

AGENDA

FOR ASSET MANAGEMENT SUB COMMITTEE MEETING TO BE HELD ON

15 MARCH 2022 AT 6.30 PM

IN WITTBER & DR RUBY DAVY ROOMS, SALISBURY COMMUNITY HUB, 34 CHURCH STREET, SALISBURY

MEMBERS Cr B Brug (Chairman)

Mayor G Aldridge (ex officio)

Cr L Braun

Deputy Mayor, Cr C Buchanan Cr D Hood (Deputy Chairman)

Cr S Ouk Cr S Reardon

REQUIRED STAFF Chief Executive Officer, Mr J Harry

General Manager City Infrastructure, Mr J Devine

Manager Governance, Mr R Deco

APOLOGIES

LEAVE OF ABSENCE

PRESENTATION OF MINUTES

Presentation of the Minutes of the Asset Management Sub Committee Meeting held on 08 November 2021.

REPORTS

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OTHER BUSINESS

CLOSE



MINUTES OF ASSET MANAGEMENT SUB COMMITTEE MEETING HELD IN WITTBER & DR RUBY DAVY ROOMS, SALISBURY COMMUNITY HUB, 34 CHURCH STREET, SALISBURY ON

8 NOVEMBER 2021

MEMBERS PRESENT Cr B Brug (Chairman)

Cr L Braun

Deputy Mayor, Cr C Buchanan Cr D Hood (Deputy Chairman)

Cr S Reardon

OBSERVERS General Manager Business Excellence, Mr C Mansueto

General Manager City Development, Mrs M English

General Manager Community Development, Mrs A Pokoney-Cramey

Manager Strategy Development Projects, Mrs S Klein

Team Leader Natural Assets, Mr C Johansen

STAFF Chief Executive Officer, Mr J Harry

Manager Infrastructure Management, MR D Roy

Manager Governance, Mr R Deco

Team Leader Urban Built Assets, Mr J Hosking PA to GM City Infrastructure, Ms H Prasad

The meeting commenced at 6:31pm.

The Chairman welcomed the members, staff and the gallery to the meeting.

APOLOGIES

Apologies were received from Mayor G Aldridge and Cr S Ouk.

LEAVE OF ABSENCE

Nil

PRESENTATION OF MINUTES

Moved Cr L Braun Seconded Cr C Buchanan

The Minutes of the Asset Management Sub Committee Meeting held on 11 October 2021, be taken as read and confirmed.

CARRIED

REPORTS

AMSC1 Future Reports for the Asset Management Sub Committee

Moved Cr C Buchanan Seconded Cr D Hood

That Council:

- 1. Notes the report.
- 2. Authorises staff to remove the future report in relation to Camelot Drive listed as 22/02/2021 AMSC-OB1 Camelot Drive, Paralowie Playspace.

CARRIED

Unanimously

AMSC2 Street Tree Species Palette - Update Report

Moved Cr C Buchanan Seconded Cr L Braun That Council:

1. Notes the report.

CARRIED

MOTIONS ON NOTICE

AMSC-MON1 Motion on Notice: Carlyle Reserve

With leave of the meeting Cr B Brug WITHDREW his MOTION

That Council:

1. Via the Asset Management Sub Committee, be presented with a feasibility report (including funding opportunities and budget implications) on the potential upgrade of Carlyle Reserve Pooraka to a District Level reserve.

OTHER BUSINESS

Nil.

CLOSE

The meeting closed at 6:34pm.

CHAIRMAN	• • • • • • • • • • • • • • • • • • • •	
DATE		

ITEM AMSC1

ASSET MANAGEMENT SUB COMMITTEE

DATE 15 March 2022

HEADING Future Reports for the Asset Management Sub Committee

AUTHOR Heather Prasad, PA to GM City Infrastructure, City Infrastructure

CITY PLAN LINKS 4.2 We deliver quality outcomes that meet the needs of our

community

SUMMARY This item details reports to be presented to the Asset Management

Sub Committee as a result of a previous Council resolution.

RECOMMENDATION

That Council:

1. Notes the report.

ATTACHMENTS

There are no attachments to this report.

1. BACKGROUND

- 1.1 A list of resolutions requiring a future report to Council is presented to each Sub Committee and standing committee for noting.
- 1.2 If reports have been deferred to a subsequent month, this will be indicated, along with a reason for the deferral.

2. CONSULTATION / COMMUNICATION

- 2.1 Internal
 - 2.1.1 Report authors and General Managers.

3. Report

3.1 The following table outlines reports to be presented to the Asset Management Sub Committee as a result of a previous Council resolution:

Meeting -	Heading and Resolution	Officer
Item		
23/03/2020	Levels of Service Options	Michelle English
2.0.4-AMSC2	2. Canopy Cover be considered as part of the	
	Sustainability Strategy, that will be the subject of	
	a report back to this Council in time to be	
	considered in the 2021/22 Budget Cycle.	
Due:	February 2022	
Deferred:	May 2022.	
Reason:	This matter will be addressed in the Sustainability	
	Strategy that will be presented to Council in May	
	2022.	

Meeting - Item	Heading and Resolution	Officer
27/07/2020	Place Activation Strategy Update – Linkages	David Boothway
2.0.2-AMSC2	2. Council notes that a report on the Linkages category of PAS will be presented to the Sub Committee in coming months for consideration. February 2022	2414 255mm
Due:	N/A	
Deferred:	Due to the overview and planning for the review	
Reason:	and adoption of the Strategic Asset Management Plan, a schedule has been created to report to Council on the different Asset Management Plans each month leading up to that report with decisions to be made in relation to Levels of Service etc. This matter will be addressed as part of those reports.	
24/08/2020	Street Tree Asset Management Plan	Jamia Hasking
2.0.2-AMSC2	5. That an updated Street Tree Asset Management Plan be prepared for future presentation to the Asset Management Sub Committee.	Jamie Hosking
Due:	February 2022	
Deferred to:	N/A	
Reason:	Due to the overview and planning for the review and adoption of the Strategic Asset Management Plan, a schedule has been created to report to Council on the different Asset Management Plans each month leading up to that report. The Street Tree Asset Management will be submitted to the Asset Management Sub Committee as part of that schedule.	
21/12/2020	Buildings Asset Management	Peter Rexeis
4.0.2-AMSC2 Due: Deferred to: Reason:	3. The next steps highlighted in section 3.13.1 to 3.13.6 of this report (Asset Management Sub Committee AMSC3 30/11/2020) be implemented and a further report be brought back to the Asset Management Sub Committee upon completion of the next steps 3.13.1 to 3.13.6. February 2022 June 2022 June 2022 3.13.1 to 3.13.3 have been completed. 3.13.4 and 3.13.6 have been included in the review of the Strategic Asset Management Plan. 3.13.5 is underway and will be reported on in June	
22/03/2021	2022. Level of Service - Tree Litter in Private	Craig Johansen
4.0.2-AMSC3	Residences 4. That a report be provided to the Asset Management Sub Committee in 12 months' time summarising the lessons learned from the first year of implementation of the program.	<u> </u>
Due:	May 2022	

