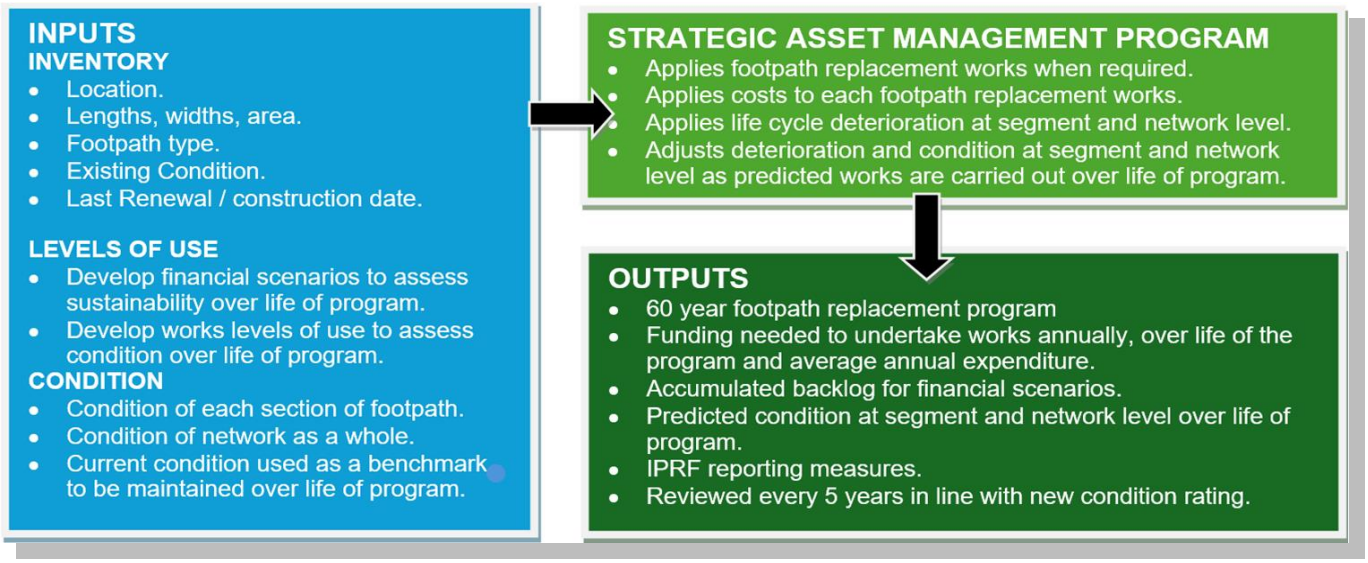
In general, strategic asset management is a top-down framework for long-term maintenance and renewal planning. It prioritises long-term asset investments while balancing capital and maintenance expenditure from a whole of life expenditure standpoint. It provides a holistic view of current asset needs and what is needed 5, 10, 20 or more years into the future.

2.1 The Modelling Program

A Strategic Asset Management modelling program has been implemented by the Shire of Dumbleyung for short, medium and long term planning of its footpath program. This program uses the life cycle of a footpath to automatically apply an annual deterioration component to each segment. When the segment is predicted to reach an unacceptable condition, the program then automatically applies renewal works and the cost of these works to the segment in the predicted year. The program then adjusts the condition of the footpath segment when these works are predicted to be done. Thus, providing a 60 year program of works for footpath renewals. The program also tracks condition annually at the segment and network level to give a prediction of the suitability of the segment and network annually and over the 60 years of the full program. In short, the program provides the information needed to make sound asset investment decisions that align with the Shire's aims.

2.2 Overview of the Process

The process of strategic asset modelling as applied to this document is depicted in the flow chart below.



3.0 FUNDING LEVELS

3.1 Current Funding Levels

In order to establish a benchmark to measure where the footpath network is currently headed, it is necessary to ascertain a current funding level. Accordingly, the following table outlines the 3 year average expenditure for footpath renewals.

Activity	Funding Source	21-22	22-23	23-24	3 Year Average
Footpath Renewal	FAG/SHIRE	$15,000	$7,000	$0	$7,333

Hence, in the Strategic Asset Management model a total of $7,333 was used for current funding levels.

4.0 TYPES OF FOOTPATHS

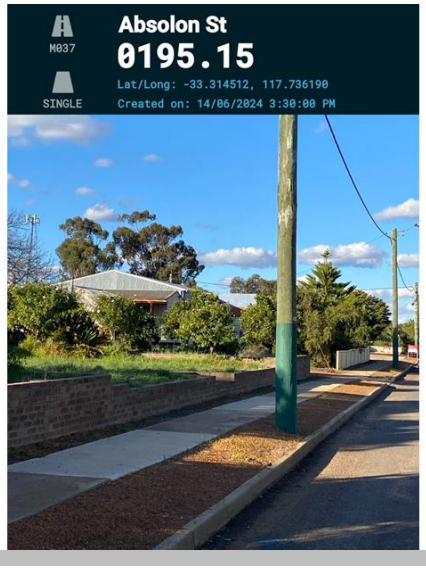
Currently, there is little consistency in the types of footpaths within the Shire's LGA. This document seeks to address this by establishing a standard footpath type to be used throughout the Shire when all footpaths are renewed.

4.1 Existing Footpath Types

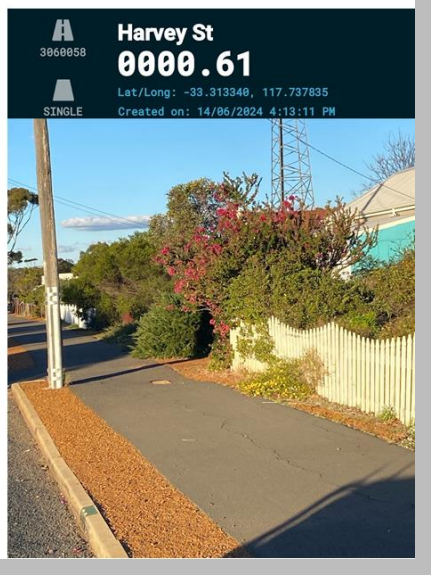
There are 3 types of footpaths currently within the Shire of Dumbleyung as follows.

Brick Paved

Concrete



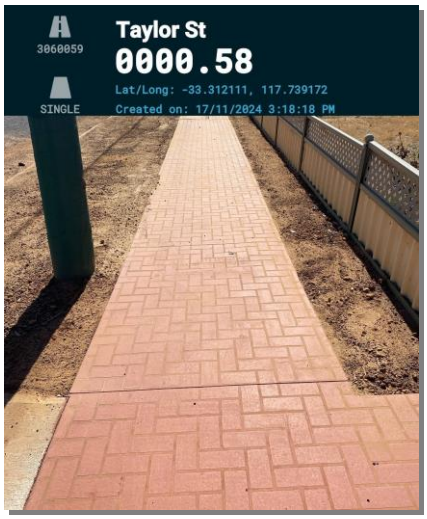
Asphalt



These types of footpaths have varying life-cycles, maintenance methods and construction costs. Asphalt footpaths have a similar construction and maintenance cost to concrete with a shorter life-cycle. Brick paved footpaths are significantly more costly to construct than concrete footpaths with a very similar life-cycle. Hence, concrete footpaths are the most cost effective with the lowest life-cycle cost.

4.2 New Footpaths Types

Each of the 3 types of existing footpath will be replaced with a stamped concrete footpath of a similar pattern and colour to the existing brick paved footpaths. All new footpaths will be coloured "Desert Red" with a herringbone stamp pattern as shown to the right. The introduction of stamped concrete design with a 'red' colouring will provide a pleasing aesthetic and professional appearance whilst also delivering a functional and quality outcome.

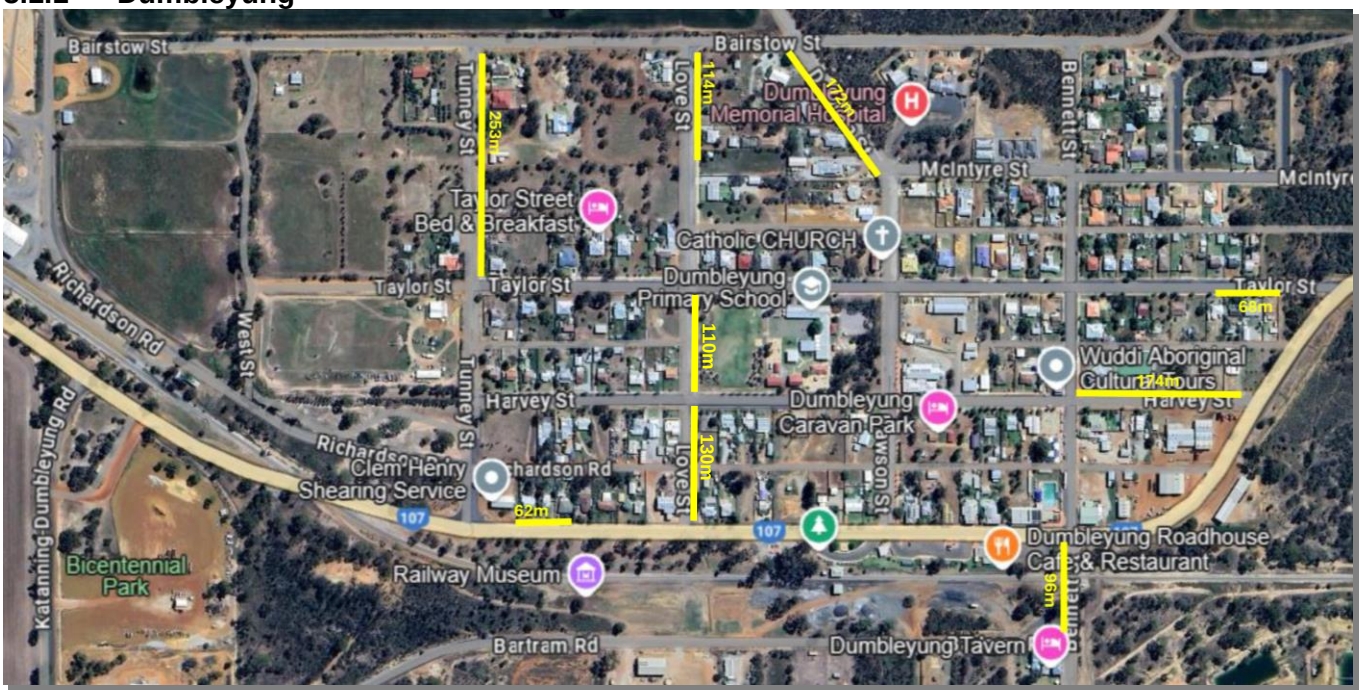


5.0 NEW FOOTPATHS

5.1 New Footpath Locations

The following maps show the new footpaths that were identified in Dumbleyung and Kukerin. In identifying these new footpaths focus was placed on gaps in the footpath network adjacent to commercial area, schools, community services and residential areas.

