Banyule
City Council

Asset Plan 2025–2035

Banyule Futures

Your Voice
Our Future

Document control

Record Number	D24/272712
Date Created	11 December 2024
Next review date	30 June 2029
Business Unit	Asset Management
Responsible Officer	Greg Gale/ Mohammad Rashid
Date of Approval	Click or tap to enter a date.

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Executive Summary

Introduction

This Asset Plan outlines key elements involved to sustainably and effectively manage Council's infrastructure assets. This Plan is a key element of Council's strategic asset management planning.

The purpose of this plan is to:

- Demonstrate Council's responsibility to manage infrastructure assets;
- Define and articulate how infrastructure assets are managed to achieve the organisation's goals and objectives;
- Understand the current condition of infrastructure assets and how they may look in 10 years;
- Facilitate stakeholder consultation to determine appropriate levels of service;
- Manage risk of premature asset failures;
- Manage assets by optimising lifecycle costs and support long term financial planning;
- Meet Council's obligation to comply with the Local Government Act 2020.

The outcome of this plan will identify future funding requirements for service delivery considering the condition of assets, levels of service to be provided, future demand and risk management.

Asset Portfolio

This plan focused on Council's fixed infrastructure assets (excluding land and trees) of $1,282 million. Six asset categories included in this plan are:

- Roads, including kerb and channel and carparks
- Footpaths
- Bridges, including road and pedestrian bridges
- Stormwater Drainage
- Buildings
- Parks and Open Space (POS)

Community Expectation

Under the Local Government Act 2020, deliberative engagement is required to develop the Asset Plan along with the Council Plan, Financial Plan and to review the Community Vision.

Council worked closely with the Banyule community including the recruitment of a ThinkTank consisting of 55 community members to participate in the deliberative engagement process.

The ThinkTank met four times between July and December 2024 to take a deep dive into Banyule Community Vision, community priorities, concerns and key Council documents. By the end of Session 4, the ThinkTank developed and recommended their priorities and principles to develop Council's key strategic plans including this Asset Plan.

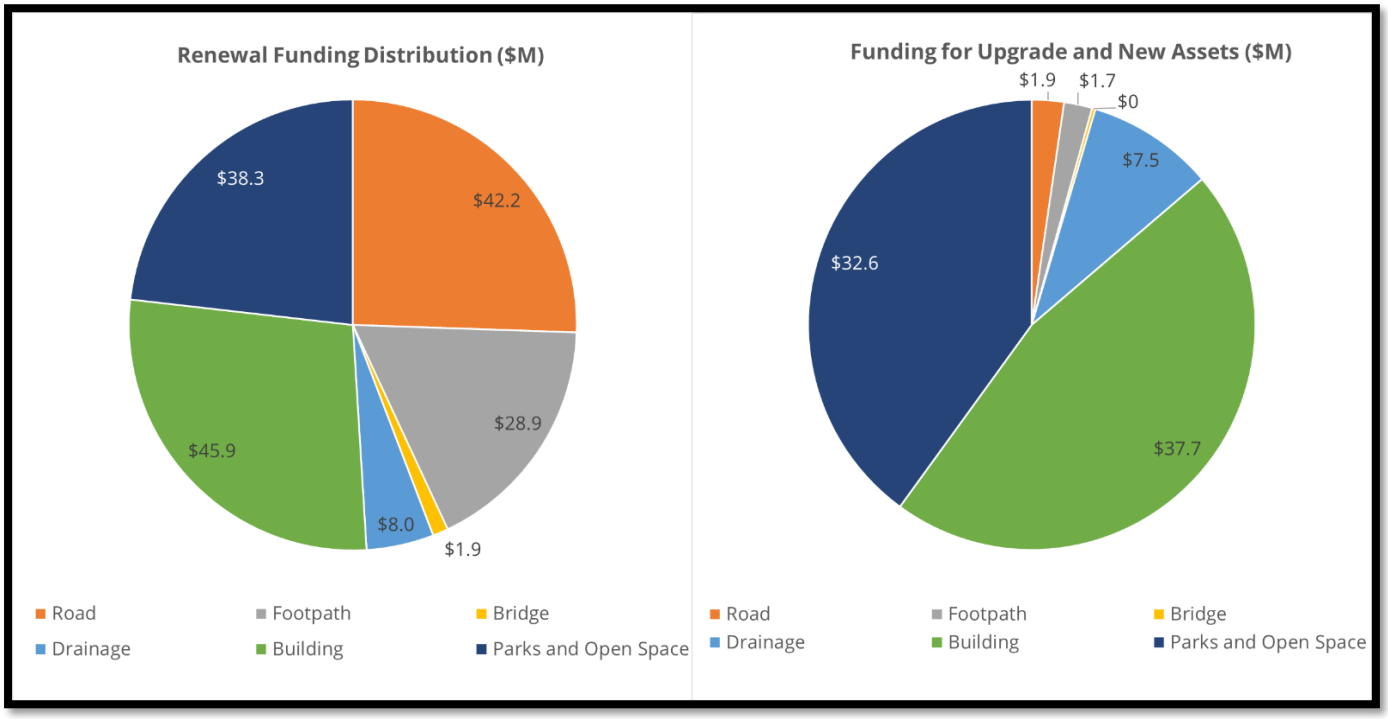
The recommendations to manage community assets and facilities are:

- Prioritise investment in existing assets and facilities to make sure they are safe, accessible to everyone and can be fully utilised.
- Ensure the needs of Banyule's changing and increasing population are considered in planning for infrastructure.
- Ensure equitable distribution and upgrade of assets and facilities when planning.
- Prioritise maintaining existing assets and facilities to make sure they are adaptable and fit for purpose for multiple community needs.

Financial Forecast and Sustainability:

Council's recurrent expenditure is required to continue as it is to keep Council's services operational and safe for the community.

Following figure depicts the proposed capital funding distribution among various asset categories over the next 10 years.



Comments

- Council's renewal budget over the next 10 years is $165.1 million. This is 67 per cent of the total budget, which is consistent with the community feedback to prioritise maintaining existing assets and facilities.
- Building and POS consume 51 per cent of the total renewal allocation. Road and footpath are 26 and 18 per cent respectively.
- Council's total budget for upgrading and creating new assets is $81.5 million over the next 10 years. This is 33 per cent of the total capital budget. This is consistent with the community feedback to ensure the needs of Banyule's changing and increasing population.
- A major part (46 per cent) of upgrade or new assets is allocated towards buildings. Creating new buildings also increases operational and maintenance costs significantly.
- A significant part (40 per cent) of the upgrade and new assets is allocated for POS, which also impacts operational and maintenance costs.
- Road, footpath, bridge and drainage have 14 percent of the upgrade and new assets, which is reasonable as these assets are long life and meeting the current needs.

Renewal Funding Allocated Vs Renewal Funding Required

A comparison between renewal funding allocated and required for different asset categories along with Renewal Gap Ratio is summarised below.

Asset Category	VAGO Financial sustainability indicators		Renewal Modelling Financial Indicator			
	Renewal Gap Ratio	Risk Level	Renewal Funding Allocation, ($M)	Required Renewal Funding ($M)	Renewal Intervention, Condition	Financial Sustainability (%)
Road	0.78	Medium	42.2	33.4	5	126%
Footpath	0.84	Medium	28.9	5.4	4	540%
Bridge	0.88	Medium	1.9	1.4	4	137%
Drainage	0.53	Medium	8	9.9	5	81%
Building	1.66	Low	45.9	43.6	4	105%
Parks and Open Space	1.84	Low	38.3	35.8	5	107%
Total			**165.1**	**129.4**		**128%**

Comments

- Council's overall renewal funding is 28 per cent higher than that required to keep up with asset consumption (depreciation).
- This additional renewal funding is required to renew any premature failures of assets, legislative and safety compliance, and also to implement best practice energy standard to address Banyule's carbon neutrality target 2028.
- Council spending on renewing roads, footpaths, bridges, building and Parks and Open Space (POS) is appropriate. These assets are financially sustainable for the next 10 years.
- Council's renewal funding for drainage asset is low considering the renewal requirement ($9.9M). Drainage has $15.5M for capital works, however half of the amount is estimated as upgrade and new. It leaves only $8M for renewal. The Renewal Gap Ratio (RGR) is 0.53, which also indicates that renewal funding is insufficient. Therefore, drainage renewal funding may require to be increased in the future.
- Council aims to renew footpath and bridges early at condition 4 to ensure these are safe for the community.
- Buildings are also renewed at condition 4 in order to ensure these facilities are fit for purpose and meet expected level of service. Council addresses climate risks in prioritising building renewals and upgrades. For instance:
  - Replacement of gas equipment is prioritised for renewal over existing electric.
  - Upgrading to energy-efficient heating and cooling systems are prioritised to reduce the cost of achieving thermal comfort as a result of climate change.
  - Applying the Sustainable Building Guidelines for any building projects including renewals and upgrades to address carbon neutrality target 2028.
- Roads and drainage assets considered for renewal when they reach at condition 5. These are comparatively low risks facilities and renewing them earlier is not considered a priority.
- Parks and Open Space are estimated to be renewed at condition 5 at this stage, since the data integrity of this asset class is low. It is required to improve the data integrity by undertaking a comprehensive condition audit of this asset.

Recommendations

1. It is recommended to implement the renewal funding proposed by this plan.
2. This includes maintaining the additional renewal funding of $6.3 million from 2026/27 to 2031/32 for roads (including carparks and kerb and channel) proposed by the previous Asset Plan 2022. Current modelling shows carpark condition will deteriorate significantly over the next 10 years based on the current funding. A part of the additional funding ($200k) should be allocated for carparks.
3. Continue flood modelling to identify potential flooding issues throughout the municipality and allocate capital funding to minimise flood impacts.
4. Undertake a condition audit of POS assets which is proposed in draft initiative budget 2026/27 to improve the data integrity and better renewal estimate.
5. Continue implementing actions recommended within the Community Infrastructure Plan to better inform future capital spending needs for buildings.