Meeting - Item	Heading and Resolution	Officer
22/03/2021	Verge Maintenance Trial and Streetscape	Mark Purdie
4.0.2-AMSC4	Improvement Program 8. A report on the outcomes of the Streetscape Improvement Program be submitted to Council in late 2023 after completion of the two-year trial.	
Due:	October 2023	
23/08/2021	2021/22 Street Tree Renewal Program, Streetscape Renewal Program, Verge Development Program and Verge Maintenance Trial	Jamie Hosking
4.0.3-AMSC3	2. Approves that staff present a draft Resident Verge Incentive Scheme policy to the Asset Management Subcommittee in October 2021.	
Due: Deferred to: Reason:	February 2022 June 2022 The creation of the Resident Verge Incentive Scheme Policy has been delayed to allow staff	
	time to implement requirements of capital works programming and delivery of the current schedule of works.	
25/10/2021	Street Tree Renewal Program 2020/21 & 2021/22	Jamie Hosking
4.0.3-AMSC2	3. Approves the species selection for the 2021/22 Street Tree Program (Appendix D) and that the program proceeds to consultation, including with the Ward Councillors with a further report to be presented by April 2022 on the outcomes of the consultation.	
Due:	April 2022	
25/10/2021 4.0.3-AMSC3	Options and Cost Implications for Potential Amendments to the Play Space Policy 2. Staff report back on appropriate wording and costings to amend existing policy for the inclusion of infant/toddler (Under 3) play element.	Jamie Hosking
Due: Deferred to:	February 2022 April 2022	
Reason:	Staff are currently investigating the cost implications associated with the proposed inclusion of infant and toddler play elements within the existing policy.	
25/10/2021 4.0.3-AMSC- MON1	Motion on Notice: Playspaces Survey 3. Approves that a further report be presented to Council on the selected engagement via the Asset Management Sub Committee within nine months, detailing the outcomes of the engagement, including any recommendations on how the feedback can be incorporated in future play spaces.	Jamie Hosking
Due:	June 2022	

4. CONCLUSION / PROPOSAL

4.1 Future reports for the Asset Management Sub Committee have been reviewed and are presented to Council for noting.

ITEM AMSC2

ASSET MANAGEMENT SUB COMMITTEE

DATE 15 March 2022

PREV REFS AMSC AMSC2 09/08/2021

HEADING Road Surface Treatments - Update

AUTHORS David Boothway, Team Leader Civil & Transport Assets, City

Infrastructure

Jarred Collins, Manager Infrastructure Delivery, City Infrastructure

CITY PLAN LINKS 1.1 Our City is attractive and well maintained

4.2 We deliver quality outcomes that meet the needs of our

community

SUMMARY Council uses a wide range of road renewal treatments to ensure

Council meets its agreed overall average road condition within budget. Lessons have been learnt on improving the engagement with the community during the road works period, and also improving the delivery of innovative treatments by contractors.

RECOMMENDATION

That Council:

- 1. Notes that staff have adjusted the community engagement process to better inform the community on proposed treatments types.
- 2. Notes that the reseal placement techniques for Cape Seal and similar treatments have been modified to achieve better outcomes.
- 3. Notes the rectification works undertaken on Kimba Road and that staff will continue to monitor the road condition over the coming months.

ATTACHMENTS

There are no attachments to this report.

1. BACKGROUND

1.1 At its meeting held on Monday, 23 August 2021 Council considered a report on Road Surface Treatments and resolved that staff:

"provide a further report in 6 months reviewing Cape Seal and Micro surface treated streets."

Resolution Number 1078/2021

1.2 This was following a number of community enquiries regarding the construction techniques used at Fairbanks, and the amount of time it took to embed the stone and reduce the road noise levels. Similarly, in the last year there has been a failure on Kimba Road, using alternative treatments.

At its meeting held on Monday, 24 January 2022 Council resolved:

"That the Urban Services Committee notes the recent road surface issues on Kimba Road, Para Hills and request the General Manager to seek an urgent report from the contractor and advise Council what remedies will be taken to restore the surface of Kimba Road."

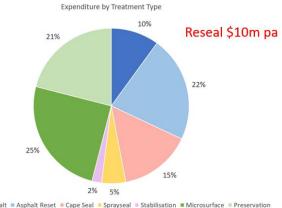
Resolution Number 1218/2022

CONSULTATION / COMMUNICATION 2.

- 2.1 Internal
 - 2.1.1 Infrastructure Management
 - 2.1.2 Infrastructure Delivery
 - 2.1.3 Field Services
- 2.2 External
 - 2.2.1 Fulton Hogan
 - 2.2.2 **Pavement Asset Solutions**

3. REPORT

- 3.1 Council manages over 823km of roads.
- 3.2 Each year Council reseals around 7 to 10% of its roads to preserve their integrity and structure, equating to 80 to 100 streets. This helps prevent roads from collapsing due to factors such as water penetration through cracks and it rejuvenates/replaces brittle road surfaces.
- The number of requests Council receives each year related to the road reseal 3.3 program is in the order of 20 requests with 5 to 10 of them being complaints. Given the size of the program and the number of homes impacted, this is a very small number.
- Council uses a range of reseal treatments that match the function of the road, traffic volumes and maintenance requirements.
- The range of treatment types has enabled council to reduce the reseal program 3.5 budget from \$14M to a current \$10M pa; a saving of around \$4M per year as compared with traditional construction methods.
- 3.6 The following graph shows the split in expenditure of the different treatment types. Over 30% of the expenditure is asphalt.



■ Deeplift Asphalt ■ Asphalt Reset ■ Cape Seal ■ Sprayseal ■ Stabilisation ■ Microsurface ■ Preservation

Treatment Types

- 3.7 Road treatments include Asphalt, Microsurface, Cape Seal, Spray Seal, Preservations and Crack Sealing. Each treatment has different structural properties, strengths, and flexibility.
- 3.8 Information regarding the different types of treatments was presented to Council in August 2021.
- 3.9 The approximate annual spend is outlined below for each treatment type:
 - 3.9.1 Spray Seal (\$420k/year)
 - 3.9.2 Micro-surfacing (\$2.0M/year)
 - 3.9.3 Preservations / Crack-Sealing (\$1.7M/year)
 - 3.9.4 Cape Seals (\$1.2M/year)
 - 3.9.5 Asphalt Overlays (\$1.8M/year)
 - 3.9.6 Asphalt Reconstruction (\$0.8M/year)
- 3.10 Road surfaces are a mix of stone and oil derivatives. The oil loses its volatile organic compounds (VOCs) overtime. This makes the road surface brittle and cracks start to form as the road is unable to flex under the load of the traffic.
- 3.11 For lightly traffic roads the structural layers of old roads are often in very good condition but the surface may show signs of brittleness and cracking. This is the perfect opportunity to use an innovative reseal treatment to create a flexible seal on the road surface. Treatments like Cape Seal, Spray Seals, and Microsurface Seals are common and the selection depends on other factors such as if minor rutting needs correction.
- 3.12 Asphalt treatments are common where full shape correction is needed or high load impact and high shear forces are experienced, such as on busy bus routes.

Lessons Learnt

- 3.13 Council is constantly refining its treatment application criteria and decision-making criteria to ensure a best value solution over the long term while meeting community expectations, and to hold the overall condition of the network at an agreed condition rating.
- 3.14 Council is also regularly refining its community engagement and feedback on roadworks. For example the recent engagement processes for works at Mawson Boulevard and Lavender Road have shown a positive response from the community when compared with Fairbanks Drive by better early engagement and education of the Community, primarily surrounding construction techniques and clear time frames for completion of the works.



Nightworks on Lavender Road – Laying Ha-Telite as part of renewal treatment

Fairbanks Drive

- 3.15 Fairbanks Road had a Cape Seal treatment completed in 2021. After this work Councillors received a small number of enquiries from residents related to the works. This feedback was mainly related to the noise level of the new surface treatment, specifically the difference between the mid blocks and the roundabouts (where asphalt treatment was used due to traffic load).
- 3.16 Road noise levels during the embedment period only increased by 7 to 8 decibels.
- 3.17 From an engineering perspective the increased noise level of the surface was expected, and known to reduce significantly over a 3 to 6 month period to a level consistent with asphalt roads.
- 3.18 The lessons learnt at Fairbanks Drive are as follows:
 - 3.18.1 Ensure the community had a better understanding of the multiple layer works of a Cape Seal treatment and the bedding in period, explaining carefully that noise levels of the new surface will be higher than the previous road surface, but that this will revert to normal levels over a 3 to 6 month period.
 - 3.18.2 Use of pneumatic rollers to pre-roll the road before allowing traffic on the renewed surface.
 - 3.18.3 More consideration will be given at T- junctions such as at Fairbanks Drive and Niven Road. (The shear forces generated by breaking and turning traffic, especially during hot summer days, are showing signs of stripping and binder bleeding on the road surface).
 - 3.18.4 It was observed that Council should have used 7mm stone rather than 10mm stone, which has been now revised in the specification for future roads.
 - 3.18.5 It is also noted that the use of smaller stones in the final layer, will further reduce the noise impacts for the residents in the initial phase.