5.1.1 Dumbleyung



5.1.2 Kukerin

5.2 Priority System for New Footpaths

This section outlines the prioritisation of newly identified footpaths in the Shire of Dumbleyung. As the main purpose of a footpath is the destination it takes a pedestrian too, different weighting are given to footpaths that access different facilities. Those providing access to commercial areas are given the highest score, followed by those accessing schools, then community facilities and residential areas. Points are also given to footpaths that provide a missing link to existing footpaths.

These scores are worked out by the facilities that are adjacent to the proposed footpath, then added together to give a final total score. The higher the score the higher the priority. Once the footpath is constructed, it is then inserted into the strategic model and is analysed the same as existing footpaths.

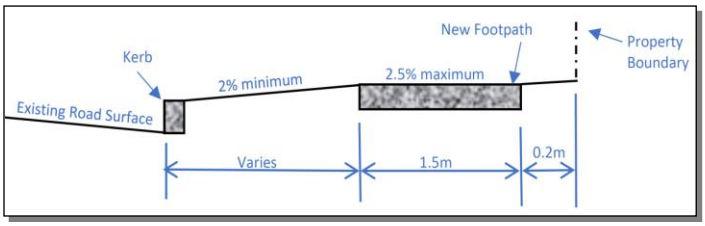
Hence, the priority system and scores for each identified new footpath is shown in the table overpage.

Street	Suburb	From	To	Length	Scores					Total Score
					5	4	3	2	1	
					Commercial Area	Near a School	Connects to existing Footpath	Near Community Facilities	Residential Area	
Bennett St	Dumbleyung	Absolon St	Bartram St	96m	✓	×	✓	✓	×	10
Manser St	Kukerin	Ex. footpath	End of St	33m	×	✓	✓	×	×	7
Bennett St	Kukerin	Manser St	Bath St	113m	×	✓	✓	×	×	7
Love St	Dumbleyung	Harvey St	Taylor St	110m	×	✓	✓	×	×	7
Dawson St	Dumbleyung	McIntyre St	Bairstow St	172m	×	×	✓	✓	✓	6
Bath St	Kukerin	Stubbs St	Johnson St	168m	×	×	✓	✓	✓	6
Bath St	Kukerin	Johnson St	Last house	110m	×	×	✓	✓	✓	6
Absolon St	Dumbleyung	Last house	Ex. footpath	62m	×	×	✓	×	✓	4
Love St	Dumbleyung	Bairstow St	Ex. footpath	114m	×	×	✓	×	✓	4
Love St	Dumbleyung	Absolon St	Harvey St	130m	×	×	✓	×	✓	4
Taylor St	Dumbleyung	Ex. footpath	Last house	68m	×	×	✓	×	✓	4
Tunney St	Dumbleyung	Bairstow St	Taylor St	253m	×	×	✓	×	✓	4
Harvey St	Dumbleyung	Bennett St	Last house	174m	×	×	×	✓	✓	3

5.3 Specifications

5.3.1 Cross Section

The diagram to the right shows the minimum cross-sectional requirements of all new footpaths within the Shire of Dumbleyung.



5.3.2 Concrete

All concrete for new footpaths is to be in line with AS 1379 & AS 3600 with minimum compressive strength of 25mpa at 28 days. A minimum thickness of 100mm of concrete is required for all footpaths.

5.3.3 Gradients and Crossfall

It is desirable that crossfall is 2.0 – 2.5% with a maximum of 2.5% to cater for people who have a disability. In most cases, path longitudinal gradients are dictated by the contours of the road. However, the longitudinal gradient should be as flat as possible with a maximum gradient of 1:14.

5.3.4 Clearances

Paths shall be designed to allow for a minimum vertical clearance of 2.5m above the path. A 0.3m horizontal clearance is desirable to be left between the edges of a path and any obstacle.

5.3.5 Pedestrian Ramps

There are many varying types of pedestrian ramps within the Shire of Dumbleyung. When footpath renewal works are carried out these will be replaced with ramps that will meet the relevant Australian Standard, currently AS/NZS1428.4.1 – 2021 as shown in the photo to the right. Pedestrian Ramps shall match the width of the path except as required by the needs of the location. A minimum width of 1.5m should be provided at the back of the ramp.

5.3.6 Vehicle Crossings

Where access is required across a path for vehicles then the crossing point shall be reinforced with a single layer of F72 mesh as a minimum. At the discretion of the Shire, a second layer of F72 mesh, and thickening of the footpath may be required at driveways that are frequented by heavy vehicles. The new stamped concrete footpaths will also cut through existing driveways as shown to the right. Property owners can elect to replace the entire driveway with stamped concrete at their own cost.

6.0 LEVELS OF SERVICE

6.1 Financial Scenarios

Three financial scenarios have been used for strategic modelling analysis of the levels of service each will provide in terms of cost and condition:

- Do nothing. Assumes no work is carried out.
- Current. Takes existing funding levels and analyses them against works required to maintain the existing condition of the network.
- Recommended. Funding and works needed to ensure that footpaths are maintained in a fit for purpose condition.

6.2 Works Levels of Service

Once the asset details have been collected, the levels of service can be assigned to each footpath, for each activity. With regard to footpaths, the Shire carries out three (3) main activities as follows:

- New Construction When a new stamped concrete footpath is constructed in a location that no constructed footpath previously existed.
- Renewal Renewals are carried out by removing the existing footpath and constructing a new stamped footpath when the footpath has reached its intervention point.
- Routine Maintenance This activity revolves around the repair of minor isolated failures in the footpath. This activity is carried out on a reactive basis and accordingly does not require a level of service.

7.0 FOOTPATH CONDITION

There are two main condition ratings for footpaths which are its Overall Condition and trip Hazards.

7.1 Overall Condition

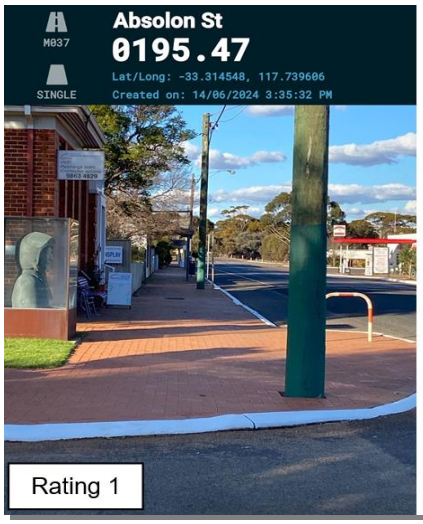
The purpose of this condition rating is to identify the deficiencies or defects in a footpath that may affect its useful life.

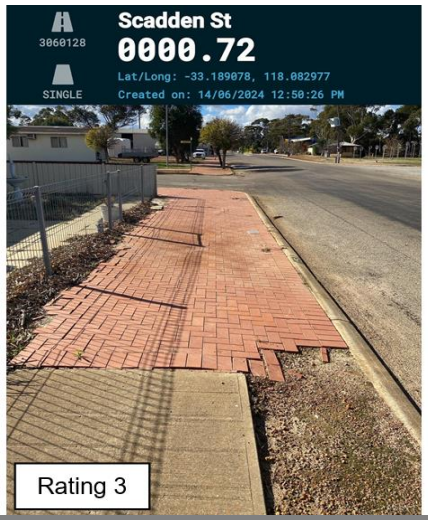
7.1.1 Brick Paved Footpaths

The following table describes the overall condition rating system for Brick Paved Footpaths.

Condition Rating	Characteristics	Condition Score as a Percentage of new
1	• No broken or cracked pavers. • Uniform gaps between pavers <2mm. Pavers stable • No displacement of pavers • No problems with service structure levels	100%
2	• No broken or cracked pavers. • Uniform gaps between pavers <5mm. Pavers stable • Displacement between pavers <5mm • Service structure levels <5mm above / below surrounding path level.	75%
3	• Paver edges chipped or cracked. • Uniform gaps between pavers <5mm. Pavers stable • Displacement between pavers 5–10mm. • Service structure levels 5–10mm above / below surrounding path level.	50%
4	• Pavers broken, edges chipped or cracked. • No uniform gaps between pavers 5–10mm. Pavers generally stable • Displacement between pavers 10–15mm. • Service structure levels 10–15mm above / below surrounding path level.	25%
5	• Pavers broken and sections missing. • No uniform gaps > 10mm. Pavers unstable • Displacement between pavers >15mm. • Service structure levels >15mm above / below surrounding path level.	0%

The following photos depict paved footpaths in the above condition ratings.