1. Introduction

This Asset Plan outlines key elements involved to sustainably and effectively manage Council's infrastructure assets. It combines engineering, technical practices and financial management to ensure that services are provided to the community by minimising the lifecycle cost.

This Plan is a key element of Council's strategic asset management planning. The purpose of this plan is to:

- Demonstrate Council's responsibility to manage infrastructure assets;
- Define and articulate how infrastructure assets are managed to achieve the organisation's goals and objectives;
- Understand the current condition of infrastructure assets and how they may look in 10 years;
- Facilitate stakeholder consultation to determine appropriate levels of service;
- Manage risk of asset failure;
- Manage assets by optimising life cycle costs and support long term financial planning;
- Meet Council's obligation to comply with the Local Government Act 2020.

The outcome of this plan will check financial sustainability of Council's infrastructure assets and identify future funding requirements for service delivery considering the following factors:

- Current levels of service and status of assets;
- Predicted level of service and status of the assets in 10 years;
- Future demand for infrastructure;
- Asset failure and risks involved;
- Financial forecasts and funding gaps.

2. Strategic Linkage

Banyule City Council has developed an integrated strategic approach to planning, delivering and reporting to deliver service outcomes for the community and to meet requirements of the new Local Government Act 2020 (the Act).

Integrated planning and reporting aim to ensure we remain an adaptive, responsive and viable local government authority. This is facilitated by understanding community needs and aspirations, setting direction within our resource capability and supporting Council to make informed decisions on behalf of our community. Figure 1 depicts our integrated planning and reporting approach from long term vision to annual actions and reporting.



Figure 1: Integrated Planning and Reporting Approach (Source: Banyule Plan 2025 – 2029)

Striving to achieve long-term social inclusion, economic prosperity and environmental sustainability, Council adopted the Banyule Community Vision 2041. The Vision 2041 statement is:

"We in Banyule are a thriving, sustainable, inclusive and connected community. We are engaged, we belong, and we value and protect our environment."

The Vision includes six priority themes which outline the aspirations and focus of our community for the next 20 years.



This plan intends to demonstrate how Council funds are allocated to manage infrastructure assets to support the Council Vision as guided by the Council Plan. The plan is also part of Council's Asset Planning documents, as shown in Figure 2, to support Council's Asset Management Strategy and Policy, and guide operation plans.



Figure 2: Asset Management Planning Hierarchy

3. Assets and Services Provided

Council manages fixed infrastructure assets (excluding land) of $1.28 billion on behalf of the community. These assets are required to provide agreed services to our diverse communities. Figures 3 and 4 summarises a list of Council's infrastructure assets and their values respectively.

Service refers to the services, programs and activities that support individuals and communities achieve better health, wellbeing, social and economic outcomes. Council has a long history of providing services for community benefit. As our communities evolve, Council's community services will adapt to keep pace. Figure 5 depicts some examples of Council's services, which are provided or supported by infrastructure assets.

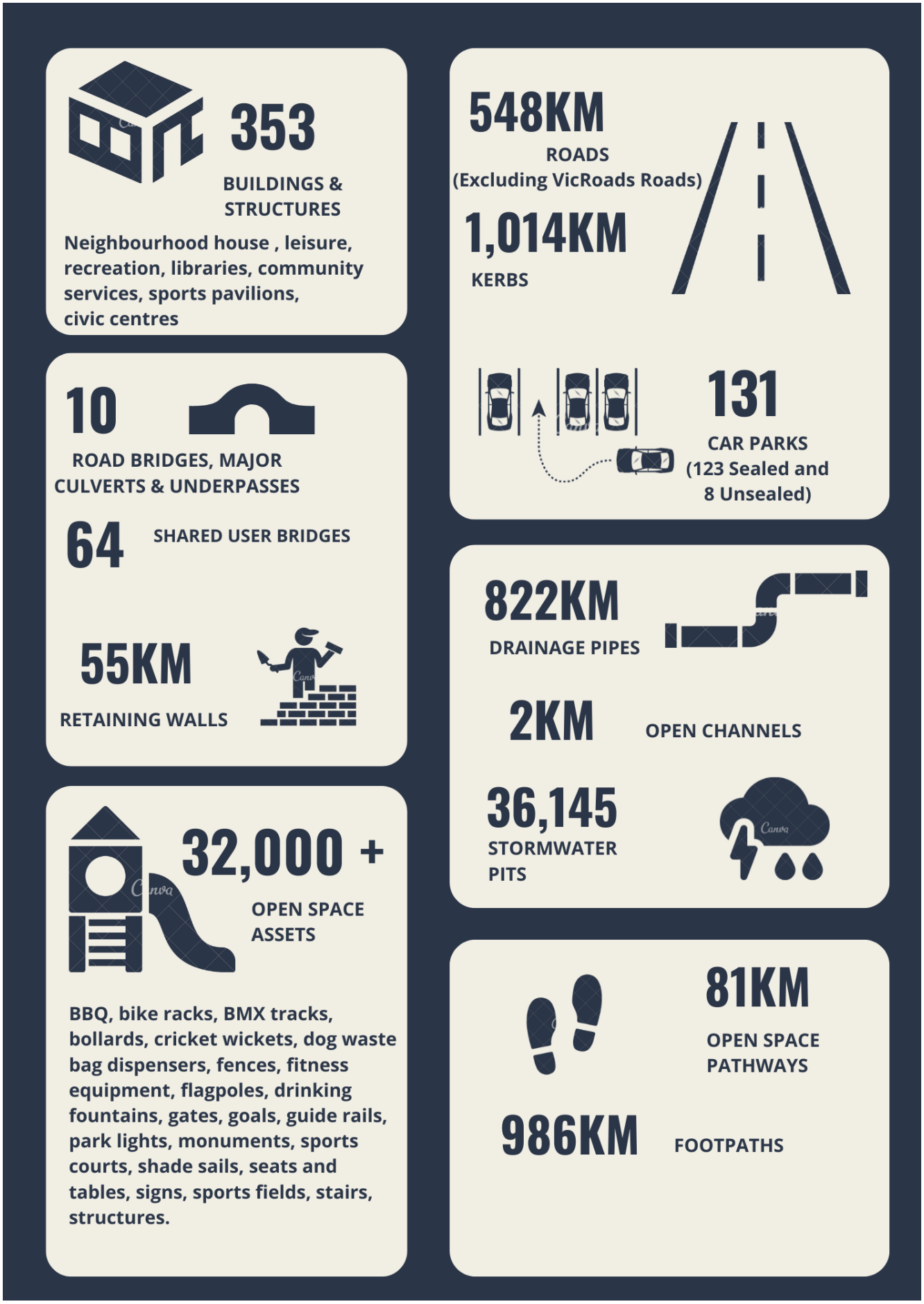


Figure 3: Summary of Council's Assets

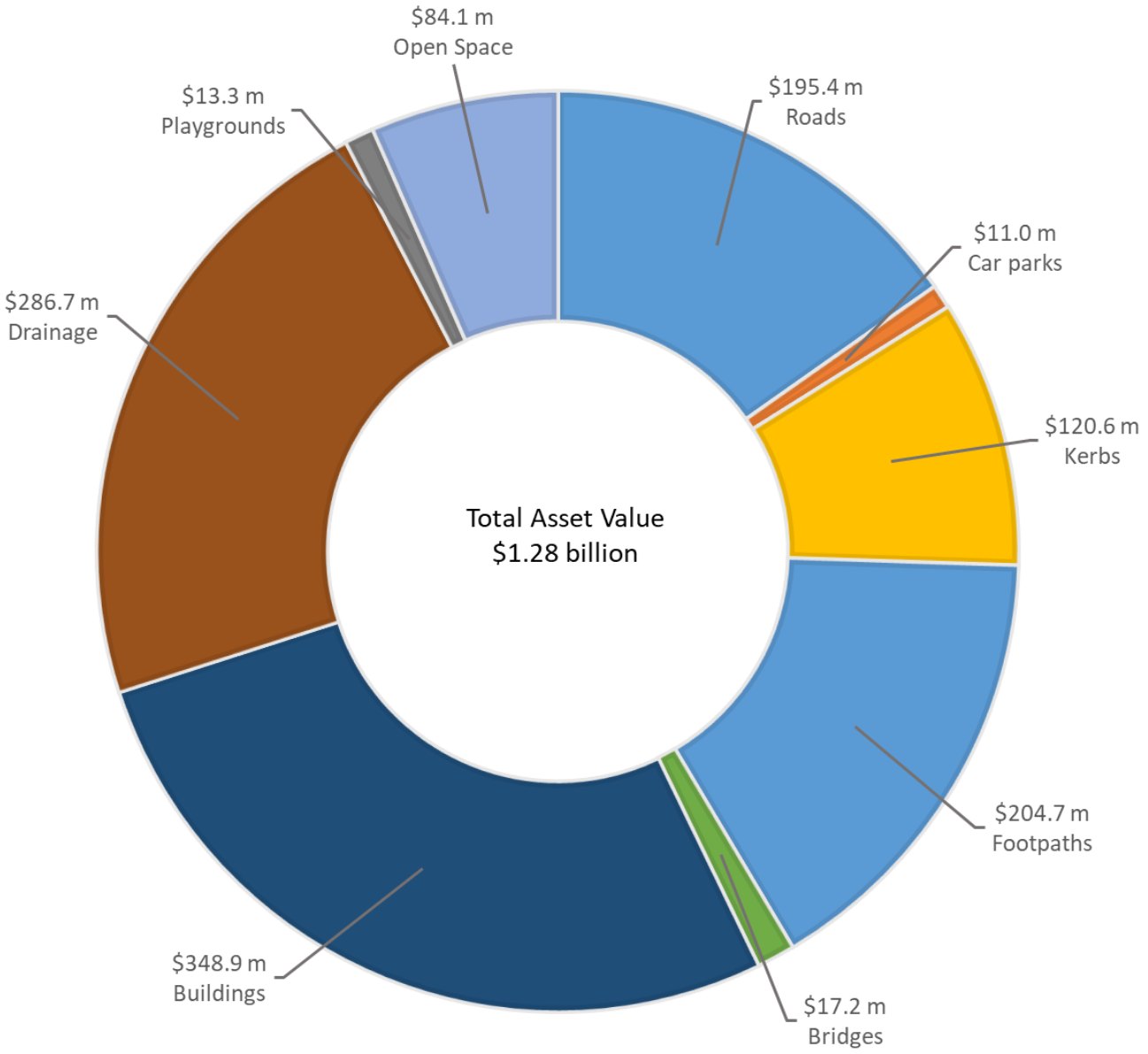


Figure 4: Asset Values



Figure 5: Example of Council's Services

4. Life Cycle Management of Our Assets

Lifecycle management details how the Council creates, operates and manages assets at the agreed levels of service within available resources. Figure 6 shows components of lifecycle management.