Kimba Road

- 3.19 On Friday 31 December 2021 staff were advised of a road failure on Kimba Road Para Hills. Staff contacted the Contractor advising that there were issues with the road due to binder bleeding and/or flushing.
- 3.20 The Contractor, on the same day, deployed a water cart to reduce the pavement temperatures and provided traffic control to Kimba Road to assist and enable local residents to avoid affected areas.
- 3.21 With high temperatures forecast a water cart and traffic control was again deployed to Kimba Road Tuesday 11 January 2022.
- 3.22 On Wednesday 12 January 2022, a 5mm sealing aggregate was applied during high temperatures to the affected areas on Kimba Road restoring the road surface and alleviating the bleeding/flushing, in addition aftercare traffic control signage installed.
- 3.23 This was further followed up on the 21 January 2022, with the 5mm stone adhering to the binder and providing the surface treatment expected from the seal. Any additional loose stone was swept from the road and aftercare signage was removed.

- 3.24 A report has been provided from the Contractor to Staff, Outlining the failure of the road and the corrective actions listed above which were taken to restore the road surface.
- 3.25 The bleeding/flushing occurred after four consecutive days of greater than 35 degrees.
- 3.26 A combination of factors resulted in the partial surface failure to Kimba Road:
 - 3.26.1 Timing of the works May 2021, with lower temperatures experienced the cutter oil used, within the binder took longer than expected to evaporate.
 - 3.26.2 Micro surfacing treatment July 2021, this treatment trapped some of the cutter oil in the binder not giving enough time to evaporate.
 - 3.26.3 Hot Weather December 2021, consecutive hot days allowed the cutter oil to start evaporating through the micro surfacing layer, which softens the binder, and in addition with vehicle turning movements, in and out of the Hotel and being a bus route facilitated the bleeding/flushing of the binder through the surface.
- 3.27 Binder thickness With the cross fall of the road it can create a thicker layer of binder, which adds additional time for the cutter oil to evaporate, this is consistent with the location of the failures on Kimba Road. The Contractor has committed to weekly reviews of Kimba Road, and since the rectification works no further issues have been reported.

4. **CONCLUSION / PROPOSAL**

- 4.1 Council uses multiple road renewal treatment types in its road renewal program to ensure fit-for-purpose road renewals take place to ensure road conditions meet the agreed average condition value for the network, while providing a saving of up to \$4m pa.
- 4.2 It is noted that of the 100 streets that have Cape Seal or Microsurfacing in the last 3 years, there have been minimal complaints, with no long term concerns about these treatments, based on a CRM (16pa) review of the last 3 years.
- 4.3 The results of the review indicate that there is no need to change the techniques, of Cape Sealing & Microsurfacing, but rather the need to improve Community Engagement and education, with minor modifications (reduction in stone size for the final layer) in the use of these techniques.

ITEM AMSC3

ASSET MANAGEMENT SUB COMMITTEE

DATE 15 March 2022

HEADING Strategic Asset Management Plan - Reporting Schedule

AUTHOR Dameon Roy, Manager Infrastructure Management, City

Infrastructure

CITY PLAN LINKS 4.2 We deliver quality outcomes that meet the needs of our community

4.4 We plan effectively to address community needs and identify

new opportunities

SUMMARY This Report follows on from the Presentation to Council at the

Weekend Workshop on the current proposed interim Strategic Asset Management Plan (SAMP), which aligns to the Long-Term Financial Plan (LTFP). It gives an outline of how the key Asset Classes will be reviewed and the timetable for the review, with a

view to approving a SAMP in early 2023.

RECOMMENDATION

That Council:

1. Notes the proposed timetable for the revised Strategic Asset Management Plan and 2 Stage reporting process for key asset classes, with a view to considering a revised Strategic Asset Management Plan in early 2023.

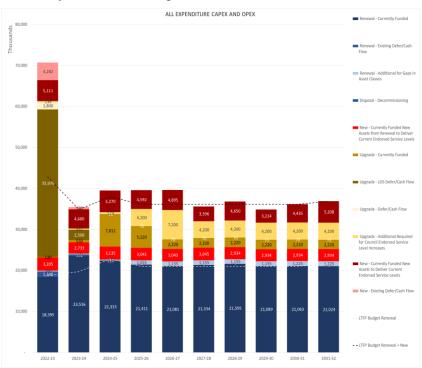
ATTACHMENTS

There are no attachments to this report.

1. BACKGROUND

- 1.1 Council has a Strategic Asset Management Plan (SAMP) that ensures service continuity including renewal, upgrade and at times new funding which reflects the costs of providing and maintaining services (through assets) to the endorsed or targeted levels of service. The SAMP is one of Council's strategic documents, which includes the Long Term Financial Plan (LTFP) and City Plan Documents, required under Section 122 (E) of the *Local Government Act 1999*.
- 1.2 The SAMP allows Council to consider what expenditure it has to make to manage assets to the desired levels of service which feed into the LTFP and in particular the total revenue (rates) that needs to be received by Council to maintain and renew assets to deliver services that meet the community's expectations.
- 1.3 Where levels of service are significantly increased for renewal of existing assets, i.e. they are replaced more regularly and/or with more elements, (for example, universal access for local playspaces) Council can either increase revenue to fund the increase in levels of services, and/or reduce other assets levels of service to fund increases.
- 1.4 In the short term another option is to not replace/ renew assets when they are due, however this builds a backlog of renewal and may create an increase in maintenance costs due to older assets.

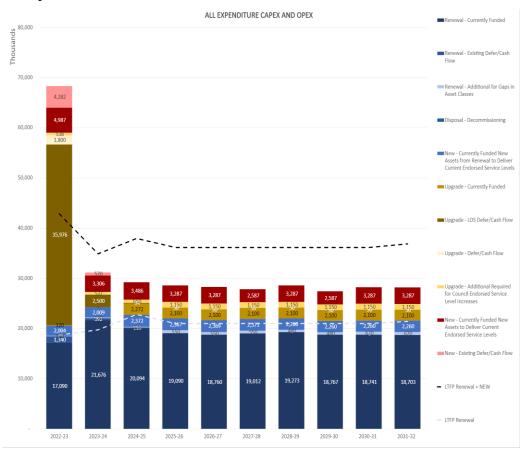
- 1.5 In the last 2-year COVID period, these changes in levels of service have not been included in a revised SAMP, but generally incorporated in the Budget Bids for 2020/21, 2021/22 and 2022/23, with the overall picture made more difficult by the escalation of projects, and subsequent escalation in costs due to industry pressures, through the COVID period.
- 1.6 Asset Managers have looked to deliver agreed levels of service through the Capital Works Program and in particularly the 2022/23 Budget Bid process, but in order to do so, there has had to be adjustments to the programs to ensure that the LTFP is sustainable.
- 1.7 In the short term (2022/23) this has been primarily achieved in the Renewal Program by allowing a backlog of work in future years, rather than reducing any levels of service. For example, playgrounds has moved from 6 playgrounds currently, back to 3 playgrounds per year, effectively meaning that the age at replacement of playgrounds will increase. Similarly, with respect to roads, this has meant that the overall average condition of the local road network has been allowed to be reduced further, to make savings to support other asset classes.
- 1.8 As previously mentioned, due to the long term nature of most council assets, building a backlog by reducing renewal programs is acceptable for a short term. However, this backlog cannot be allowed to grow over the medium term, and needs to be addressed either by increasing funding to that program, or reducing the targeted level of service.
- 1.9 The following graph shows the overview of the capital spend over the next 10 years, based on service continuity and future programs delivered at the current rate of projects. In summary, it shows that, at the current endorsed levels of service, Council *had no capacity to deliver any new projects, based on the LTFP*. That is the financial forecasts in the LTFP are fully used to cover service continuity at the current agreed service levels.