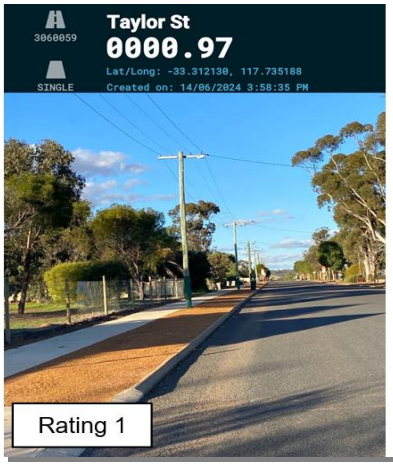


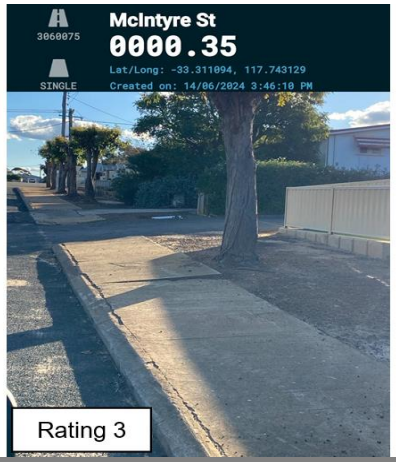
7.1.2 Concrete Footpaths

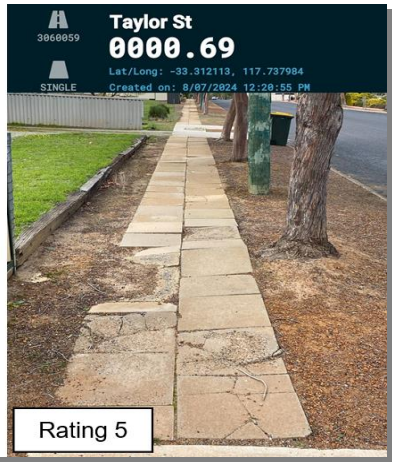
The following table describes the overall condition rating system for Concrete Footpaths.

Condition Rating	Characteristics	Condition Score as a Percentage of new
1	• No cracking. • No broken / sinking sections. • Uniform gaps between sections <10mm. • No displacement between sections. • No problems with service structure levels.	100%
2	• Slight cracking <2mm. • No broken / sinking sections. • Uniform gaps between sections 10 – 15mm. • Displacement between sections <5mm. • Service structure levels <5mm above / below surrounding path level	75%
3	• Cracking present. • No broken / sinking sections. • Non uniform gaps between sections 10 – 15mm. • Displacement between sections 5 – 10mm. • Service structure levels 5 – 10mm above / below surrounding path level	50%
4	• Cracking present. • Broken / sinking sections. • Non uniform gaps between sections 15 – 20mm. • Displacement between sections 10 – 15mm. • Service structure levels 10 – 15mm above / below surrounding path level	25%
5	• High level of cracking present. • High level of broken / sinking sections. • Non uniform gaps between sections >20mm. • Displacement between sections >15mm. • Service structure levels >15mm above / below surrounding path level	0%

The following photos depict concrete footpaths in the above condition ratings.





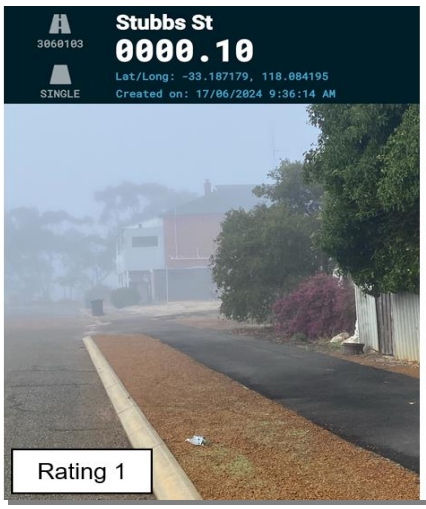


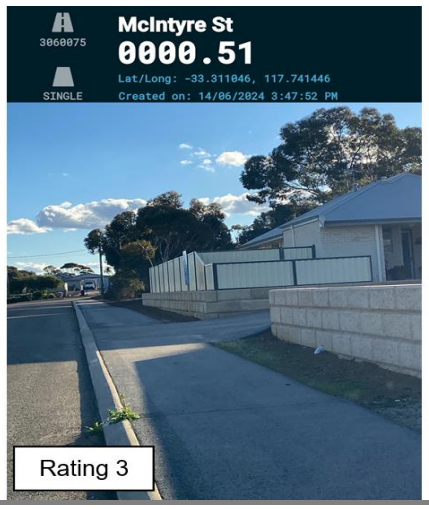
7.1.3 Asphalt Footpaths

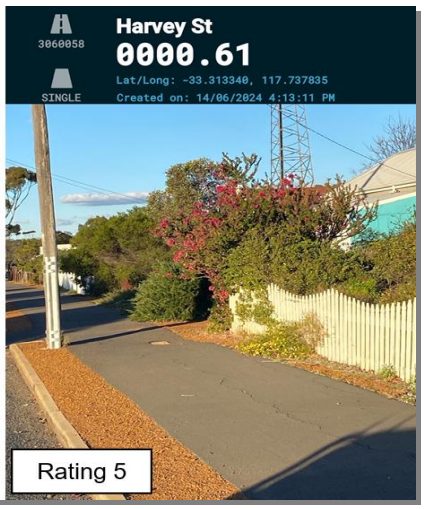
The following table describes the overall condition rating system for Asphalt Footpaths.

Condition Rating	Characteristics	Condition Score as a Percentage of new
1	• No cracking. • No deformation or sinking sections. • No problems with service structure levels. • No potholes, failed patches, edge break.	100%
2	• Slight surface cracking <2mm width. • Slight deformation in surface. • Service structure levels <5mm above / below surrounding path level. • No potholes, failed patches, very slight edge break.	75%
3	• Cracking 2 – 5mm width. • Some minor deformation or sinking in surface level of <5mm. • Service structure levels 5 – 10mm above / below surrounding path level. • Small isolated potholes, failed patches or slight edge break.	50%
4	• Cracking 5 – 10mm width. • Deformation or sinking in surface level of 5 – 10mm. • Service structure levels 5 – 10mm above / below surrounding path level. • Small isolated potholes, failed patches, moderate edge break.	25%
5	• Cracking >10mm width. • Deformation or sinking in surface level of >10mm. • Service structure levels >15mm above / below surrounding path level. • Large potholes, failed patches, high level of broken edges.	0%

The following photos depict asphalt footpaths in the above condition ratings.







7.2 Trip Hazards

This is a factor to assess the level of risk that a footpath presents to the public. It is calculated by dividing the area affected by trip hazards by the area of the footpath. This is then converted to give a percentage of the area of the footpath that is affected by trip hazards. This percentage is then used to assign a percentage of new score as follows.

Condition Rating	Percentage of Footpath Affected by Trip Hazards	Condition Score as a Percentage of new
1	Trip Hazards < 2%	100%
2	2% < Trip Hazards </= 4%	80%
3	4% < Trip Hazards </= 6%	60%
4	6% < Trip Hazards </= 8%	40%
5	8% < Trip Hazards </= 10%	20%
6	Trip Hazards > 10%	0

8.0 CONDITION WEIGHTINGS

8.1 Footpath Renewal Score

The main purpose of a footpath is to provide a safe connection for pedestrians to access community facilities such as schools, halls, churches and shopping districts. Hence, the safety factor (trip hazards) is the main factor in determining the need to replace a footpath. It is possible for a footpath that is nearing the end of its useful life to not be hazardous to pedestrians as long as its condition provides safe and unhindered pedestrian access. Accordingly, the footpath renewal score is calculated as shown in the following table. This score has been used to assess the current condition of the footpath in the strategic asset modelling program.

Aspect	Percentage of Footpath Covered by Trip Hazards	Rating Score	% of New	Weighting
Overall Condition Score		1	100%	10%
		2	75%	
		3	50%	
		4	25%	
		5	0%	
Trip Hazards	0% - 2%	1	100%	90%
	>2% - 4%	2	80%	
	>4% - 6%	3	60%	
	>6% - 8%	4	40%	
	>8% - 10%	5	20%	
	>10%	6	0%	

Hence, assuming that a section of footpath received the following condition scores:

- Overall Condition Score = Rating 3 (50% of CRC)
- Trip Hazards = Area affected 15% (Rating 6 – 0% of CRC)

The following formula would give its Pavement Renewal Score:
= (Overall Condition Score 50% x 10%) + (Trip Hazards 0% x 90%)
= (50% x 10%) + (0% x 90%)
= 5% + 0%
= 5%.

Therefore, the Footpath Renewal Score = 5%

9.0 LIFE CYCLES

9.1 Useful Life

As the footpath renewal score represents the percentage of remaining life in a footpath, this score and the age of the footpath is used to calculate its useful life. An example of the calculation is:

Footpath Renewal Score = 5%
Age of Footpath = 35 years
Useful Life (yrs) = Age of Footpath + $\left(\frac{\text{Age of Footpath (yrs) x Footpath Renewal Score}}{\text{100\% - Footpath Renewal Score}}\right)$
= 36.84 years

9.2 Intervention Life

The useful life of a footpath relates to the time from the date the footpath was constructed or renewed to the date that the footpath can no longer provide its intended service and is basically rubble. This point of a footpaths life is also characterised by increasing routine maintenance costs. Hence, it is desirable that the Shire intervene before this point to ensure that the footpath remains functional and to negate the accelerating maintenance requirements. The point at which this intervention should be put in place is considered to be when it reaches a footpath renewal score of 25%. Thus, using the above useful life example, the intervention life is calculated as follows:

Intervention Life = useful life – (25% of useful life)
= 27.63 years.