Figure 6: Life Cycle Management of Assets

5. State of Assets (Current and Future Outlook)

Council applies a five-point grading system, as summarised in Table 1, to assess the condition of Council's assets. This is consistent with the grading system recommended by the Institute of Public Works Engineering Australasia (IPWEA).

Table 1 | Condition Rating Definition

Condition Grading Scale	Name	Description
1	Very Good	Assets in as new condition
2	Good	Only planned maintenance required
3	Fair	Minor maintenance required plus planned maintenance
4	Poor	Major maintenance required
5	Very Poor	Significant renewal/rehabilitation required

Council carries out asset condition audits regularly and monitors the deterioration of assets over time. Assets at Condition 5, whilst deemed to warrant renewal, continue to be maintained in a safe and functional condition until renewal works are undertaken.

This Plan presents current condition of assets and their predicted condition after 10 years. Council's Asset Management System has been used for predictive modelling. Three scenarios are considered to demonstrate predicted condition and required funding as follows:

Scenario 1 - Condition with the proposed funding level and renewing assets based on levels of service
Scenario 2 - Condition forecast with renewing assets when they reach Condition 4
Scenario 3 - Condition forecast with renewing assets when they reach Condition 5

Scenario 1: Condition with the proposed funding level and renewing assets based on levels of service

This option maintains Council's proposed funding level as proposed in the previous Asset Plan (2022-2032) and will target renewing assets when they reach their level of service. The level of service is defined by the intervention levels for renewal, which is Condition 4 or 5 depending on asset categories. Predicted condition of the assets at the end of the 10 year analysis period is shown in Figures 7, 8 and 9.

More details of the intervention levels and funding scenarios are discussed in Section 8.

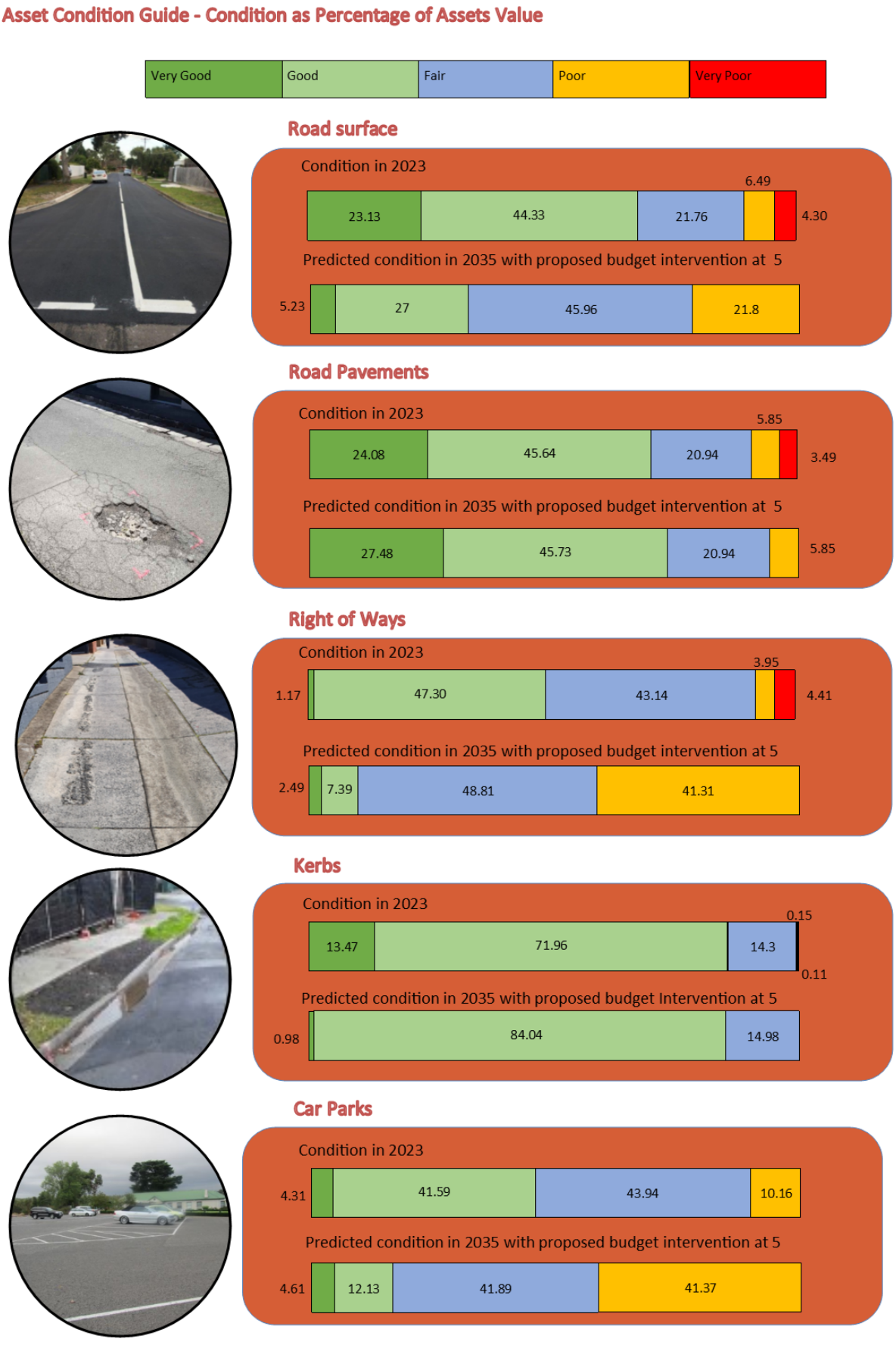


Figure 7: Asset Condition Considering Proposed Funding

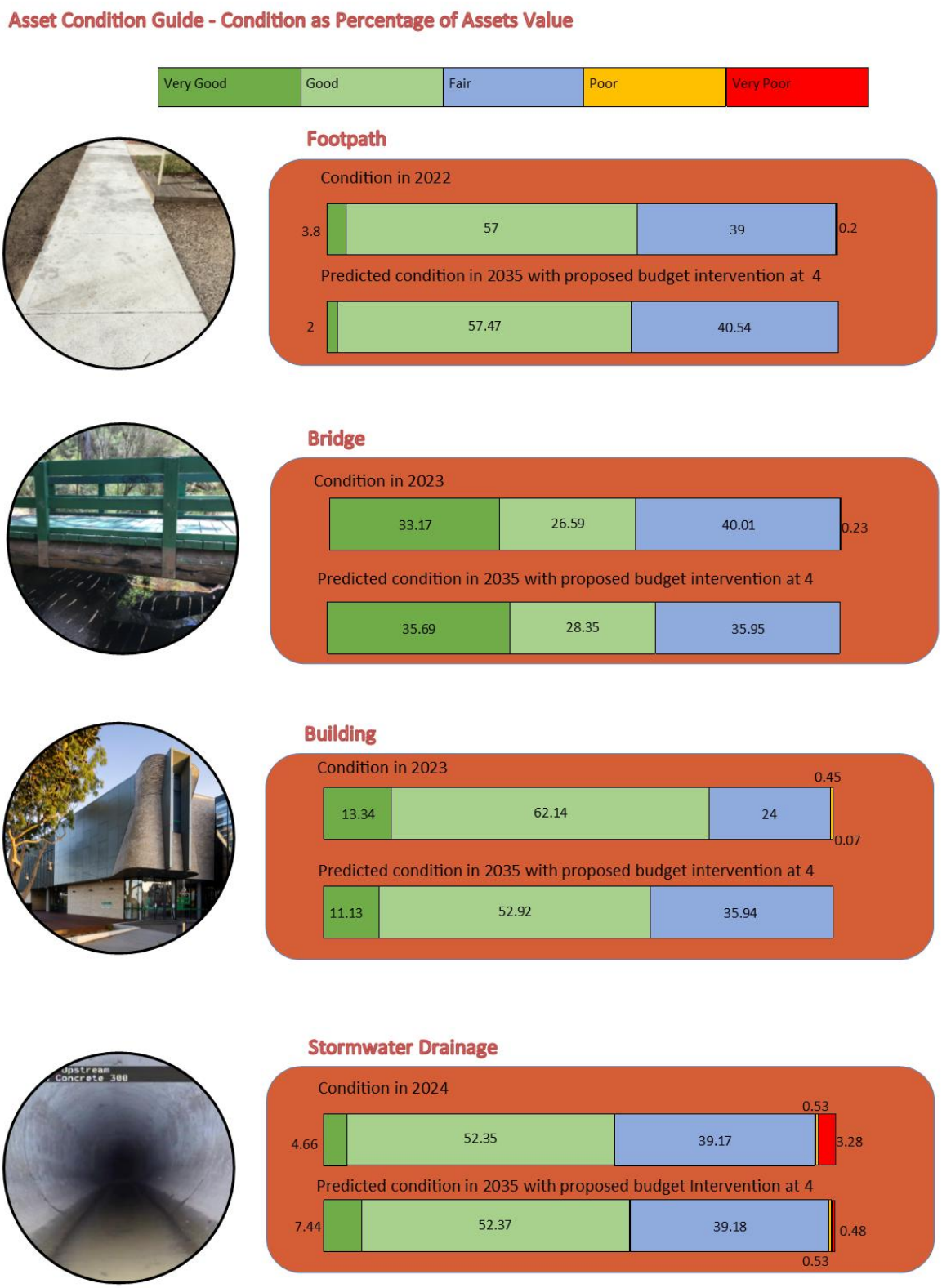


Figure 8: Asset Condition Considering Proposed Funding (Continued)