Graph 1 - Service continuity based on delivery of the same programs at agreed service levels.

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1.10 Graph 2 shows the revised SAMP based on reduction in programs to deliver Current Endorsed Service Continuity which includes decreases in expenditure based on reductions in the pace of renewal of some assets, which is discussed in the report below.



Graph 2 - Interim SAMP based on revised programs to ensure a sustainable LTFP.

- 1.11 As noted, Graph 2 assumes in the short term that there is an increase in age before replacement of some asset classes, or the creation of a backlog of assets that will not be replaced at the agreed end of life, or the condition of some assets will be allowed to deteriorate further than previously expected.
- 1.12 This means that the current Interim SAMP needs to be reviewed to revise expenditure across the Renewal Program to ensure Council can sustainably afford to maintain their current assets and services at agreed and/or improved or reduced service levels and still allow for future new projects, particularly outlined in the 2035 City Plan.
- 1.13 This report provides:
 - 1.13.1 A methodology of review through the Council of key asset classes based on a two-stage approach:
 - 1.15.1.1 the first report based on a breakdown of each relevant asset class, and a proposed set of criteria to consider levels of service options and associated financial forecasts; and

- 1.15.1.2 the second report explaining the range of options considered with associated costs, and seeking confirmation for endorsement of the preferred option for that asset class.
- 1.15.2 A proposed timeframe to review the key Asset Classes, with a revised SAMP, for public consultation to be approved in early 2023.

2 CITY PLAN CRITICAL ACTION

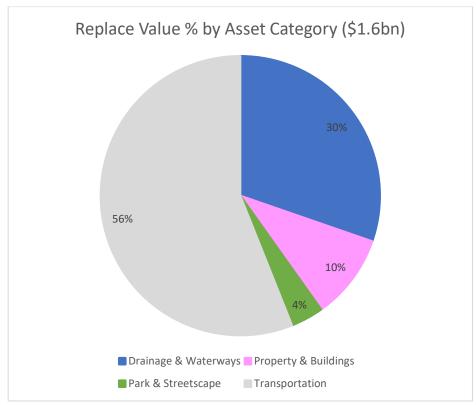
2.1 The review of the SAMP is critical to enabling the Council to deliver on the 2035 City Plan Strategies.

3 CONSULTATION / COMMUNICATION

- 3.1 Internal
 - 3.1.1 Asset Managers & associated service providers
- 3.2 External
 - 3.2.1 Nil

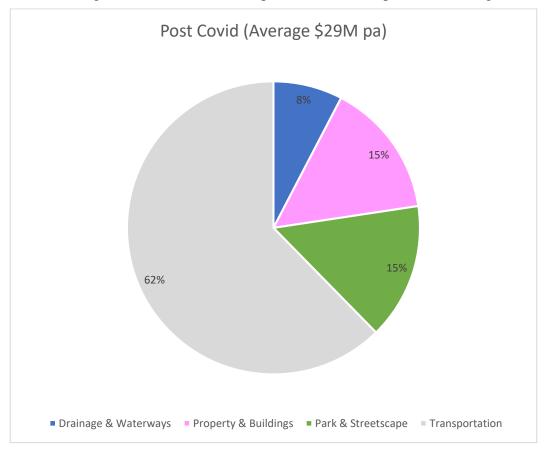
4 REPORT

- 4.1 The SAMP is the mechanism for Council to undertake a review of levels of service and the effect on the revenue requirements to maintain the \$1.6 Billion of **existing** assets and services for the City.
- 4.2 The SAMP has a twenty-year per-view, with a detailed focus on the next 10-year Service Continuity Program.
- 4.3 The assets are broken up into the following classes:



Graph 3 – Replacement value of Council's assets by percentage

4.4 The following is the overall renewal expenditure in the Capital Works Program:



Graph 4 – Current service continuity expenditure by percentage

- 4.5 Over the last two to three years Council has utilitised its existing financial capacity to increase the renewal/upgrade by \$7M across the renewal program.
- 4.6 What this has meant is that the increased service continuity increases, (levels of service and program spend), approved through discussions over the last 3 years with Council, particularly through the Asset Management Sub Committee, has been included in the Capital Program without a detailed consideration of the long-term financial sustainability, when considering the total value of the increased levels of service across all the asset classes.
- 4.7 The SAMP is the mechanism for Council to undertake this review in total across the whole asset portfolio. This review will be undertaken over the next 12 months, including a review of key individual asset classes which includes:

Asset Class	% of Asset Base
Roads	40%
Drainage	30%
Buildings	10%
Playspaces	7.5%

Asset Class	% of Asset Base
Natural Assets	2.5%
Urban Assets	5%
Bridges	5%

- 4.8 As noted previously the Interim SAMP has assumed that there is an increase in age before replacement of some asset classes (local playgrounds), the creation of a backlog of assets that will not be replaced at the agreed end of life (lower profile buildings), or the condition of some assets will be allowed to deteriorate further than previously expected before renewal or replacement (local roads). This has enabled the Renewal Program to be reduced to fund \$7M of new projects in alignment with the LTFP.
- 4.9 The Interim SAMP, which has informed the 2022/23 Budget Bids, to be approved in May, is acceptable, as it currently stands, in the short term. However it needs to be reviewed to revise expenditure across the Renewal Program to ensure Council can sustainably afford to maintain their current assets and services at agreed and/or improved or reduced service levels and still allow for future new projects, particularly outlined in the 2035 City Plan.
- 4.10 A methodology of review, through the Council of key asset classes is proposed to be based on a two-stage approach:
 - 4.10.1 The first report will inform the Council of the existing endorsed or historical levels of service and associated cost drivers with respect to these levels of service and recommend a breakdown of each asset class, to enable clear decision making.
 - 4.10.2 The second report will be providing options considered for proposed service levels and associated budget implications particularly for the LTFP. This report will make recommendations to Council for endorsement on the levels of service for each of the key asset classes and associated renewal budgets.
- 4.11 This will be summarised in the SAMP for approval as part of the 2023/24 Strategic Papers.
- 4.12 Levels of service are constantly changing based on community expectations, however a decision in one asset class area may have direct ramifications on renewal costs in another area.
- 4.13 The discussion within each asset class, as it has been over the last two years, can often be very complex. For example, in playspaces, the inclusion of rubber softfall, irrigation and additional access requirements has significantly increased the cost of local playspaces, both from replacement and maintenance perspectives.

4.14 A proposed timeframe to review the key asset classes, with a revised SAMP to be approved by Council in early 2023 for public consultation as set out below:

Asset Management Improvement Plan Timetable & 2 Stage Reporting Process				
March	Road 1		Building 1	
April		Drainage 1		Playspace 1
Мау	Submission of Interim SAM	IP for Approval as part of	the LTFP, Budget & Const	ultation Process
June	Road 2	Natural 1		Urban Minor 1
July		Drainage 2	Building 2	
August	Natural 2	Playspaces 2	Bridges 1	Urban Minor 2
September October - December	Presentation of SAMP summary changes, to inform 2023/24 Budget Bids Preparation of revised SAMP, public brochure for consultation and Budget Bids for 2023/24			
February – June 2023	Approval of SAMP by New Council including public consultation			

4.15 The information gained through this program will be used to inform the Budget Bid development for 2023/24, and inform the revised SAMP to be finalised as part of the 2023/24 strategic documents with the new Council.