9.3 Remaining Useful Life

The Footpath Renewal Score also represents the percentage of life remaining in an asset. Conversely, the percentage difference between 100% (new) and the Footpath Renewal Score also represents the amount of life that an asset has used. Hence, the remaining life can be calculated as follows:

Footpath Renewal Score = 5%
Useful Life = 36.84 years
Remaining Life = 5% x 36.84 years
= 1.84 years

9.4 Average Life Cycles

Accordingly, using the above methodology, the tables below outlines the calculation of average useful lives, intervention lives and remaining life of each type of footpath. The averages of these have been adopted and applied to the strategic asset modelling program for all footpaths throughout the Shire.

9.4.1 Brick Paving

Road Name	Year of Condition Rating	Year Last Renewal	Current Age of Footpath (Years)	Footpath Condition Score	Remaining Life	Useful Life	Intervention Life
Bennett Street	27/03/2023	1/01/2010	13.24	82%	34	47	35
Bennett Street	27/03/2023	1/01/2010	13.24	82%	34	47	35
Bennett Street	27/03/2023	1/01/2010	13.24	100%	119	132	99
Dawson Street	27/03/2023	1/01/2010	13.24	64%	16	29	22
Dawson Street	27/03/2023	1/01/2010	13.24	82%	34	47	35
Dawson Street	27/03/2023	1/01/2010	13.24	82%	34	47	35
Dawson Street	27/03/2023	1/01/2010	13.24	82%	34	47	35
Harvey Street	27/03/2023	1/01/2010	13.24	82%	34	47	35
Harvey Street	27/03/2023	1/01/2010	13.24	82%	34	47	35
Harvey Street	27/03/2023	1/01/2010	13.24	82%	34	47	35
Scadden Street	27/03/2023	1/01/2010	13.24	100%	119	132	99
Scadden Street	27/03/2023	1/01/2010	13.24	100%	119	132	99
Stubbs Street	27/03/2023	1/01/2004	19.25	26%	4	23	17
Taylor Street	27/03/2023	1/01/2010	13.24	46%	7	21	16
					Average	**61**	**45**

Hence, a useful life of 61 years has been adopted and an intervention life of 45 years. These have been used in the Strategic Asset Management Model of the footpath network for Brick Paved Footpaths.

9.4.2 Concrete

Road Name	Year of Condition Rating	Year Last Renewal	Current Age of Footpath (Years)	Footpath Condition Score	Remaining Life	Useful Life	Intervention Life
Bennett Street	27/03/2023	1/01/1985	38.26	23.00%	5.72	43.97	32.98
Bennett Street	27/03/2023	1/01/2010	13.24	100.00%	119.17	132.41	99.31
Bennett Street	27/03/2023	1/01/1985	38.26	59.00%	36.76	75.01	56.26
Bennett Street	27/03/2023	1/01/2004	19.25	97.50%	134.73	153.97	115.48
Bennett Street	27/03/2023	1/01/1985	38.26	23.00%	5.72	43.97	32.98
Campbell Court	27/03/2023	1/01/1985	38.26	41.00%	17.19	55.45	41.58
Harvey Street	27/03/2023	1/01/1978	45.26	23.00%	6.76	52.03	39.02
Johnston Street	27/03/2023	1/01/2004	19.25	43.50%	9.70	28.94	21.71
Johnston Street	27/03/2023	1/01/2004	19.25	43.50%	9.70	28.94	21.71
Love Street	27/03/2023	1/01/2010	13.24	100.00%	119.17	132.41	99.31
Manser Street	27/03/2023	1/01/2004	19.25	79.50%	43.86	63.10	47.33
Manser Street	27/03/2023	1/01/2004	19.25	43.50%	9.70	28.94	21.71
Manser Street	27/03/2023	1/01/2010	13.24	100.00%	119.17	132.41	99.31
Manser Street	27/03/2023	1/01/2010	13.24	64.00%	15.54	28.78	21.59
Manser Street	27/03/2023	1/01/2004	19.25	79.50%	43.86	63.10	47.33
Mcintyre Street	27/03/2023	1/01/1987	36.26	38.50%	14.45	50.71	38.03
Mcintyre Street	27/03/2023	1/01/1980	43.26	20.50%	5.08	48.34	36.25
Scadden Street	27/03/2023	1/01/1985	38.26	41.00%	17.19	55.45	41.58
Scadden Street	27/03/2023	1/01/2004	19.25	61.50%	20.44	39.68	29.76
Taylor Street	27/03/2023	1/01/1980	43.26	41.00%	19.44	62.70	47.03
Taylor Street	27/03/2023	1/01/1980	43.26	23.00%	6.46	49.73	37.30
Taylor Street	27/03/2023	1/01/1980	43.26	59.00%	41.57	84.83	63.62
Taylor Street	27/03/2023	1/01/1980	43.26	59.00%	41.57	84.83	63.62
Taylor Street	27/03/2023	1/01/2010	13.24	100.00%	119.17	132.41	99.31
					Average	**69.67**	**52.25**

Hence, a useful life of 70 years has been adopted and an intervention life of 52 years. These have been used in the Strategic Asset Management Model of the footpath network for Concrete Footpaths.

9.4.3 Asphalt

Road Name	Year of Condition Rating	Year Last Renewal	Current Age of Footpath (Years)	Footpath Condition Score	Remaining Life	Useful Life	Intervention Life
Dawson Street	27/03/2023	1/01/2004	19.25	75.00%	35.74	54.99	41.24
Dawson Street	27/03/2023	1/01/2004	19.25	75.00%	35.74	54.99	41.24
Mcintyre Street	27/03/2023	1/01/2004	19.25	75.00%	35.74	54.99	41.24
Stubbs Street	27/03/2023	1/01/2004	19.25	75.00%	35.74	54.99	41.24
					Average	**54.99**	**41.24**

Hence, a useful life of 55 years has been adopted and an intervention life of 41 years. These have been used in the Strategic Asset Management Model of the footpath network for asphalt footpaths.

10.0 FAIR VALUE METHODOLOGY

The following are the steps taken in valuing footpaths. The results of these are also calculated in the strategic asset management modelling program and have been provided in Appendix 6.

10.1 Ascertain the Relevant Asset Details.

The footpath network inventory is provided in Appendix 1.

10.2 Determine the Condition of the Asset.

See Section 7.0 for how condition rating is carried out.

10.3 Convert the Condition Rating to a Percentage of New.

See Section 8.0 for how condition ratings are converted to a percentage of new.

10.4 Determine the Life Cycles of the Asset.

See Section 9.0 for how life cycles are calculated.

10.5 Determine the Current Replacement Cost (CRC) and Renewal Costs.

The Current Replacement Cost is the cost of replacing an asset with a new asset of a similar size and function. In essence, for footpaths this is the cost of replacing the footpath when it reaches an unacceptable condition. See Section 11 for estimated costs used in this manual.

10.6 Determine the Depreciated Replacement Cost (Fair Value).

As the Footpath Renewal Score reflects the life left and the life used in an asset, it is also reflective of the value left in an asset. Hence, the Depreciated Replacement Cost is calculated by multiplying the Footpath Renewal Score by the Current Replacement Cost.

10.7 Determine the Annual Depreciation

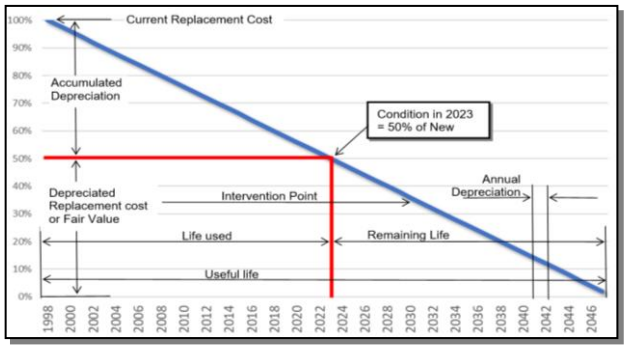
The Annual Depreciation is merely calculated by dividing the Current Replacement Cost by the Intervention Life. This represents the dollar figure of how much an asset is depreciating annually.

10.8 Determine the Accumulated Depreciation

The Accumulated Depreciation is calculated by multiplying the Annual Depreciation by the number of years that the asset has been in service.

10.9 Summary

The graph to the right gives an overview of how each of the Fair Value measures relate to each other against the deterioration of a footpath. The graph depicts the deterioration of a footpath with a useful life of 50 years, that was last renewed in 1998 and condition rated in 2023. See Appendix 6 for the fair value results for footpaths.



11.0 LANDSCAPING

Whilst this document does not directly relate to landscaping, it is important to establish a standard should trees need to be replaced or installed as part of a footpath construction project.

The recommended tree species is Melaleuca Linariifolia (photo right) due to this species being evergreen, their upright growth and their leaves remaining consistent throughout the year. Root barriers are also to be installed with each new tree being planted to protect the footpath and other infrastructure from damage. The cost of installing one of these trees every 20m with root barriers has been included in the modelling and program costs.

12.0 ESTIMATED COSTS

12.1 Footpath Renewal and New Construction

The tables below outline the costs per square metre used in the strategic modelling for footpath renewal and new footpath construction works. These costs are based on recent contract prices and completed works for 100m² of stamped concrete, including the provision of 2 pedestrian ramps. It is expected that each footpath renewal project will incur the replacement of 2 pedestrian ramps. It is the intent of this strategy to replace all existing footpaths with stamped concrete, therefore this is the only estimated cost used in the model.