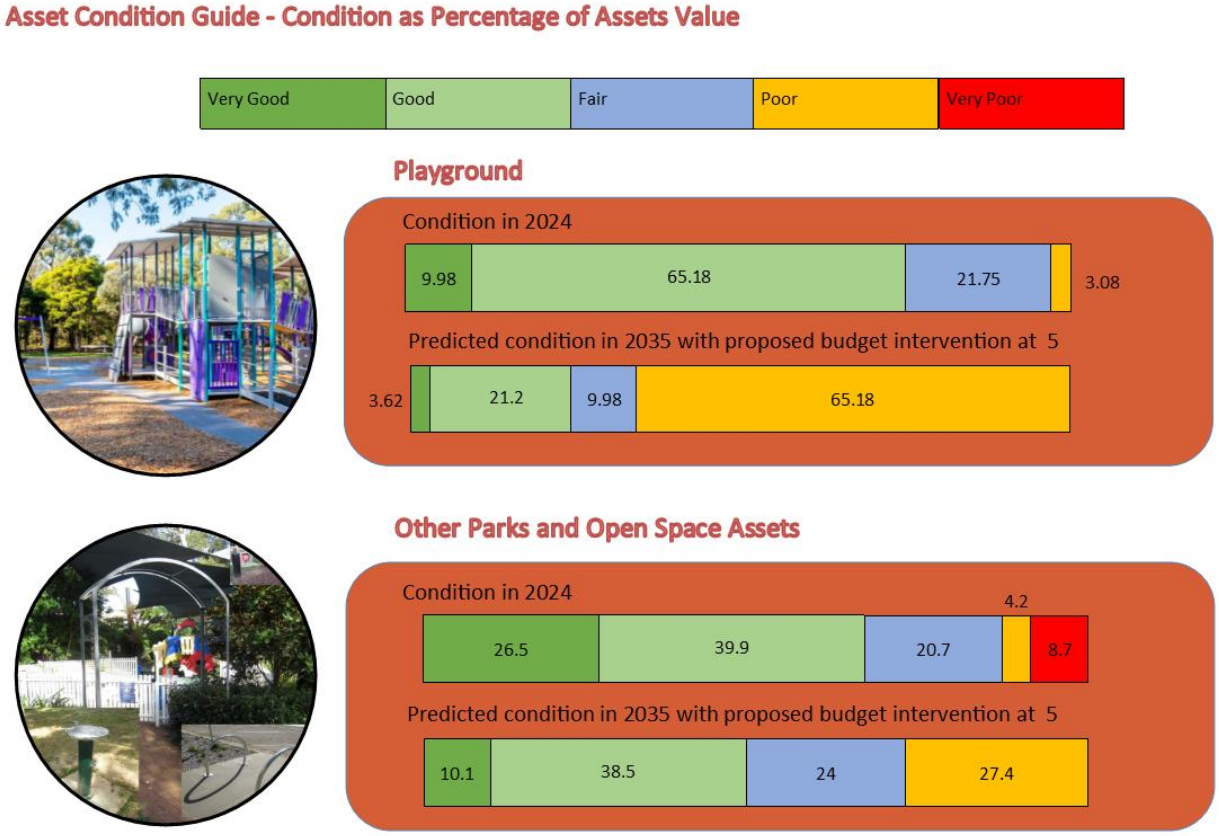


Figure 9: Asset Condition Considering Proposed Funding (Continued)

Scenario 2: Condition forecast, renewing assets when they reach Condition 4

This scenario considers an unconstrained budget and targets renewing assets when they reach Condition 4. It will renew assets as they reach Condition 4 and subsequently will require significantly more funding to achieve. Level of service will improve significantly.

Funding required for this option is discussed in Section 8. Figure 10 presents the condition forecast of assets after 10 years. This option will renew assets at Condition 4, therefore the forecast does not have any assets at Condition 4 or 5.

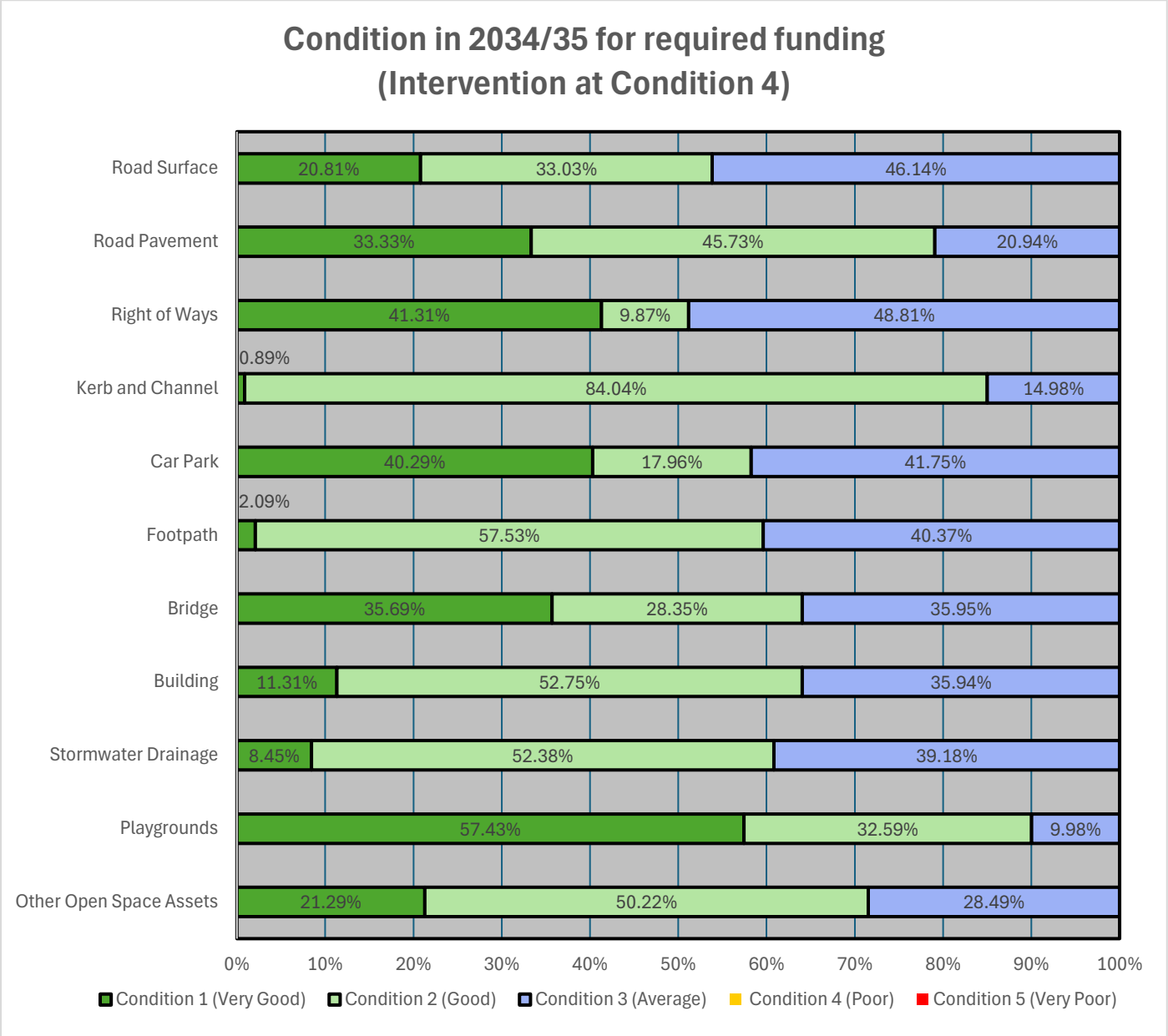


Figure 10: Asset Condition Considering Required Funding and Intervention at Condition 4

Scenario 3: Condition forecast, renewing assets when they reach Condition 5

This scenario considers an unconstrained budget and targets renewing assets when they reach Condition 5. It will renew assets as they reach at Condition 5. Funding required for this option is summarised in Section 8. Figure 11 presents the condition forecast of assets after 10 years. This option does not have any assets at Condition 5.