5. CONCLUSION / PROPOSAL

- 5.1 The existing SAMP was endorsed in 2015, meaning that a new SAMP is overdue.
- 5.2 Due to the changes in levels of service an Interim SAMP is being developed to ensure the consistency with the LTFP, however there is significant slowing of programs, with the lives of some assets, increasing and the condition before replacement reducing, which needs to be weighed carefully with the community expectation and long-term future expenditure by the Council. This is a short term solution.
- 5.3 This Interim SAMP is expected to be presented to Council in May 2022 for endorsement.
- 5.4 The program as outlined above, reports on key assets via a two stage reporting process that will enable Council to make careful informed decisions around the future levels of service for the revised SAMP, in line with a sustainable LTFP, that will replace the interim SAMP in mid-2023.

ITEM AMSC4

ASSET MANAGEMENT SUB COMMITTEE

DATE 15 March 2022

HEADING Strategic Asset Management Plan - Building Assets

AUTHOR Karen Pepe, Manager Property and Buildings, City Infrastructure

CITY PLAN LINKS 1.1 Our City is attractive and well maintained

3.4 Our urban growth is well planned and our centres are active

4.2 We deliver quality outcomes that meet the needs of our

community

SUMMARY This report provides information on the proposed breakdown of the

types of buildings in the assets portfolio, and the suggested levels of service criteria for discussion with Council. It also highlights the changing community expectations and the need to review levels of service to ensure that the building assets are maintained and renewed in a manner that while meeting the needs of the community is done so in a manner that is consistent with Council's

Long Term Financial Plan (LTFP).

RECOMMENDATION

That Council:

- 1. Adopts the building assets types as outlined below:
 - a. Bespoke (custom made)
 - b. Community Hubs
 - c. Community Centres/Libraries
 - d. Sporting Clubrooms Local
 - e. Sporting Clubrooms District/Regional
 - f. Public Toilets
 - g. Minor Buildings
 - h. Heritage/Historic buildings
- 2. Endorses the following criteria to enable analysis to be undertaken on a range levels of service for buildings:
 - a. New Builds functionality; capacity; inclusiveness; environmental; finishes
 - b. Maintenance levels routine maintenance frequency; planned maintenance (including inspections); reactive intervention levels
- 3. Notes a further report will be presented to Council seeking endorsement of the buildings level of service for the different building types and the respective financial forescasts.

ATTACHMENTS

There are no attachments to this report.

1. BACKGROUND

- 1.1 Section 122 of the Local Government Act outlines the requirements in relation to Council's responsibilities in asset management planning and the adoption of the Strategic Asset Management Plan (SAMP). This includes that the financial projections in a long term financial plan (LTFP) must be consistent with those within the SAMP adopted by Council.
- 1.2 The Buildings Asset Management Plan sets out the proposed management of the building assets providing for both operational and community needs of the City of Salisbury. The Plan specifies the lifecycle requirements for effective management, inspection and replacement of the asset and outlines the financial implications and standards to provide the required levels of service. This information is included in the SAMP which is the overarching plan and provides the strategic, details of all the asset categories, levels of service, financial forecasts and any associated risks.
- 1.3 This report presents the first stage of a methodology of review for the building assets in alignment with the two stage approach which is also being presented to the AMSC in March 2022.
- 1.4 This report provides information on the proposed breakdown of the types of buildings in the assets portfolio, and the suggested levels of service criteria for discussion with Council. The second report will provide a range of Levels of Service and associated financial forecasts and how this will impact the LTFP and seek endorsement of one option.
- 1.5 These building assets directly or indirectly support delivery of services to the community; some of which are leased or used for Council business and have staff located there.

2. CONSULTATION / COMMUNICATION

- 2.1 Internal
 - 2.1.1 City Infrastructure staff
- 2.2 External
 - 2.2.1 Sproutt Engineering Services Pty Ltd

3. REPORT

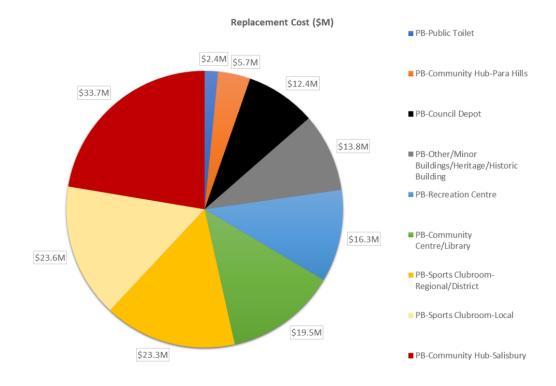
3.1 **Building Assets**

3.1.1 In December 2020 Council had 215 buildings with a value of \$127.7m, in 2022 Council currently has 227 buildings with a value of \$150.7m an increase of 12 buildings and additional value of over \$23M. It does not include the works currently underway such as the upgraded Operations Centre and the new Burton Community Hub.

Page 24 Asset Management Sub Committee Agenda - 15 March 2022 3.1.2 Currently the buildings are assigned a 'type' to better align to the service they provide. This is outlined in Table 1 below which also reports on the replacement value of the buildings portfolio.

Table 1

Hierarchy/Classification	Count	Replacement Cost (\$M)
Community Hub-Salisbury	1	\$33.7M
Sports Clubroom-Local	31	\$23.6M
Sports Clubroom-District	12	\$13.0M
Sports Clubroom-Regional	6	\$10.4M
Community Centre	12	\$17.4M
Recreation Centre	3	\$16.3M
Council Depot/Transfer Station	2	\$12.4M
Heritage/Historic Building	27	\$6.9M
Library	5	\$4.6M
Community Hub-Para Hills	1	\$3.2M
Public Toilets	15	\$2.4M
Other/Minor Buildings	62	\$6.9M
TOTAL	177	\$150.7M



3.1.3 It is being proposed to simplify the building type and group them for the next assessment being undertaken on the levels of service and associated financial forecasts for service continuity. It will better align with the services that are being provided from these buildings, functionality requirements as well as the quality of finishes.

- 3.1.4 It is being proposed to change the building types to the following:
 - **Bespoke** (custom made) these are buildings that are custom made and are designed for a specific requirement. For example the Salisbury Community Hub, Operations Centre & Recreation Centres. Generally they will be one off designs.
 - *Community Hubs* are buildings that offer a wide variety of services and spaces and generally service a district, rather than a local area. For example the Para Hills & Burton Community Hubs.
 - *Community Centres/Libraries* offer specific services and generally service a local area. Example of these buildings are Bagsters & Morella Community Centres, Salisbury West Library.
 - Sporting Clubrooms (Local) are buildings that cater for sports, service the needs of local communities, and are used by clubs for home/away games and training activities. These locations currently are not equipped to hold multifunction sporting and community activities. They are generally located on local road networks and provide basic facilities. For example St Augustines at Wildwood Park & Parafield Gardens Soccer, Sports Club at Parafield Gardens Oval, or North Pines at Andrew Smith Drive Oval.
 - Sporting Clubrooms (*District/Regional*) district level buildings have a catchment area within Council and provides a focus for association competition and generally located on collector or distributor roads. For example Salisbury International Soccer Club at Underdown Park, Sportsmans Association at Salisbury Oval and Salisbury United Soccer Club Inc at Burton Park.
 - **Public Toilets** it is a building with toilet/sink amenities for the general public to use and are located within district/regional facilities. They are standalone buildings.
 - *Minor Buildings* these are buildings that are used for a variety of purposes offering different services or uses, are located within different catchment areas. Examples of these would be sheds/garages and buildings such as the Watershed and the Carisbrooke Nursery.
 - *Heritage/Historic buildings* are building structures that require preservation because of its historical, architectural, cultural, aesthetic or ecological value. It gives people a sense of place and a connection to the past. Examples of these are a RM Williams site at Walkleys Park and the Clock Tower in the CBD.