12.1.1 Footpath Renewal Works

Item	Quantity	Unit of Measure	Unit Value	Cost
Removal of existing concrete paths	100	m²	$ 33.00	$ 3,300.00
Earthworks, set up and pour stamped concrete footpath	100	m²	$ 176.00	$ 17,600.00
Standard Kerb Ramps	2	each	$ 809.00	$ 1,618.00
Installation of new tree and root barrier every 20m	3	each	$ 200.00	$ 600.00
Traffic management	1	days	$ 2,420.00	$ 2,420.00
			Total cost for 100m	**$ 25,538.00**
			Cost per m²	**$ 255.38**

12.1.2 New Footpath Construction Works

Item	Quantity	Unit of Measure	Unit Value	Cost
Earthworks, set up and pour stamped concrete footpath	100	m²	$ 176.00	$ 17,600.00
Standard Kerb Ramps	2	each	$ 809.00	$ 1,618.00
Installation of new tree and root barrier every 20m	3	each	$ 200.00	$ 600.00
Traffic management	1	days	$ 2,420.00	$ 2,420.00
			Total cost for 100m²	**$ 22,238.00**
			Cost per m²	**$ 222.38**

13.0 PROGRAM DEVELOPMENT

The data collected in the previous sections is then used in the strategic asset modelling program to develop the footpath renewal program.

13.1 Prioritisation of Works

13.1.1 Renewal Works

Renewal works are prioritised in the Strategic Asset Modelling program in line with the previously outlined Footpath Renewal Score.

13.1.2 New Construction Works

New footpath construction works are prioritised as set out in Section 5.2.

13.2 Year of Replacement / Renewal

The year that a footpath needs to be renewed is estimated as follows. As the Footpath Renewal Score is a percentage of new, it represents the remaining life of the footpath. If a footpath has a Footpath Renewal Score of 5%, it has 5% of the Intervention Life remaining until it needs to be renewed.

Using an Intervention Life of 52 years, together with a Footpath Renewal Score of 5% equates to 2.6 years until the footpath needs to be renewed. Once this is calculated then it is merely a matter of adding these 2.6 years to the year that the assessment is carried out. For example, if the condition assessment year was 2023, then the year when the example section of footpath will need to be renewed is estimated to be 2026.

14.0 RESOURCES REQUIRED

The following outlines the resources required to meet the levels of service outlined in Section 6.2 and the works recommended in the Strategic Asset Management model.

14.1 Footpath Renewal and New Construction

The construction of stamped concrete footpaths is a specialised area and it is recommended that it be undertaken via contract. Accordingly, it does not require any of the Shire's labour or plant. It is also considered that the Shire's outdoor crew do not have the available time to devote to this activity.

14.2 Routine Maintenance

Similarly, maintenance of paved, asphalt, concrete and stamped concrete footpaths is also a specialised area that the Shire's outdoor crew do not have time or expertise to devote to this activity. Hence, it is also recommended that maintenance of footpaths be undertaken via contract and also does not require any of the Shire's labour or plant.

14.6 Inspections

In order for the footpath network and associated infrastructure to be managed effectively, it is necessary for inspections to be carried out to identify and repair defects. This is done via a two (2) tied approach.

- Proactive Inspections. In order to keep on top of hazards and maintenance, it's vital that regular inspections be carried out to identify issues such as the need for patching defects and removing trip hazards. This will be done once every six (6) months by the Director of Infrastructure.
- Reactive Inspections. As the proactive inspections are done on a six (6) monthly basis, issues can arise between these inspections. Hence, reactive inspections are a back up to the primary proactive inspections. Usually, these will be initiated from customer complaints and will also be undertaken by the Director of Infrastructure.

15.0 SUMMARY

15.1 Footpath Renewal and Construction Program

In order to construct the newly identified footpaths and replace these and all existing footpaths within the Shire once at their intervention point and keep them in a good condition over the short, medium and long term, an annual average budget of $87,000 is required.

However, as this program aims to construct all newly identified footpaths and replace all existing concrete and asphalt footpaths with stamped concrete within the first 15 years of the program, the annual average budget required to undertake this will be $174,000 for the first 15 years.

After this first 15 years is completed, no expenditure will be required for this program for the next 18 years, when there will be a 5 year program to replace the remaining Brick Paved footpaths. This will cost an average of $141,000 per annum over this 5 year period.

There will then be another 13 year gap until the remaining renewals will be required. The remaining 10 years of the program will require an annual average budget of $170,000 per annum to mostly renew the works undertaken in the first 15 years.

15.2 Condition

The condition chart provided in Appendix 2 shows that if no works were carried out, the entire footpath network would slip into the ”Poor” range within 10 years, “Very Poor” within 23 years and would need to be fully reconstructed in about 36 years. The cost of this in today’s dollars would be about $3,800,000.

Whereas by spending an average of $87,000 per year over 60 years for footpath construction and renewals the condition of the footpath network will be maintained at its current level to enable the continuation of the service and function that they are intended to provide.

The condition portrayed by the graph in Appendix 2 also shows that this level of funding provides a sustainable footpath network that does not place a burden on future generations to bring it back up to an acceptable standard.

16.0 FINANCING THE PROGRAM

16.1 Annual Average Costs – 60 Year Program

The following table assesses if the Shire has the funding available to undertake the required works over the 60 years of the full footpath program. The average roads expenditure has been included for context.

Road Type	Activity	Annual Budget	Funding Source				
			RRG	R2R	FAG	MRWA Direct	Shire
Sealed Roads	Resealing	$ 407,000	$ 133,980	$ 130,000	$ 143,020	$ 0	$ 0
	Pavement Renewal	$ 796,000	$ 219,120	$ 150,000	$ 377,980	$ 48,900	$ 0
	Drainage Maintenance	$ 46,000	$ 0	$ 0	$ 46,000	$ 0	$ 0
	Vegetation Maintenance	$ 15,000	$ 0	$ 0	$ 15,000	$ 0	$ 0
	Delineation	$ 7,000	$ 0	$ 0	$ 7,000	$ 0	$ 0
	Inspections	$ 13,000	$ 0	$ 0	$ 13,000	$ 0	$ 0
Unsealed Roads	Maintenance Grading	$ 312,000	$ 0	$ 0	$ 126,000	$ 186,000	$ 0
	Gravel Resheeting	$ 410,000	$ 0	$ 410,000	$ 0	$ 0	$ 0
	Drainage Maintenance	$ 42,000	$ 0	$ 0	$ 42,000	$ 0	$ 0
	Vegetation Maintenance	$ 15,000	$ 0	$ 0	$ 15,000	$ 0	$ 0
	Delineation	$ 10,000	$ 0	$ 0	$ 10,000	$ 0	$ 0
	Inspections	$ 16,000	$ 0	$ 0	$ 16,000	$ 0	$ 0
Footpaths	Construction/Renewal Pgm	$ 57,916	$ 0	$ 0	$ 0	$ 0	$ 87,000
	General Maintenance	$ 10,000	$ 0	$ 0	$ 0	$ 0	$ 10,000
	Total		**$ 353,100**	**$ 690,000**	**$ 811,000**	**$ 234,900**	**$ 97,000**
	Funding Allocation		**$ 493,516**	**$ 690,000**	**$ 811,000**	**$ 237,652**	**$ 0**
	Balance		**$ 140,416**	**$ 0**	**$ 0**	**$ 2,752**	**$ 97,000**

Thus, on average the Shire would have to contribute $97,000 per year over 60 years from its own revenue to complete the program outlined in this Manual.

16.2 First 5 Year Allocation

The previous table looks at the Shire’s ability to fund the average program recommended by strategic modelling over the 60 years of the program. However, it is also important to take a look at the Shire’s ability to fund the first 5 years of these programs as shown in the table on the next page.

		25/26	26/27	27/28	28/29	29/30
EXPENDITURE						
RESEALING						
	RRG Funded Roads	$ 93,449	$ -	$ 148,341	$ 22,325	$ -
	Shire Funded Roads	$ 24,720	$ -	$ -	$ -	$ -
	TOTALS	**$ 118,169**	**$ -**	**$ 148,341**	**$ 22,325**	**$ -**
PAVEMENT RENEWALS						
	RRG Funded Roads	$ -	$ 521,074	$ 43,015	$ 673,856	$ 823,577
	WSFN Funded Roads	$ 2,157,401	$ 986,624	$ -	$ -	$ -
	Shire Funded Roads	$ 285,600	$ 265,011	$ 700,565	$ 170,340	$ 9,792
	TOTALS	**$ 2,443,001**	**$ 1,772,709**	**$ 743,580**	**$ 844,196**	**$ 833,369**
GRADING						
	Shire Funded Roads	$ 312,000	$ 312,000	$ 312,000	$ 312,000	$ 312,000
	TOTALS	**$ 312,000**	**$ 312,000**	**$ 312,000**	**$ 312,000**	**$ 312,000**
GRAVEL RESHEETING						
	Shire Funded Roads	$ 403,657	$ 410,291	$ 417,580	$ 396,156	$ 419,392
	TOTALS	**$ 403,657**	**$ 410,291**	**$ 417,580**	**$ 396,156**	**$ 419,392**
UPGRADE WORKS – SEALING OF UNSEALED ROADS						
	RRG Funded Roads	$ 400,067	$ -	$ 302,160	$ -	$ -
	TOTALS	**$ 400,067**	**$ -**	**$ 302,160**	**$ -**	**$ -**
ROUTINE MAINTENCE – SEALED ROADS						
	TOTALS	**$ 81,000**	**$ 81,000**	**$ 81,000**	**$ 81,000**	**$ 81,000**
ROUTINE MAINTENCE – UNSEALED ROADS						
	TOTALS	**$ 83,000**	**$ 83,000**	**$ 83,000**	**$ 83,000**	**$ 83,000**
FOOTPATHS						
	Construction / Renewal Program	$ 173,759	$ 166,513	$ 166,354	$ 173,914	$ 175,957
	General Maintenance	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
	TOTALS	**$ 183,759**	**$ 176,513**	**$ 176,354**	**$ 183,914**	**$ 185,957**
	Total Cost of Roads Program	**$ 4,024,653**	**$ 2,835,513**		**$ 1,922,591**	**$ 1,914,718**
INCOME						
	RRG Contribution (66%)	$ 329,011	$ 347,383	$ 329,011	$ 493,516	$ 549,051
	WSFN Contribution (93%)	$ 2,006,383	$ 917,560	$ -	$ -	$ -
Shire Contribution + 34% RRG & 7% WSFN	R2R Contribution	$ 690,000	$ 690,000	$ 690,000	$ 690,000	$ 690,000
	FAG Contribution	$ 811,000	$ 811,000	$ 811,000	$ 811,000	$ 811,000
	MRWA Direct Grant	$ 237,652	$ 237,652	$ 237,652	$ 237,652	$ 237,652
	Shire Revenue	$ 151,018	$ 69,064	$ 196,352	$ -	$ -
	TOTAL ALL INCOME	**$ 4,225,064**	**$ 3,072,659**	**$ 2,275,507**	**$ 2,232,168**	**$ 2,287,703**
	SUPPLUS / - DEFICIT	**$ 200,411**	**$ 237,146**	**$ 0**	**$ 309,577**	**$ 372,985**