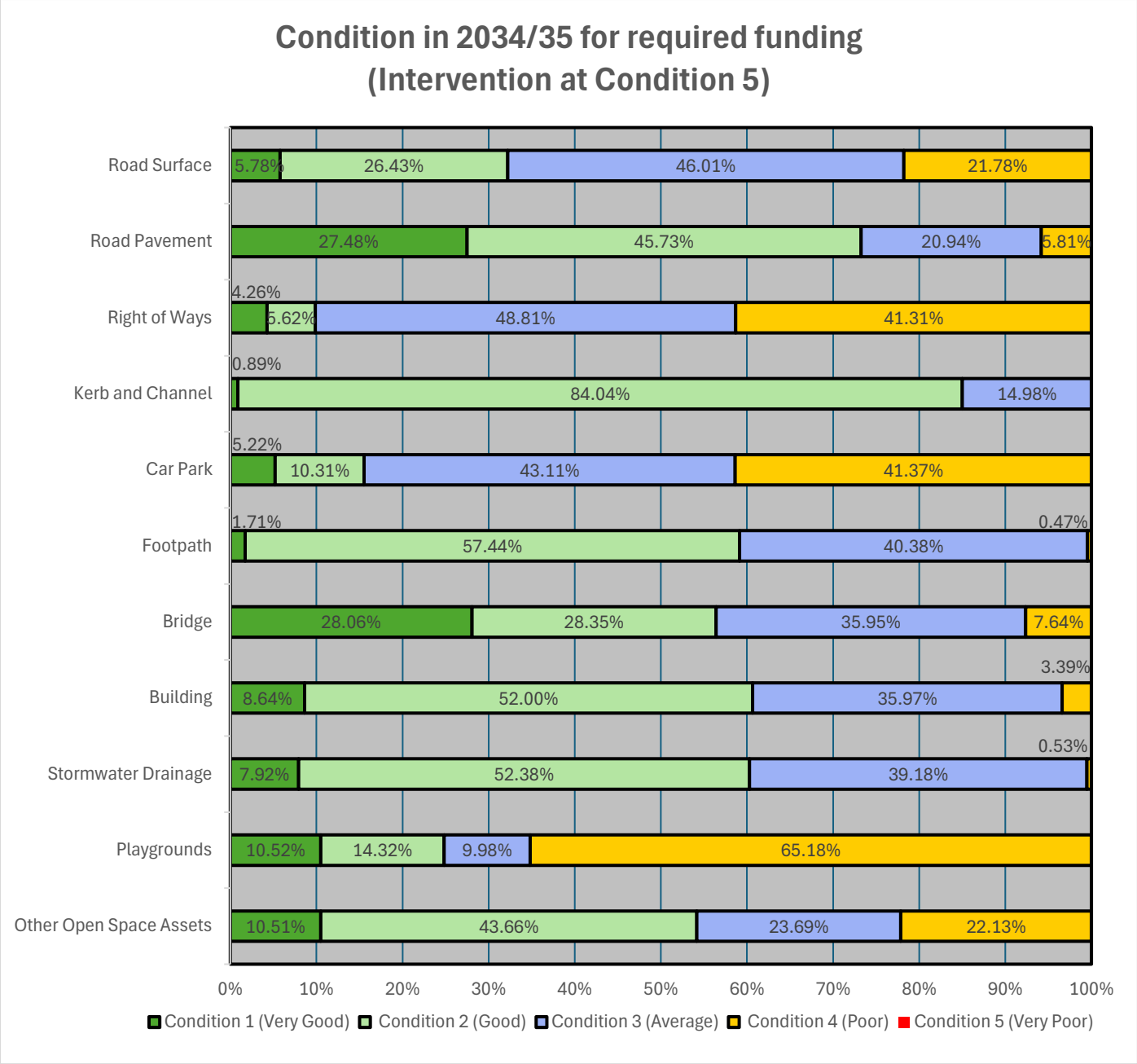


Figure 11: Asset Condition Considering Required Funding and Intervention at Condition 5

6. Challenges

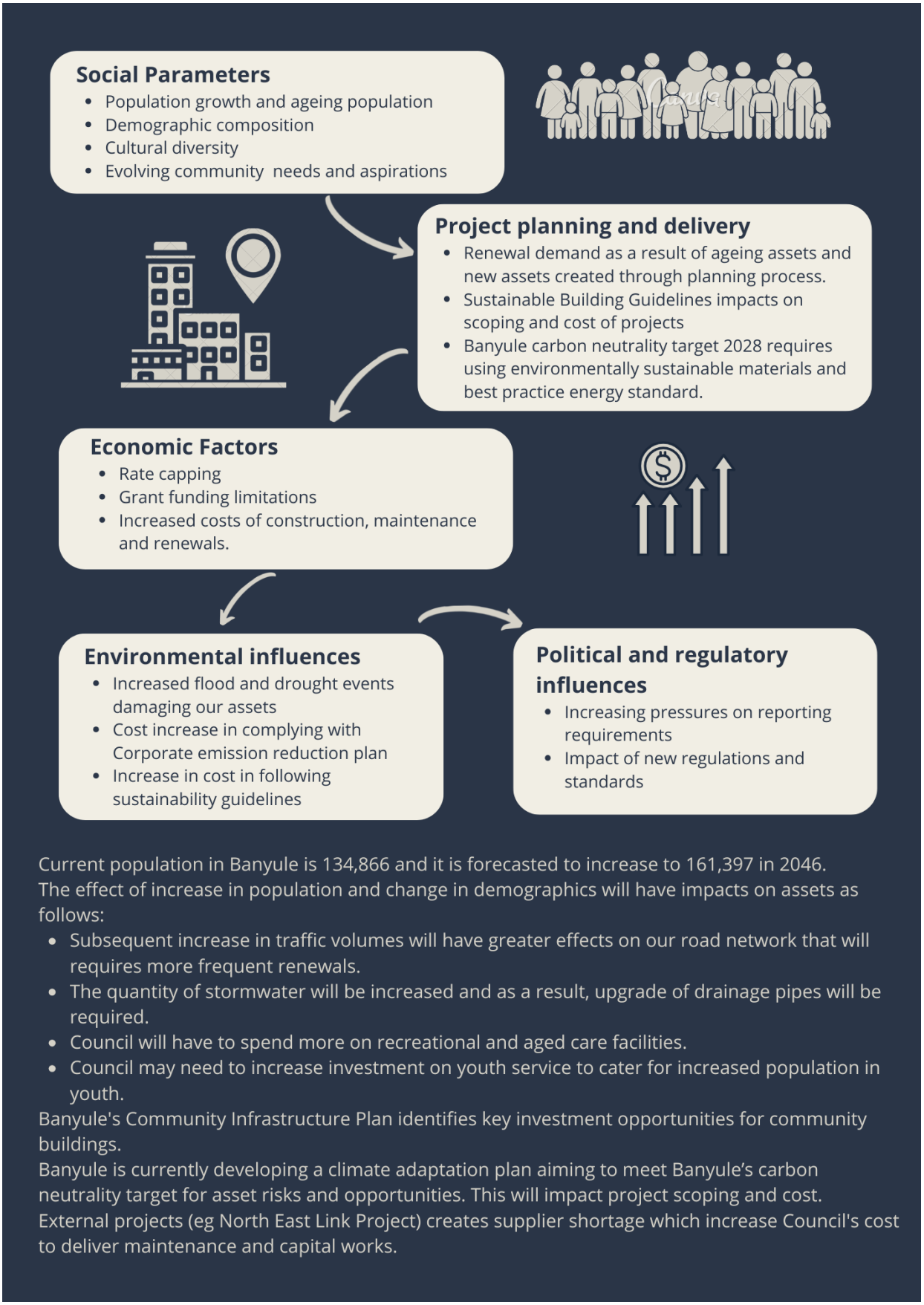


Figure 12: Challenges

7. Strategic Intent for Investment

We plan our investments to minimise the lifecycle cost and to ensure the sustainability of our assets. Our expenditure is categorised based on activity types. Future asset investment needs are predicted based on available data and asset condition. Council's Asset Management System is utilised to predict asset deterioration and renewal required into the future.

7.1 Expenditure Categories

Council's expenditure to manage infrastructure assets is broadly grouped into either recurrent or capital. Figure 13 depicts the details of expenditure categories.

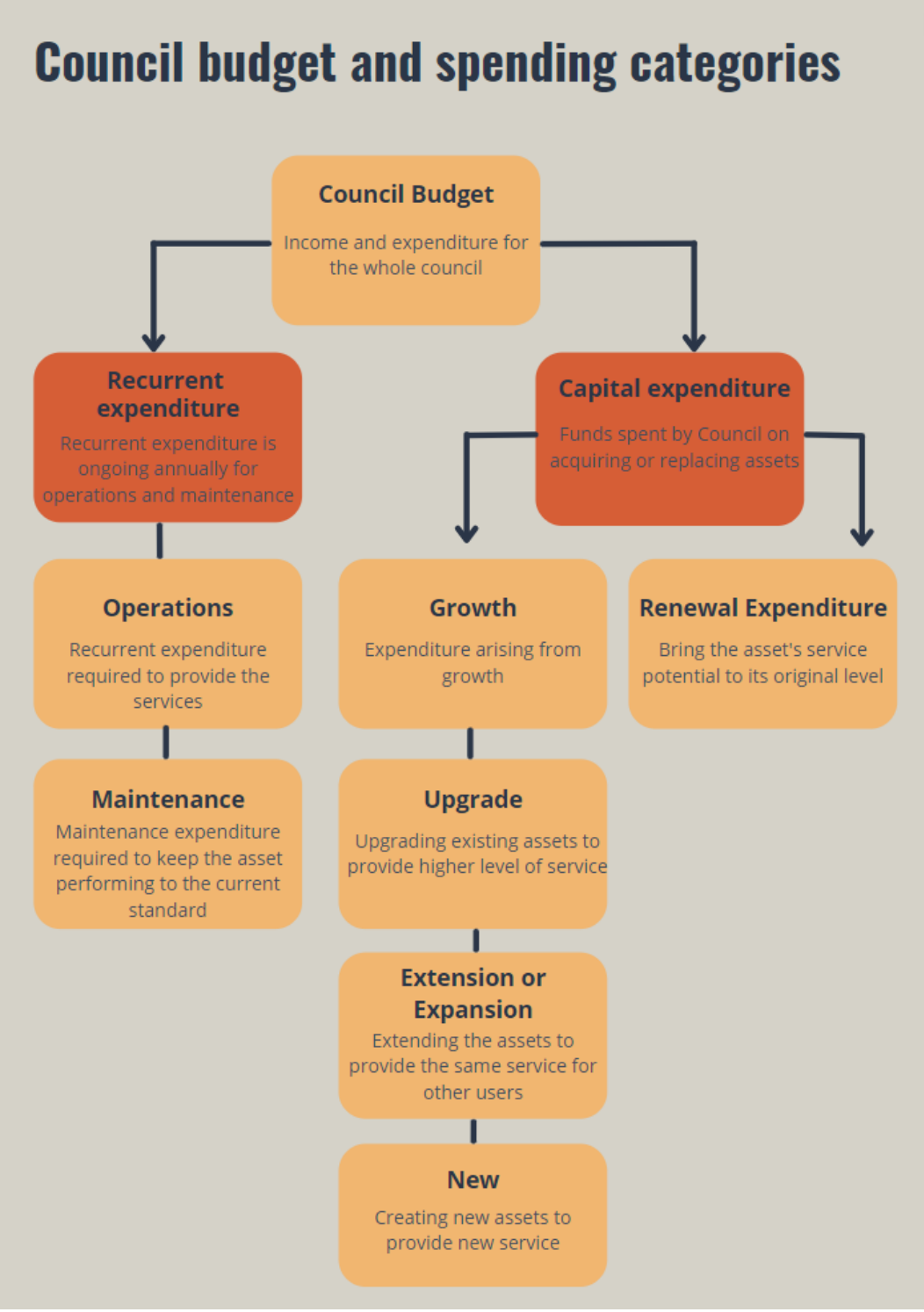


Figure 13: Expenditure Categories

Recurrent Expenditure

Recurrent expenditure includes both operational and maintenance activities to provide services.