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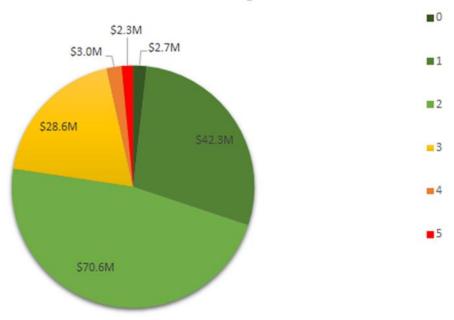
3.2 **Buildings Level of Service**

- 3.2.1 Council's levels of service for buildings is based on the overall condition of the building, fit for purpose requirements (functionality) and maintenance response times.
- 3.2.2 The levels of service can define Council's reputational risk and brand. A satisfactory level of service reduces the possibility for complaints from the community and other stakeholders.

3.2.3 *Condition*:

- 3.2.3.1 The conditions ratings of the building are 0 brand new, 1 very good, 2 good, 3 fair, 4 poor, 5 very poor to 6 which is end of life.
- 3.2.3.2 The Building Audit undertaken in 2020 determined that the majority of building assets range from new (0) to a fair (3) condition. A current condition profile graph appears below.
- 3.2.3.4 A portion of Council's Historical and Minor buildings fall within the poor to very poor range. The remainder are within the fair to new categories which is deemed an acceptable level of service and within industry standards.

Current Condition Profile Buildings



3.2.4 Fit for Purpose:

3.2.4.1 Fit for purpose is defined as the building or facility being well equipped and suited for its designated role or purpose, meeting the needs of the community/stakeholders.

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- 3.2.4.2 Council has also endorsed the Place Activation Strategy which is a core strategy delivering key parts of the City Plan 2035. There are two categories which are relevant to the building assets. These are 'Formal Recreation' and 'Community Facilities (meaning Community Centres, libraries & Civic buildings)'. Council has endorsed the hierarchy and framework of its Formal Recreation (not including the larger recreational facilities) and only the broad hierarchy of its social infrastructure and provision threshold of its Community Facilities. This work still needs to be undertaken.
- 3.2.4.3 Current PAS guidelines and services being provided for those buildings are contributing to a substantial increase in the levels of service and capital costs, especially maintenance operating costs.

3.2.5 Building Maintenance

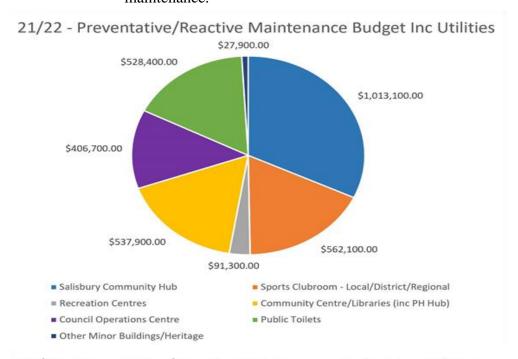
- 3.2.5.1 Council carries out regular maintenance of all its buildings as part of the buildings level of service
- 3.2.5.2 Maintenance falls into two categories:
 - Reactive maintenance is unplanned maintenance and can result from vandalism, break ins, weather events and unforeseen failures. Response times safety/emergency:-<2hrs: urgent:- within 24hrs; general:- within 10 business days; noting this is dependent on availability of materials and the works required. This work is either carried out by internal staff or external contractors.
 - Preventative maintenance is maintenance performed at regular scheduled intervals to prevent or reduce the risk of failure of the buildings components such as programmed general maintenance; cleaning; sharps/sanitary; HVAC maintenance; solar & gutter cleaning; review of asbestos registers, fire & emergency services; lift/auto door maintenance, testing & tagging. This work is undertaken by specialised contractors.
- 3.2.5.3 This ensures the building assets are kept at a fair or better condition and protects the building and the building occupants.
- 3.2.5.4 Ensuring compliance with legislative requirements, i.e. fire safety, access points to the roof, as well as DDA compliance etc.
- 3.2.5.5 Regular building maintenance makes sure that the building and its environment remain healthy, clean and a safe place to occupy. It also helps ensure that the value of the building remains stable or increases while extending the buildings useful life.
- 3.2.5.6 Property & Buildings and Field Services Divisions current Maintenance Operating Budget for all buildings is \$3.168M (including utilities).

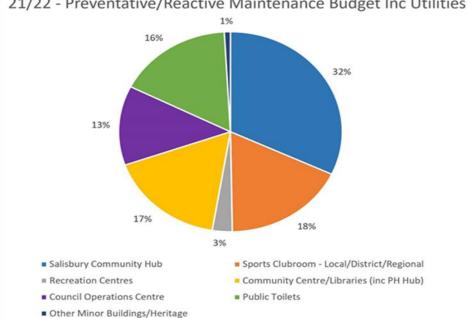
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3.2.5.6.1 Utilities are water, electricity, gas, insurance premiums and total \$608k (only those allocated within the Property & Buildings Division have been included. There are utilities contained in other Division's budgets)

3.2.5.7 Maintenance Operating Budget less utilities is \$2.560M

- \$1.694m is allocated to Property & Buildings for preventative maintenance.
- \$866k is allocated to Field Services for reactive maintenance.





21/22 - Preventative/Reactive Maintenance Budget Inc Utilities

- 3.2.5.8 Additional operating maintenance budgets which are not included due to either not being building asset specific or a condition of use:
 - Security charges \$348,500
 - Graffiti Removal (volunteers/staff) \$394,000
- 3.2.5.9 There are utility charges included in other service delivery line budget areas (Divisions) or paid directly by Lessee if a property is leased.
- 3.2.5.10 Community Centres such as Twelve25, Jack Young Centre, Pine Lakes, Para Hills Community Hub, Para Hills Senior Citizens are operated by staff and are included in the maintenance budget.
- 3.2.5.11 Other Community Centres such as Burton, Bagster, Morella, Salisbury East have committees and Council do not undertake cleaning and only undertake what is required in the service agreements.
- 3.2.5.12 Recreation Centres (Parafield Gardens/Ingle Farm/Golf Course) are managed by Belgravia and they undertake most maintenance as per the agreement.

3.3 Capital Programs

- 3.4.1 Renewal Program (continuity of service)
 - 3.4.1.1 This work is prioritised in accordance with condition audits, compliance with building standards, ongoing function & fit for purpose.
 - 3.4.1.2 Renewal works will normally include painting internally and externally, capital works such as (kitchens and canteens, changerooms and toilets which become compliance requirements under the Building Code of Australia (BCA) and Disability Discrimination Act requirements), roof replacements, air conditioning renewal & office modifications across all buildings.
 - 3.4.1.3 This budget for renewal work is currently \$1.3m per year.

3.4.2 Upgrade Program

- 3.4.2.1 Upgrades are also undertaken as part of the capital program such as extensions to a building for new kitchen facilities/changerooms/umpires changerooms/first aid/DDA requirements and full replacement of roofs.
- 3.4.2.2 Council has had significant expenditure on building renewal & upgrades over the last 10 years.

3.4.3 New Program

- 3.4.3.1 Council has built several new buildings increasing levels of service over the last few years,
- 3.4.3.2 These brand-new building assets ie SCH, PHCC, Bridgestone, Burton Park & Salisbury Recreational Precinct, new public toilets i.e. Salisbury Oval, Fairbanks Reserve involve a significant change of service delivery.

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3.4.3.3 There has been an increase in expenditure for new building asset projects within current allocated programs, or standalone budget bids to provide budgets to allow the projects to proceed.

3.4.4 Other Considerations

- 3.4.4.1 Other impacts to programs are universal access requirements, adequate parking/amenities, security provision and the request for improvements of other assets.
- 3.4.4.2 Standards and specifications have been developed for Council's buildings assets which is included in tender documentation but facilities considered to be bespoke will be on the higher specification range.
- 3.4.4.3 COVID has also impacted on the maintenance and operational costs of buildings.
- 3.4.5 Functionality -Fit for Purpose requirements and community/stakeholder expectations will be one of the largest cost drivers for Council. Council can carry out renewal or upgrades based on legislative requirements which may provide a much better functioning building for its intended purpose but it's unlikely to be a level of service that will meet community/stakeholder expectations. There needs to be a balance on what the community desires and what the Council is able to do.
- 3.4.6 Council's buildings are in good to fair condition which means there are no significant risks; but not consistent with today's community expectations
- 3.4.7 Changes in legislation can make a building non-compliant and to comply can come at a large cost which sometimes cannot always be seen or wanted in the building by the stakeholders.