The above table shows that the Shire will have to contribute about $151,000 in 25/26 for RRG and WSFN roadworks, $69,000 in 26/27 for RRG and WSFN roadworks and $196,000 in 27/28 for RRG roadworks. This is due to the condition placed upon WSFN works that the Shire contribute 7% of the total cost from its own revenue and the requirement placed upon RRG roadworks that the Shire contribute 33% of the total cost. No funds from Shire revenue will need to be added to the 28/29 and 29/30 program.

In summary, despite a total of $416,434 being required from Shire revenue to fund WSFN and RRG roadworks over the first 5 years of the program, there will be a surplus in grant funding of about $1,120,000 in total over the first 5 years. This means that significant untied notionally allocated grant road related funding can be deployed towards other Shire uses.

17.0 IMPROVEMENT PLAN

17.1 Inventory

As this document is the Shire's first attempt to collate and strategically model all of its footpath network, it is possible that there may be some minor anomalies. Accordingly, a review of the inventory data will be carried out at least once every 5 years, in line with the asset valuation cycle and any corrections made before the next iteration of this document.

17.2 Useful Life Predictions

As each new condition rating is undertaken on each footpath, the tracking of the deterioration of each individual footpath can be refined and the useful lives will become more precise.

APPENDIX 1 FOOTPATH INVENTORY

The following table contains all existing footpaths within the Shire of Dumbleyung. As new footpaths are constructed, they will be added to the inventory.

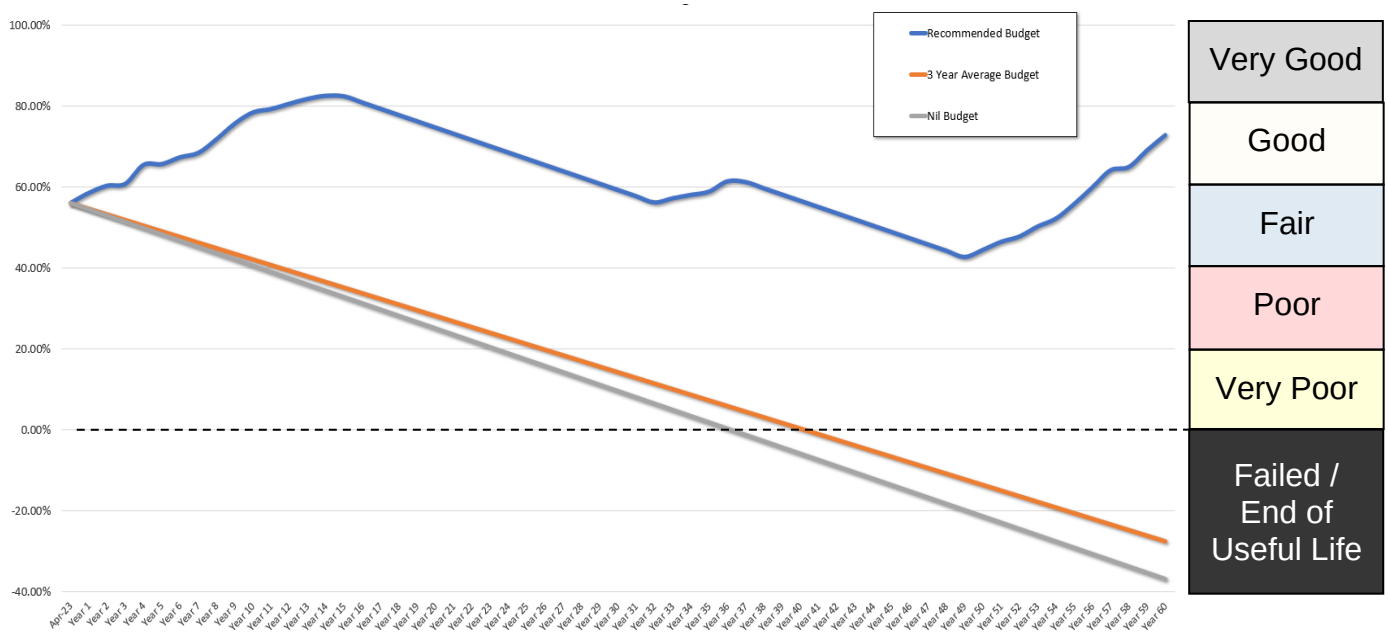
ID	Road Name	Suburb	Side of Road	Footpath Type	Start	End	Length (m)	Width (m)	Area (m²)	No. Trip Hazards
62	Bennett Street	Dumbleyung	Right	Brick Paving	285	420	135	3.4	459	8
49	Bennett Street	Dumbleyung	Left	Brick Paving	285	405	120	2.1	252	6
50	Bennett Street	Dumbleyung	Left	Brick Paving	420	435	15	2.1	31.5	2
76	Bennett Street	Dumbleyung	Right	Brick Paving	430	490	60	3.4	204	1
51	Bennett Street	Dumbleyung	Left	Concrete	435	447	12	1.8	21.6	2
52	Bennett Street	Dumbleyung	Left	Concrete	447	535	88	1.8	158	0
77	Bennett Street	Dumbleyung	Right	Concrete	490	540	50	1.8	90	1
53	Bennett Street	Dumbleyung	Left	Concrete	555	685	130	1.8	234	12
63	Bennett Street	Dumbleyung	Right	Concrete	560	660	100	1.8	180	3
64	Bennett Street	Dumbleyung	Right	Concrete	680	800	120	1.8	216	25
78	Campbell Court	Dumbleyung	Left	Concrete	10	100	90	1.8	162	13
26	Dawson Street	Dumbleyung	Right	Brick Paving	20	130	110	3.3	363	10
45	Dawson Street	Dumbleyung	Left	Brick Paving	20	130	110	2.2	242	5
46	Dawson Street	Dumbleyung	Left	Brick Paving	150	260	110	2.2	242	9
79	Dawson Street	Dumbleyung	Right	Brick Paving	160	200	40	3.3	132	2
60	Dawson Street	Dumbleyung	Right	Asphalt	210	260	50	1.8	90	2
61	Dawson Street	Dumbleyung	Right	Asphalt	270	400	130	1.8	234	3
47	Dawson Street	Dumbleyung	Left	Concrete	270	300	30	1.2	36	0
30	Harvey Street	Dumbleyung	Left	Brick Paving	220	250	30	3.4	102	2
12	Harvey Street	Dumbleyung	Right	Brick Paving	230	410	180	3.4	612	8
31	Harvey Street	Dumbleyung	Left	Brick Paving	420	440	20	0.8	16	1
13	Harvey Street	Dumbleyung	Right	Concrete	430	630	200	1.2	240	0
32	Harvey Street	Dumbleyung	Left	Asphalt	450	550	100	2.1	210	13
33	Harvey Street	Dumbleyung	Left	Asphalt	550	630	80	1.8	144	12
15	Harvey Street	Dumbleyung	Right	Concrete	650	880	230	1.8	414	45
70	Johnston Street	Kukerin	Right	Concrete	10	110	100	1.8	180	15
71	Johnston Street	Kukerin	Right	Concrete	120	240	120	1.8	216	15
25	Love Street	Dumbleyung	Right	Concrete	280	420	140	1.8	252	3
80	Manser Street	Kukerin	Right	Concrete	110	160	50	1.8	90	4
81	Manser Street	Kukerin	Right	Concrete	160	330	170	1.8	306	23
2	Manser Street	Kukerin	Left	Concrete	360	510	150	1.8	270	0
82	Manser Street	Kukerin	Right	Concrete	360	510	150	1.8	270	13
3	Manser Street	Kukerin	Left	Concrete	540	670	130	1.8	234	9
68	McIntyre Street	Dumbleyung	Right	Concrete	340	450	110	1.6	176	16
57	McIntyre Street	Dumbleyung	Left	Concrete	460	640	180	1.2	216	39
69	McIntyre Street	Dumbleyung	Right	Asphalt	470	640	170	2.00	340	2
83	Scadden Street	Kukerin	Right	Concrete	220	290	70	1.00	70	10
84	Scadden Street	Kukerin	Right	Concrete	320	500	180	1.80	324	17
85	Scadden Street	Kukerin	Right	Brick Paving	510	550	40	3.00	120	0
86	Scadden Street	Kukerin	Right	Brick Paving	580	620	40	3.00	120	1
87	Scadden Street	Kukerin	Right	Brick Paving	630	680	50	3.00	150	11
88	Scadden Street	Kukerin	Right	Brick Paving	690	710	20	3.00	60	11
89	Scadden Street	Kukerin	Right	Concrete	710	860	150	1.8	270	26
7	Stubbs Street	Kukerin	Left	Brick Paving	10	20	10	3.00	30	2
8	Stubbs Street	Kukerin	Left	Asphalt	20	110	90	2.1	189	6
73	Stubbs Street	Kukerin	Right	Asphalt	120	240	120	2.1	252	2
17	Taylor Street	Dumbleyung	Right	Concrete	110	310	200	1.8	360	28
36	Taylor Street	Dumbleyung	Left	Concrete	150	300	150	1.8	270	26
37	Taylor Street	Dumbleyung	Left	Concrete	310	500	190	1.8	342	20
18	Taylor Street	Dumbleyung	Right	Concrete	320	500	180	1.8	324	17
19	Taylor Street	Dumbleyung	Right	Concrete	520	720	200	1.2	240	0
38	Taylor Street	Dumbleyung	Left	Brick Paving	520	720	200	1.2	240	29
21	Taylor Street	Dumbleyung	Right	Concrete	750	990	240	1.8	432	4
						TOTAL	**5,940**		**11,429**	