Operation is regular activity required to maintain the service level even if the assets are in excellent condition without any defects. For instance, cleaning, street sweeping, utilities costs.

Maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again, e.g. pothole patching and crack sealing of road, footpath wedging and grinding, replacing or repairing small components of buildings. Maintenance actions do not extend the life of assets.

Capital Expenditure

Capital expenditure includes renewal, upgrade, expansion and new assets.

Renewal expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is considered to be an upgrade/expansion or new work expenditure resulting in additional future operations and maintenance costs.

Examples of renewal include:

- Resurfacing roads
- Replacing footpath segments, kerb and channel, bridge components
- Replacing drainage pipes and pits
- Replacing major building components (e.g. roof, kitchen, fit outs, mechanical, any structural components)
- Replacing existing Parks and Open Space assets (e.g. playground, BBQ, seats)

Upgrade is required to provide higher level of service such as sealing an unsealed road, converting open drains to underground drainage.

Expansion is required to extend the capacity of the service. For instance, road widening, installing bigger drainage pipes, extending buildings. They may result from growth, social or environmental needs.

New works are those that create a new asset that did not previously exist.

7.2 Investment Principles

Council's investments on our asset portfolio is guided by level of service, statutory requirements and the Social Infrastructure Framework. The levels of service are defined to respond to our requirement to deliver public value, which is informed by community needs and aspirations and feasible long term financial plan. Levels of service provide the basis for the life cycle management strategies including recurrent and capital expenditure.

Recurrent activities including operation and maintenance are non-discretionary as they are required to keep the service operational and safe. Asset renewals are also non-discretionary, however standard practice is to shift budget from one asset category to another subject to the condition and community need. Any upgrade, expansion and creation of new assets are discretionary items, which should be provided to respond to population growth, demographics, changes in demand, budget constraints, grant opportunities, consolidation or reimaging of assets.

7.3 Community Expectation

Under the Local Government Act 2020, deliberative engagement is required to develop the Council Plan, Asset Plan, Financial Plan and to review the Community Vision.

Council worked closely with the Banyule community including the recruitment of a ThinkTank consisting of 55 community members to participate in the deliberative engagement process.

A broad community engagement program was undertaken between 29 April and 23 June 2024 aimed at harnessing the wisdom of Banyule's diverse community, to inform the ThinkTank and to help work out:

- Council's big picture for the next four years (2025 to 2029) - the Council Plan
- what's needed to improve the community's health and wellbeing - Health and Wellbeing Plan
- how to best manage buildings and assets - the Asset Plan
- how to fund Council's work and what to prioritise - the Long Term Financial Plan.

The ThinkTank met four times between July and December 2024 to take a deep dive into Banyule Community Vision, community priorities, concerns and key Council documents. By the end of Session 4, the ThinkTank developed and recommended their priorities and principles to develop Council's key strategic plans including this Asset Plan.

Priorities and level of comfort received from the Thinktank for Theme 4 (Our valued community assets and facilities) are summarised in Table 2. These priorities are supported by the Thinktank.

Table 2 | Priorities and Level of Comfort Received from the Community Engagement

Priority	Number of Response			
	Very Comfortable	Comfortable	Neutral	Uncomfortable
Prioritise investment in existing assets and facilities to make sure they are safe, accessible to everyone and can be fully utilised	18	6	1	1
Ensure the needs of Banyule's changing and increasing population are considered in planning for infrastructure	11	9	2	3
Ensure equitable distribution and upgrade of assets and facilities when planning	14	12		
Prioritise maintaining existing assets and facilities to make sure they are adaptable and fit for purpose for multiple community needs	16	11	1	

7.4 Climate Change – Risks and Mitigation

Under the Local Government Act 2020, Councils are now required to consider opportunities for carbon emission reductions (climate change mitigation) and plan for projected climate change risks to assets and community (climate adaptation).

Council is committed to achieving carbon neutrality for the organisation by 2028 and for the municipality by 2040. Projects or suppliers addressing climate change as such obtain higher priority scorings in project evaluations.

Buildings contribute a greater level of carbon emissions compared to other asset classes. Recognising this, Council developed the Sustainable Building Guidelines to ensure the delivery of best practice energy standards that align with the organisations carbon neutrality focus. These guidelines are applied to any Council building projects including renewals, maintenance upgrades and new builds, ensuring minimisation of the carbon footprint caused by Council's buildings.

For other infrastructure, Council is also committed to trialling or implementing the best available products to contribute to the carbon neutrality target. For instance, Council trialled crumbed rubber asphalt, modified asphalt made from recycled plastic, glass, toner cartridges, and reclaimed asphalt for road resurfacing.

Council recognises the need to consider climate risk within asset planning, as we build adaptation and resilience to future climate impacts. We know we are experiencing the impacts of climate change today and will continue to do so. Temperature extremes and increasing incidents of floods and bushfires require us to consider how to

build in a way that minimises our exposure and vulnerability to these events. Incorporating guidance from Victorian Climate Resilient Councils, Banyule is currently developing a climate adaptation plan for asset risks and opportunities identified by staff across the organisation. This work will involve in-depth co-design across Council departments and the community to ensure robustness and will include a monitoring and evaluation plan.

Key strategies implemented here will support the Victorian Government's Built Environment Climate Change Adaptation Action Plans.

7.5 Financial Sustainability

Good asset management practice relies on Council being financially sustainable. The Victorian Auditor General Office (VAGO) uses Renewal Gap Ratio (RGR) and Capital Replacement Ratio (CRR) as indicators relating to asset management. The RGR is calculated by comparing renewal and upgrade expenditure to depreciation and the CRR is capital expenditure to depreciation.

Table 3 outlines the criteria VAGO applies to assess each council's financial sustainability risk.

Table 3 | Criteria to Assess Financial Sustainability Risk

Risk	Renewal Gap Ratio	Capital Replacement Ratio
High	Less than 0.5 - Spending on existing assets has not kept pace with consumption of these assets.	Less than 1.0 - Spending on capital works has not kept pace with consumption of assets.
Medium	0.5 to 1.0 - May indicate insufficient spending on renewal of existing assets.	1.0 to 1.5 - May indicate spending on asset renewal is insufficient.
Low	More than 1.0 - Low risk of insufficient spending on assets.	More than 1.5 - Low risk of insufficient spending on asset renewal.

The following section highlights the current capital expenditure for various asset classes for the next 10 years. It also predicts the expenditure required for the same analysis period and identifies gaps.

8. Financial Forecast

8.1 Roads

Assets Included

• Sealed and unsealed road	543 km
• Unsealed Road	5 km
• Kerbs and table drain	1014 km
• Carparks	131 no
• Right of Ways	28 km

Services Provided

- To ensure the connectivity and mobility of the community with a safe road network

Total Replacement Value

- $327.1 M
- 26% of Asset Portfolio of $1,282 M

Financial indicators (10 Years)

• Renewal Gap Ratio	0.78
• Capital Replacement Ratio	0.80
• Risk Level	Medium

Assets Life in Years

• Sealed road pavement	100
• Right of ways	50
• Asphalt surface	25
• Spray seal	15
• Slurry Seal	10
• Kerbs	70

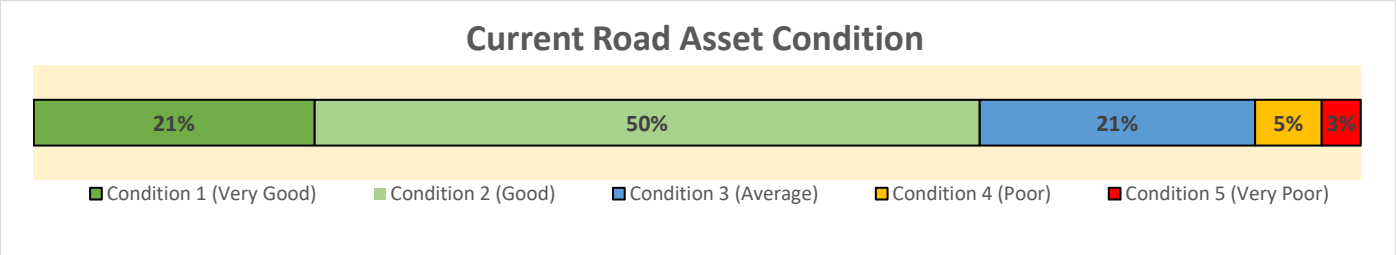
Confidence level of the existing data

• Inventory data	95%
• Condition data	95%

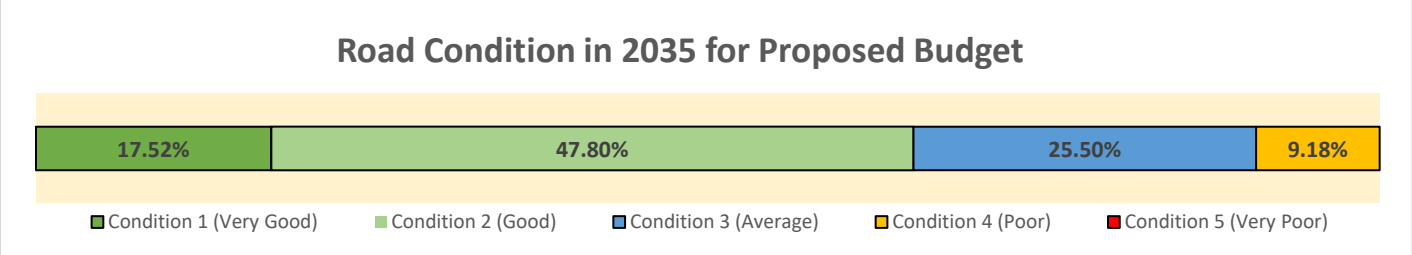
Renewal Required and Funding Gap

10 Year Depreciation:	$55.1 M
Scenario-1:	
• Total renewal funds allocated	$42.2 M
Scenario-2:	
• Required funds for intervention at Condition 4 (model output)	$94.9 M
- Funding gap for intervention at condition 4	$52.7 M
Scenario-3:	
• Required funds for intervention at Condition 5 (model output)	$33.4 M
- Funding gap for intervention at condition 5	-$8.8 M