4 CONCLUSION / PROPOSAL

- 4.1 There is a wide range of types of buildings in Council's asset portfolio. In order to move forward to undertake further analysis of the building assets and develop a future sustainable budget and program, it is being recommended that Council endorses the following building types for further discussion:
 - 4.1.1 Salisbury Community Hub
 - 4.1.2 Para Hills Community Hub
 - 4.1.3 Operations Centre
 - 4.1.4 Recreation Centres
 - 4.1.5 Community Centres/Libraries
 - 4.1.6 Sporting Clubrooms Local/District/Regional
 - 4.1.7 Public Toilets
 - 4.1.8 Other/Minor Buildings/Heritage/Historic buildings
- 4.2 The levels of service are a key cost driver and community expectations are resulting in increases in the level of service which in turn increases budget allocations for renewal (service continuity) and upgrades.

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- 4.3 The Operating costs will vary on design, finishes and usage of the building. This results in a larger operating cost to provide these services.
- 4.4 A further report will be presented to Council seeking endorsement of the buildings level of service for the different building asset types and the respective financial forecasts.

ITEM AMSC5

ASSET MANAGEMENT SUB COMMITTEE

DATE 15 March 2022

HEADING Strategic Asset Management Plan - Road Assets

AUTHOR David Boothway, Team Leader Civil & Transport Assets, City

Infrastructure

CITY PLAN LINKS 1.1 Our City is attractive and well maintained

3.3 Our infrastructure supports investment and business activity

4.2 We deliver quality outcomes that meet the needs of our

community

SUMMARY This is the first report in the two stage service continuity review

process for Roads, outlining the hierarchy and structure and current levels of service for the asset class. It provides commentary on community expectation and on-going improvement of the assets data to ensure the City's road assets are planned, managed and renewed in line with agreed levels of service that are financially

sustainable.

RECOMMENDATION

That Council:

- 1. Adopts the Road Hierarchy for Council Roads as outlined below:
 - High Profile Roads (at key destinations)
 - Industrial Roads
 - Collector/Bus Routes
 - Residential Streets
 - Minor Streets
- 2. Endorses the Pavement Condition Index (PCI), and the Surface Condition Index (SCI), as the key level of service criteria for roads.

ATTACHMENTS

There are no attachments to this report.

1. BACKGROUND

- 1.1 Roads form a key part of Council's asset portfolio, representing some 56%, with an annual expenditure in the order of \$10M.
- 1.2 This report presents the first stage of a methodology of review, for Roads in alignment with the two stage approach approved in March 2022.

1.3 The first report focusses on a proposed hierarchy and structure for roads, and the proposed levels of service, with the second report detailing a range of options for the road asset portfolio across the hierarchy and a range of service levels with associated costs. This report will seek endorsement of one option which will then be included in Council's revised Strategic Asset Management Plan (SAMP) and subsequently the Long Term Financial Plan (LTFP).

2. CITY PLAN CRITICAL ACTION

- 2.1 A welcoming and liveable City.
- 2.2 Enhance the visual appearance and amenity of public space through an expanded verge maintenance program, appropriate lighting and more greening of reserves.
- 2.3 Improve our playgrounds and sporting facilities and cycle paths.
- 2.4 Our City is attractive and well maintained.

3. CONSULTATION / COMMUNICATION

- 3.1 Internal
 - 3.1.1 Community Development
 - 3.1.2 City Infrastructure
 - 3.1.3 City Development
 - 3.1.4 Elected Members
- 3.2 External
 - 3.2.1 Department of Infrastructure and Transport

4. REPORT

Introduction

4.1 The transport Asset Category currently covers the following assets:

Asset Category	Dimension		
Sealed Road	782 km		
Traffic Devices	366 items		
(roundabout, calming device, speed hump)			
Kerb	1,791 km		
Pedestrian Crossing	127 locations		
(Emu, Koala, Wombat, Signals and Refuge)			
Bridges & Major Culverts	244 Bridges & Major		
	Culverts		
Bus Shelters	296 items		
Footpaths and Paths	1108 km		
Car Parks	257000 m ² (229 locations)		

4.2 This report is focused on the Road Assets which makes up 80% of the expenditure of the Transport Asset Management Plan.

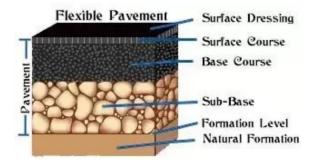
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External Context, Structure, Hierarchy & Existing Levels of Service

- 4.3 There is constant pressure on the roading system to meet the needs of local traffic movements, commuters, freight and public transport.
- 4.4 Some of the roads, mainly the Arterial roads, within Salisbury are owned and maintained by the Department of Infrastructure and Transport. In addition, the buses and train services are also managed by other parties. Council's road network interfaces with all these assets and thus close cooperation is required with external parties to ensure our community receives an integrated road service.

Description of Road Assets

4.5 The Road asset class encompasses both the riding surface and underlying structural layers that provide the strength of the road. The different layers of the road are shown in the figure below. Each layer is designed separately, and together make up the total strength of the road.



- 4.6 A road that carries high volumes of heavy freight will have a deeper and stronger road structure. This is more expensive to build and renew.
- 4.7 The wearing course (top layer) is what people see when they drive on a road. This layer helps provide skid resistance and water proofing, as any water penetrating into the structural layers will weaken a road and cause it to fail prematurely.
- 4.8 Each layer of the road has a different design life as shown in the table below. The top wearing course has the shortest life and this is what is renewed more frequently.
- 4.9 Council has adopted the following design life for its road structures:

Asset Type	Useful Life	Residual
Seal (Asphalt)	25 years	0%
Seal (Asphalt) – reactive soil	20 years	0%
Spray Seal	16 years	0%
Spray Seal – reactive soil	13 years	0%
Micro-surface Treatments – first application	4 years	0%
Micro-surface Treatments – except first	7 years	0%
application		
Base – Local Roads	85 Years	0%
Base – Local Roads Reactive Soil	68 Years	0%
Base – Major Roads	50 Years	0%
Base – Major Roads Reactive Soil	40 Years	0%

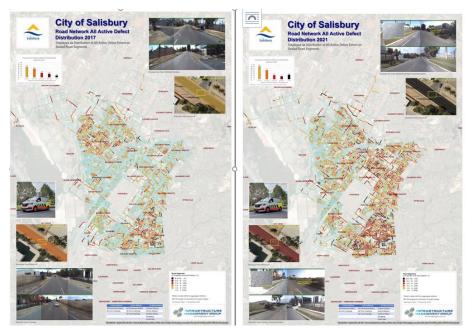
Asset Type	Useful Life	Residual
Sub Base – Local Roads	255 Years	0%
Sub Base – Local Roads Reactive Soil	204 Years	0%
Sub Base – Major Roads	150 Years	0%
Sub Base – Major Roads Reactive Soil	120 Years	0%

Current Levels of Service

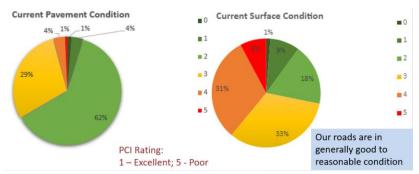
- 4.10 Council has 782km of roads a current estimated value of \$600M.
- 4.11 In 2016 the Council adopted the Pavement Condition Index (PCI) as the way of Measuring Levels of Service for roads throughout the City. Another key measure is the Surface Condition Index (SCI) and this is a subset of the PCI.
- 4.12 The Pavement Condition Index is the combination of a number of key criteria and is used across Australia by road managers. It includes an assessment of:
 - 4.12.1 Roughness
 - 4.12.2 Cracking
 - **4.12.3** Rutting
 - 4.12.4 Surface condition (Smoothness)
 - 4.12.5 Rideability (Bumpiness along a section of road)
- 4.13 This aligns well with what the driver of a road would experience, in other words the worse the roughness, or rideability the higher the PCI. This makes the PCI an excellent Level of Service key performance indicator and has been adopted by Council for many years.
- 4.14 A condition score of 5 represents a road in very poor condition, whilst a score of 1 represents a road in very good condition. A reduction in the average road condition based on Pavement Condition Index (PCI) from 2.4 to 2.8 across all roads was adopted in 2016, based on a Hierarchy of Major, Minor and Collector Roads.
- 4.15 Council undertakes a road condition audit of all its roads every 4 years. The audit reviews both the surface condition and underlying pavement (structural) condition, noting that Surface condition, the number of cracks, ruts, pot holing etc, is a clear sign of what the underlying condition of the pavement is.
- 4.16 The last audit occurred in 2021 and Council is currently analyzing the data to determine which roads require treatment over the next 5 years.
- 4.17 The overall condition of the roads is shown in the figure below. The darker the road lines the more active faults are evident. The left side is the 2017 audit result and the right side the 2021 audit result.