APPENDIX 2 PREDICTED CONDITION

The graph below depicts the strategic modelling results in regard to the condition of the footpath network. The modelling starts from when the condition assessments were carried out (April 23) to the end of the program (year 60 – 2085/86). It also compares the 3 levels of service scenarios, which are:

- The condition of the network if no works were carried out (nil budget),
- The condition of the network if the current expenditure levels are maintained (3 year average budget), and
- The condition of the network if the budget derived from the strategic modelling (recommended budget) was adopted and implemented.

As outlined in Section 3.1 a total of $7,333 was used per annum for current funding levels in the Strategic Asset Management model. These figures were derived from the average expenditure over the last 3 years. It is important to note that the condition incurred from the Nil Budget and Current Budget (3 year average budget) is an average across the network as a whole that serves to give a reasonable prediction at the end of the 60 year program. Whereas the graph for the recommended budget is an actual tracking of each segment of each footpath on an annual basis in line with the works or lack of works predicted to be needed for that segment in the particular year.

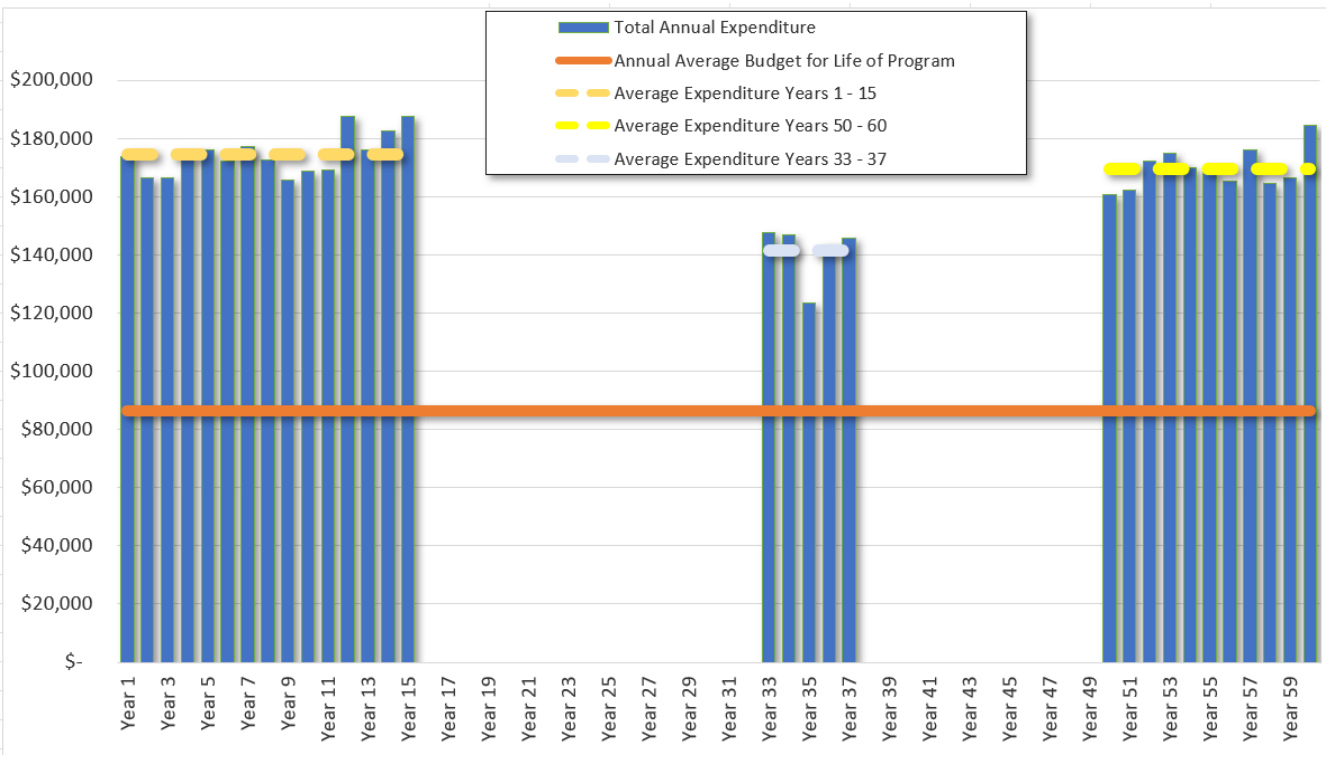


The following can be derived from this graph:

- If no further works were carried out on the footpath network, it would deteriorate into the poor range within 10 years and be at the end of its life within 36 years.
- If the current budget levels were maintained, there would be a declining trend in the condition of the footpath network, which may lead to it falling into the poor range within 11 years and failing or reaching the end of its useful life within 40 years.
- The recommended budget derived from the strategic modelling will see the current condition of the footpath network maintained indefinitely.
- The condition of the footpath network is currently 56% (Fair). As the initial program of works is within the first 15 years, the condition of the network rises up to 83% (very good) over this period. The condition of the network will then gradually decline to 56% (Fair) by year 32 of the program when the 5 year program to replace the remaining brick paved footpaths commences. This 5 year program will lift the overall condition of the network to 61% (Good) before it starts to decline again over the next 12 years until the final renewal works commences at year 50, which will see the overall condition rise to 73% (good) by the end of the 60 year program.

APPENDIX 3 RECOMMENDED 60 YEAR BUDGET

The graph below depicts the annual expenditure and average annual budget recommended by the Strategic Asset Management Modelling for footpath construction/renewal works.



The average annual expenditure over the 60 years of the program is $87,000.

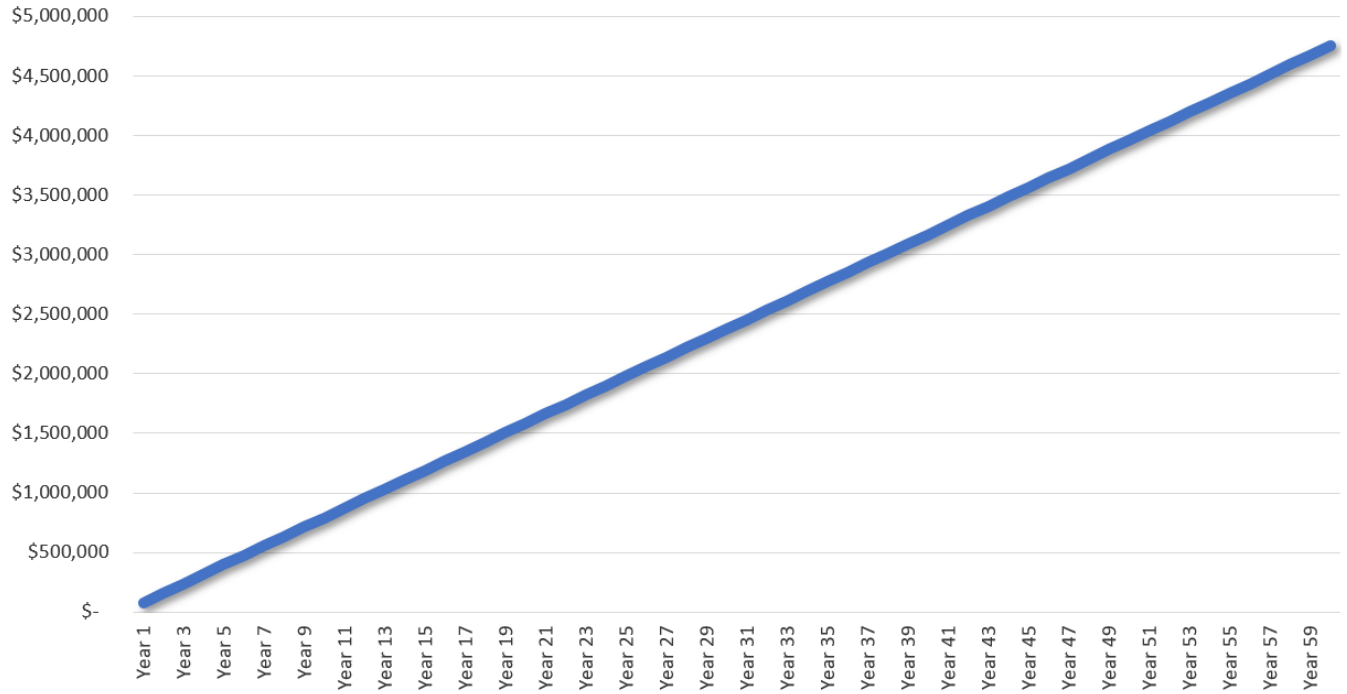
However, it is the intent of the progam to construct all new footpaths and replace all concrete and asphalt footpaths with stamped concrete footpaths in the first 15 years of the program. There is also some brick paved footpaths that will require replacement in the first 15 years. Hence, the average annual spend for the first 15 years is $174,000.