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4.18 It is clear to see that the planned drop in overall road condition from good to fair is working, and with little noticeable reduction in satisfaction from the community with the Customer survey regarding street continuing to remain unchanged at around 7.3-7.5. There is also no noticeable increases in road condition complaints.



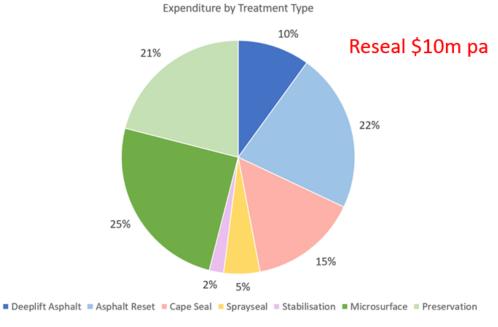
- 4.19 The analysis of the road pavement, as shown in the pie chart below shows that 62% of roads have a good pavement structure (the layers that make up the structure of the road). This is good news as a failed road pavement requires expensive reconstruction.
- 4.20 The surface condition graph shows that 72% of surface condition is 3 or greater. If not treated early enough the poor surface condition will let in water and lead to structure road failure, thus unnecessary road expenditure. This is primarily because the majority of Local Roads only have a very thin seal (30mm) over the top of Granular material. SCI is a subset of PCI.



Current renewal program

- 4.21 The Current Renewal Program is managed through the Road Reseal and Reconstruction Program, with support from the complimentary Programs of the Kerb Renewal Program and Major Traffic Program.
- 4.22 Based on the audit data a 5 year works Program is developed. The Program is made up of Road Seal works and Road Reconstruction works.

- 4.23 The Program optimizes the treatment types to fit the traffic volumes and traffic loads of each road. For example, an industrial road that has reached the end of its useful life will most likely require a deep lift full reconstruction, whereas a local road may need the wearing course to be rejuvenated to keep it flexible and prevent cracking.
- 4.24 Council has been proactive in developing a suite of treatment types to suit the complexity of underlying reactive soils in some areas and suit the need for cost effective water proofing and rejuvenation Programs and the need to be sustainable in reducing heat island effects of suburbs and industrial estates.
- 4.25 The suite of treatment types include Asphalt, Capeseal, Sprayseal, Microsurface, Rejuvenation and Crack sealing. The chart below shows the good spread of expenditure across treatments types, which enable Council to stay with budget and deliver a functional road network.

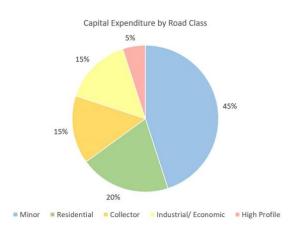


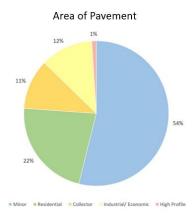
- 4.26 Whilst the overall optimisation has been successful an increase in the number of Road Hierarchies from 3 types to 5, will enable better alignment with Function and Capacity of the different types of Roads in the network.
- 4.27 Currently there is limited scope to determine different levels of service (Pavement Condition Index's) for different Road Hierarchies across the City, but rather the program is considered based on an average PCI across the City as discussed above. It is proposed to consider a range of different levels of service across different road types and present these to council for the preferred approach.

Function/Capacity

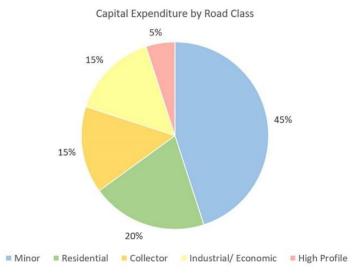
- 4.28 The function of each road is key to determining what treatment is applied, and therefore the expenditure required to renew each road.
- 4.29 Local roads have a lot of flexibility with regards to treatment type as traffic volumes are lower and loads are lighter. (Usually the heaviest vehicle is the waste removal truck). The graphs below show that the majority of our expenditure is on local roads (minor, residential and collector). This is to ensure that the minor, residential roads, which only have 30mm of seal are having that seal reconstructed regularly to prevent water entering into the Pavement.

Page 38 Asset Management Sub Committee Agenda - 15 March 2022 4.30 However, if the roads had a further hierarchy that determined a low vehicle load environment, say minor roads, further reduction in the condition of the seal could be achieved without risking the underlying pavement.





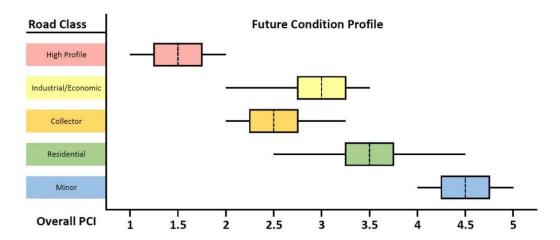
4.31 The graph below shows that Council spends 80% of our renewal Program on residential streets (minor, residential and collector). This highlights the importance of being innovative to reduce costs. By targeting the hierarchy to specific PCI's a better value proposition for the community can be gained in the distribution of the Road Reseal, Reconstruction Program Funding.



Asset Management Improvement Plan & Hierarchy Development

- 4.32 To further improve the value offered to the community it is proposed to move from an average PCI across the City, to individual PCI's profiles based on the hierarchy outlined below:
 - High Profile Roads (at key destinations)
 - Industrial Roads
 - Collector/Bus Routes
 - Residential
 - Minor
- 4.33 This is an increase in the current road hierarchy, which is currently minor, major and collector to the 5 mentioned above.

4.34 What this will allow Council to do is create new PCI profiles for each of the hierarchies. A hypothetical profile demonstrating this is shown below:



4.35 Given the adoption of different PCI for different Hierarchies of Road this would also allow Council to use different Renewal Techniques for different Hierarchies. For example for Minor and Residential streets would have non-asphalt treatments, such as microseals, with Asphalt re-sheeting being used in high profile and industrial areas, with a combination of treatments on Collector Roads depending on the volume of traffic and types of loads on those roads.

5. CONCLUSION / PROPOSAL

- 5.1 Roads are a major part of Council's asset portfolio and provide an invaluable service to the community. The Council also invests heavily in its road networks to provide a sustainable service.
- 5.2 There are a number of types of road across the City, each fulfilling a different function. To ensure Council's investment in roads provides the best service offering to the community at a sustainable cost, a range options will be provided for Council consideration in coming months.
- 5.3 A proposed road hierarchy to assist with future Council discussions is outlined below:
 - 5.3.1 High Profile Roads (at key destinations)
 - 5.3.2 Industrial Roads
 - 5.3.3 Collector/Bus Routes
 - 5.3.4 Residential
 - 5.3.5 Minor
- 5.3 Administration will come back to Council with a range of options across the hierarchy of roads to discuss the preferred option from Council.

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