The remaining brick paved footpaths will need to be replaced in a 5 year period from year 33 to year 37. The average annual spend for this 5 year period is $141,000.

Years 50 to 60 of the program will mainly see renewal works being required for the replacement works carried out in the first 15 years. The average annual spend for years 50 to 60 is $170,000.

APPENDIX 4. ACCUMULATING BACKLOG

The following chart shows the backlog that will accumulate at the end of each year of the 60 year program if the current budget levels are maintained.



This chart shows that if the current budget levels were maintained, there would be a gradual increase in the works and funding required to bring the footpath network back up to a fit for purpose condition, which will reach over $1,000,000 within 13 years and just over $4,700,000 by the end of the program.

It is important to note that this is the financial burden that may be put onto future generations if current expenditure levels are maintained.

APPENDIX 5 15 YEAR FOOTPATH REPLACEMENT/RENEWAL PROGRAM

The following table outlines the first 15 years of the 60 year footpath renewal program developed from the strategic modelling of the footpath network. Please note that the condition rating assessments carried out in April 2023 were used as the initial starting point in the development of this program and *that* only footpaths with replacement / renewal works needed in the first 15 years have been included.

Road Name	Suburb	From	to	Side of Road	Length (m)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Bennett Street	Dumbleyung	Harvey St	Wuddi Shop frontage	Left	15	$ -	$ -	$ -	$ 8,044	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bennett Street	Dumbleyung	RSL Boundary	Taylor St	Right	50	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 19,154
Bennett Street	Dumbleyung	Taylor St	McIntyre St	Left	130	$ -	$ -	$ -	$ -	$ -	$ -	$ 49,799	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bennett Street	Dumbleyung	Taylor St	McIntyre St	Right	100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 38,307	$ -	$ -	$ -	$ -	$ -
Bennett Street	Dumbleyung	McIntyre St	Bairstow St	Right	120	$ -	$ -	$ -	$ 45,968	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Absolon Street	Dumbleyung	Supermarket	Culvert	Left	33	$ -	$ -	$ -	$ 12,641	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Absolon Street	Dumbleyung	Bennett St	Dawson St	Left	140	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 125,136	$ -
Absolon Street	Dumbleyung	Love St	Driveway	Left	180	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 68,953	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Absolon Street	Dumbleyung	west driveway to park	east driveway to park	Right	50	$ -	$ 31,923	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Campbell Court	Dumbleyung	McIntyre St	Cul-de-sac	Left	90	$ -	$ -	$ 34,476	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Dawson Street	Dumbleyung	Absolon St	Harvey St	Right	110	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 92,703	$ -	$ -	$ -	$ -
Dawson Street	Dumbleyung	Shire driveway	Taylor St	Right	50	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 19,154	$ -	$ -	$ -	$ -	$ -	$ -
Dawson Street	Dumbleyung	Taylor St	McIntyre St	Right	130	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 49,799	$ -	$ -	$ -	$ -	$ -
Dawson Street	Dumbleyung	Taylor St	Catholic Church	Left	30	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 11,492
Harvey Street	Dumbleyung	39 Harvey St	49 Harvey St	Left	100	$ -	$ -	$ -	$ 38,307	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Harvey Street	Dumbleyung	49 Harvey St	Love St	Left	80	$ -	$ -	$ -	$ 30,646	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Harvey Street	Dumbleyung	Love St	Tunney St	Right	230	$ -	$ 88,106	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Johnston Street	Kukerin	Scadden St	Manser St	Right	100	$ -	$ -	$ -	$ -	$ 38,307	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Johnston Street	Kukerin	Manser St	Bath St	Right	120	$ -	$ -	$ 45,968	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Love Street	Dumbleyung	Taylor St	28 Love St	Right	140	$ -	$ -	$ -	$ -	$ -	$ -	$ 53,630	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Manser Street	Kukerin	School	Bennett St	Right	50	$ -	$ -	$ -	$ -	$ -	$ 19,154	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Manser Street	Kukerin	Bennett St	Stubbs St	Right	170	$ -	$ -	$ -	$ -	$ -	$ 65,122	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Manser Street	Kukerin	Bennett St	Stubbs St	Left	150	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 57,461	$ -
Manser Street	Kukerin	Stubbs St	Johnston St	Right	150	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 57,461	$ -	$ -
Manser Street	Kukerin	Stubbs St	Johnston St	Left	130	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 49,799	$ -	$ -
Mcintyre Street	Dumbleyung	Meadow View Ct	Campbell Ct	Right	110	$ -	$ -	$ -	$ -	$ 42,138	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Mcintyre Street	Dumbleyung	Bennett St	Dawson St	Left	180	$ 68,953	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Mcintyre Street	Dumbleyung	Bennett St	Dawson St	Right	170	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 65,122
Scadden Street	Kukerin	55 Scadden St	Bennett St	Right	70	$ -	$ -	$ 26,815	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Scadden Street	Kukerin	Bennett St	Stubbs St	Right	180	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 68,953	$ -	$ -
Scadden Street	Kukerin	21 Scadden St	Johnston St	Right	50	$ -	$ -	$ -	$ 38,307	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Scadden Street	Kukerin	Johnston St	13 Scadden St	Right	20	$ 15,323	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Scadden Street	Kukerin	13 Scadden St	Collier St	Right	150	$ 57,461	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Stubbs Street	Kukerin	Scadden St	Community Hub	Left	10	$ -	$ 7,661	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Stubbs Street	Kukerin	Community Hub	Manser St	Left	90	$ -	$ -	$ -	$ -	$ -	$ -	$ 34,476	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Stubbs Street	Kukerin	Manser St	Bath St	Right	120	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 45,968	$ -	$ -	$ -
Taylor Street	Dumbleyung	14 Taylor St	Bennett St	Right	200	$ -	$ -	$ -	$ -	$ -	$ 76,614	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Taylor Street	Dumbleyung	17 Taylor St	Bennett St	Left	150	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 57,461	$ -	$ -	$ -	$ -	$ -
Taylor Street	Dumbleyung	Bennett St	Dawson St	Left	190	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 72,783	$ -	$ -	$ -
Taylor Street	Dumbleyung	Bennett St	Dawson St	Right	180	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 68,953	$ -	$ -	$ -
Taylor Street	Dumbleyung	Dawson St	Love St	Left	200	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 76,614	$ -	$ -	$ -	$ -
Taylor Street	Dumbleyung	Love St	Tunney St	Right	240	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 91,937
Bennett Street	Dumbleyung	Bartram Rd	Absolon St	Left	96	$ 32,023	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Absolon Street	Dumbleyung	62 Absolon St	66 Absolon St	Left	62	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 21,301	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Harvey Street	Dumbleyung	4 Harvey St	Bennett St	Right	174	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 59,781	$ -	$ -	$ -	$ -	$ -	$ -
Dawson Street	Dumbleyung	McIntyre St	Bairstow St	Left	172	$ -	$ -	$ 59,094	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Love Street	Dumbleyung	28 Love St	Bairstow St	Right	114	$ -	$ -	$ -	$ -	$ -	$ -	$ 39,167	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Love Street	Dumbleyung	Absolon St	Harvey St	Right	130	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 44,664	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Love Street	Dumbleyung	Harvey St	Taylor St	Right	110	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 37,793	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Taylor Street	Dumbleyung	11 Taylor St	17 Taylor St	Left	68	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 23,363	$ -	$ -	$ -	$ -	$ -
Tunney Street	Dumbleyung	Taylor St	Bairstow St	Right	253	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 86,923	$ -	$ -	$ -	$ -	$ -	$ -
Manser Street	Kukerin	End of Street	existing path	Right	33	$ -	$ -	$ -	$ -	$ -	$ 11,338	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bennett Street	Kukerin	Manser St	Bath St	Right	113	$ -	$ 38,823	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bath Street	Kukerin	Johnston St	8 Bath St	Left	110	$ -	$ -	$ -	$ -	$ 37,793	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bath Street	Kukerin	Stubbs St	Johnston St	Left	168	$ -	$ -	$ -	$ -	$ 57,720	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
					Totals	$ 173,759	$ 166,513	$ 166,354	$ 173,914	$ 175,957	$ 172,227	$ 177,072	$ 172,711	$ 165,858	$ 168,929	$ 169,317	$ 187,704	$ 176,212	$ 182,597	$ 187,704

It can be seen from the above table that the average spend over the first 15 years is $174,000 per year, as opposed to the annual average of $87,000 over the 60 years of the program. The estimated annual allocations differs to the average amount which reflects actual footpath sections targeted for renewal during each given year. This is due to the aim to replace existing concrete and asphalt footpaths with stamped concrete in the first 15 years.

APPENDIX 6 FAIR VALUE ASSESSMENT AND ASSET RATIOS

The following table shows the results of the models fair value assessments for the current and recommended budget.

Most importantly, this shows that the important reporting ratios required by State Government will be lifted from 10% to 118% for the Sustainability Index and from 8% to 100% for the Asset Renewal Funding Ratio.

	CURRENT BUDGET 23/24	RECOMMENDED BUDGET
Current Replacement Cost	$ 3,542,581	$ 3,542,581
Depreciated Replacement Cost (Fair Value)	$ 1,988,325	$ 1,988,325
Accumulated Depreciation	$ 1,554,256	$ 1,554,256
Annual Depreciation	$ 73,105	$ 73,105
Average Age Of Network (Years)	21	21
Average Remaining Life Of Network	27	Indefinite
Asset Consumption Ratio	56%	73%
Sustainability Index	10%	118%
Asset Renewal Funding Ratio	8%	100%