Current Condition:

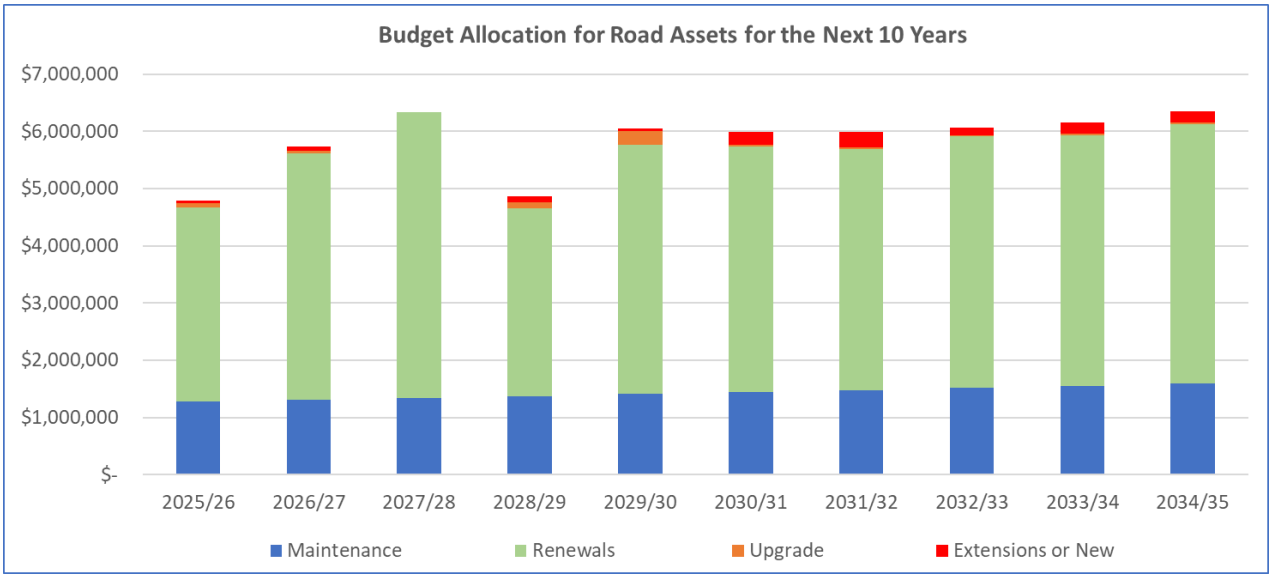


Predicted Condition in 2035 with Proposed Budget:



Recurrent and Capital Expenditure for next 10 years

Year	Maintenance ($M)	Renewals ($M)	Upgrade ($M)	Expansion or New ($M)
2025/26	$ 1.28	$ 3.39	$ 0.08	$ 0.05
2026/27	$ 1.31	$ 4.32	$ 0.04	$ 0.07
2027/28	$ 1.34	$ 4.99	$ -	$ -
2028/29	$ 1.37	$ 3.28	$ 0.12	$ 0.10
2029/30	$ 1.41	$ 4.36	$ 0.24	$ 0.05
2030/31	$ 1.44	$ 4.29	$ 0.03	$ 0.23
2031/32	$ 1.48	$ 4.21	$ 0.03	$ 0.26
2032/33	$ 1.52	$ 4.40	$ 0.02	$ 0.13
2033/34	$ 1.56	$ 4.38	$ 0.03	$ 0.20
2034/35	$ 1.59	$ 4.53	$ 0.03	$ 0.20
Total	**$ 14.30**	**$ 42.15**	**$ 0.60**	**$ 1.29**



Example of activities carried out under each expenditure category			
Maintenance	Renewals	Upgrades	New or Extensions
• Regular inspections • Pothole patching • Line marking • Cleaning table drains • Sweeping • General upkeep of the road network	• Major patching • Road resurfacing • Road reconstruction	• Carpark upgrade work included in next 10 years	• No new and extension work included in next 10 years

Comments

- Council has more recently been underspending on renewal of roads, including carpark and kerb and channel. Therefore, Asset Plan 2022 proposed to increase funding for road asset renewal and an additional $6.3M was allocated from 2026/27 to 2031/32.
- Current modelling shows carpark condition will deteriorate significantly over the next 10 years based on the current funding. A part of the additional funding ($200k) should be allocated for carparks.
- There is a need to continue exploring more recycled and environmentally sustainable materials for road infrastructure to address Banyule's carbon neutrality target 2028.

Recommendations

- Scenario-1 is recommended, which is generally to renew road assets reaching at condition 5 (Very Poor) and on some occasions earlier based on usage and unexpected failure.
- A part of the budget ($200k annually) is proposed to be shifted from road to carpark.

8.2 Footpath

Assets Included

- Footpaths – Concrete 967 km
- Footpaths – Asphalt 15 km
- Footpaths – Pavers 1.7 km
- Footpaths – Gravel 2.4 km

Services Provided

- To ensure the connectivity of the community with a safe footpath network.
- To provide safe and enjoyable walking paths.

Total Replacement Value

- $204.7 M
- 16% of Asset Portfolio of $1,282 M

Financial indicators

- Renewal Gap Ratio 0.84
- Capital Replacement Ratio 0.88
- Risk Level Medium

Assets Life in Years

- Concrete footpaths 60
- Asphalt footpaths 30
- Gravel footpath 10
- Pavers 60

Confidence level of the existing data

- Inventory data 95%
- Condition data 95%

Renewal Required and Funding Gap

10 Year Depreciation: $34.6 M

Scenario-1:

- Total renewal funds allocated $28.90 M

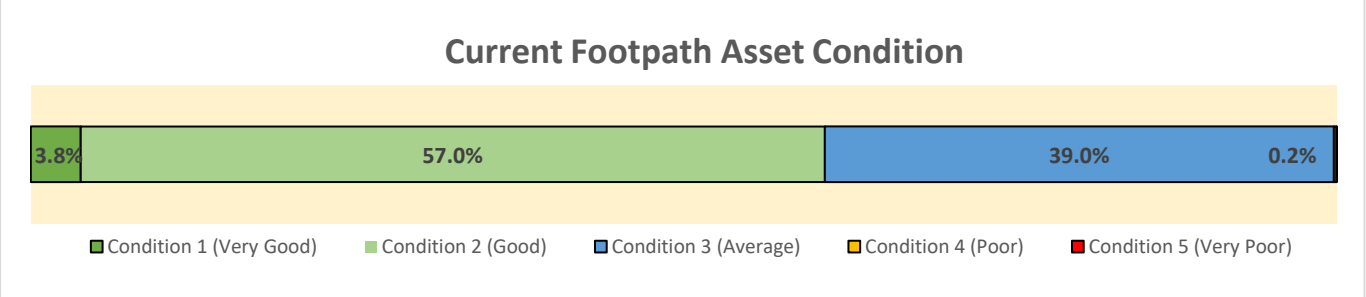
Scenario-2:

- Required funds for intervention at Condition 4 (model output) $5.4 M
  - Funding gap for intervention at condition 4 -$23.5 M

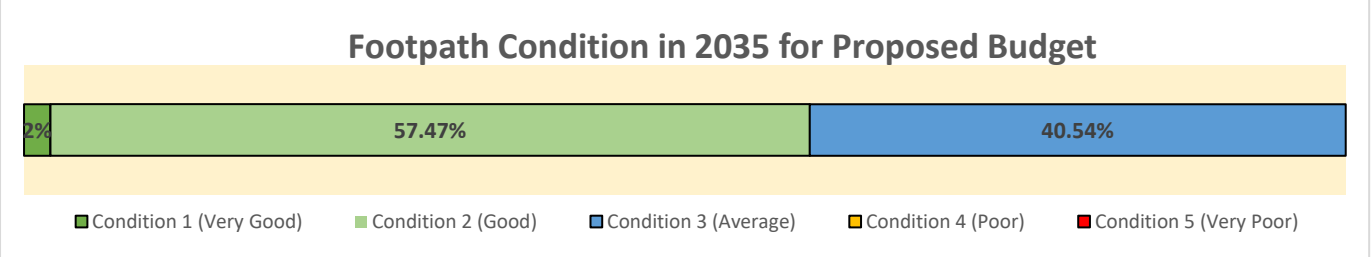
Scenario-3:

- Required funds for intervention at Condition 5 (model output) $4.2 M
  - Funding gap for intervention at condition 5 -$24.7 M

Current Condition:

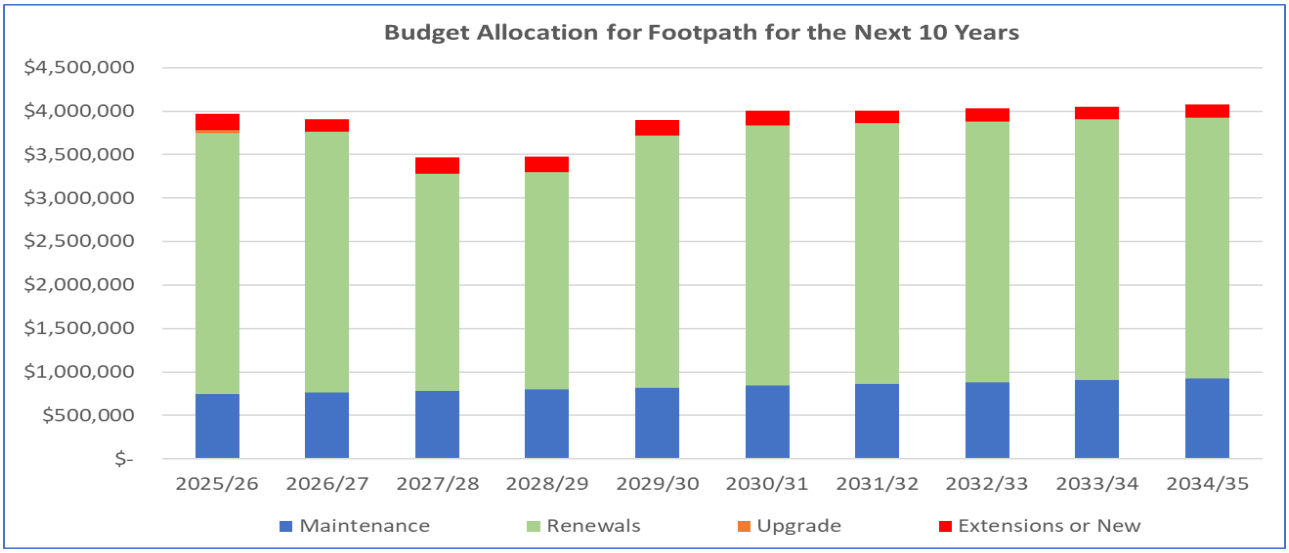


Predicted Condition in 2035 with Proposed Budget:



Recurrent and Capital Expenditure for next 10 years

Year	Maintenance ($M)	Renewals ($M)	Upgrade ($M)	Expansion or New ($M)
2025/26	$ 0.74	$ 3.00	$ 0.04	$ 0.19
2026/27	$ 0.76	$ 3.00	$ -	$ 0.15
2027/28	$ 0.78	$ 2.50	$ -	$ 0.19
2028/29	$ 0.80	$ 2.50	$ -	$ 0.18
2029/30	$ 0.82	$ 2.90	$ -	$ 0.18
2030/31	$ 0.84	$ 3.00	$ -	$ 0.17
2031/32	$ 0.86	$ 3.00	$ -	$ 0.15
2032/33	$ 0.88	$ 3.00	$ -	$ 0.15
2033/34	$ 0.90	$ 3.00	$ -	$ 0.15
2034/35	$ 0.93	$ 3.00	$ -	$ 0.15
Total	**$ 8.31**	**$ 28.90**	**$ 0.04**	**$ 1.66**



Example of activities carried out under each expenditure category			
Maintenance	Renewals	Upgrades	New or Extensions
• Regular inspections • Wedging • Replacing damaged bays	• Replacing damaged bays • Re-gravelling of gravel footpaths • Laying asphalts on damaged sections	• No upgrade work included in next 10 years	• Extending existing footpaths or constructing new footpaths

Comments

- Condition audit of footpath undertaken in 2021/22 showed the footpath condition improved. It was a reflection of additional funding for footpath since 2018/2019.
- However, Council's footpath network has a large number of localised defects (eg. tripping hazards), which require fixing by renewing associated footpath bays. This is required in accordance with the Road Management Plan (RMP), which is a legal obligation for Council.
- Therefore, footpath condition rating does not fully reflect renewal needs. Renewing footpath bays associated with localised defects is also required.
- The next condition audit of Council's footpath is scheduled for 2025/26, which will help better understand the current footpath condition again and more accurate renewal needs.
- There is a need to explore more recycled and environmentally sustainable materials for footpath renewal to address Banyule's carbon neutrality target 2028.

Recommendations

- Scenario 1 is recommended for footpaths, maintaining current funding in the short term. This is 84% of 10 year depreciation.
- This is sufficient renewal funding to maintain overall asset condition, as well as manage localised defect repairs in accordance with the Road Management Plan.

8.3 Bridge

Assets Included

- Road bridges and culverts 10
- Footbridges 55

Financial indicators

- Renewal Gap Ratio 0.88
- Capital Replacement Ratio 0.97
- Risk Level Medium

Services Provided

- To ensure the connectivity and mobility of the community with a safe road and footpath network
- Providing safe walking paths in reserves.

Assets Life in Years

- Concrete vehicular bridges 100
- Concrete vehicular culverts 100
- Steel frame and concrete deck bridges 80
- Timber Bridges 60

Total Replacement Value

- $17.2 M
- 1% of Asset Portfolio of $1,282 M

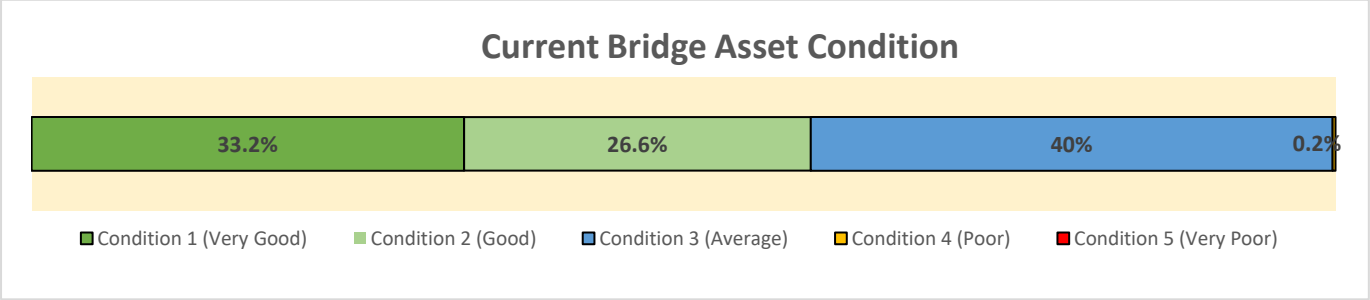
Confidence level of the existing data

- Inventory data 95%
- Condition data 95%

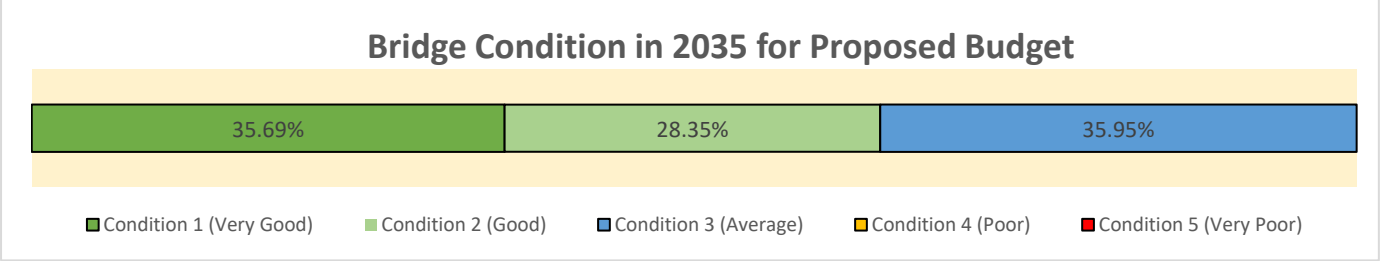
Renewal Required and Funding Gap

10 Year Depreciation:	$2.10 M
Scenario-1:	
• Total renewal funds allocated	$1.85 M
Scenario-2:	
• Required funds for intervention at Condition 4 (model output)	$1.35 M
- Funding gap for intervention at condition 4	-$0.50 M
Scenario-3:	
• Required funds for intervention at Condition 5 (model output)	$0.04 M
- Funding gap for intervention at condition 5	-$1.81 M

Current Condition:

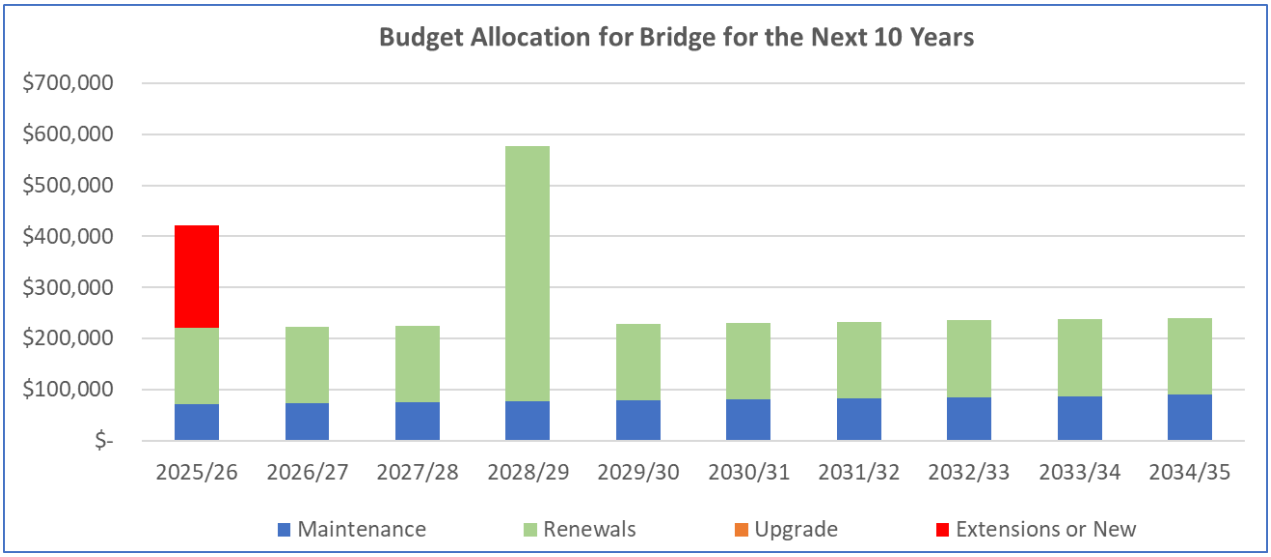


Predicted Condition in 2035 with Proposed Budget:



Recurrent and Capital Expenditure for next 10 years

Year	Maintenance ($M)	Renewals ($M)	Upgrade ($M)	Expansion or New ($M)
2025/26	$ 0.07	$ 0.15	$ -	$ 0.2
2026/27	$ 0.07	$ 0.15	$ -	$ -
2027/28	$ 0.08	$ 0.15	$ -	$ -
2028/29	$ 0.08	$ 0.50	$ -	$ -
2029/30	$ 0.08	$ 0.15	$ -	$ -
2030/31	$ 0.08	$ 0.15	$ -	$ -
2031/32	$ 0.08	$ 0.15	$ -	$ -
2032/33	$ 0.09	$ 0.15	$ -	$ -
2033/34	$ 0.09	$ 0.15	$ -	$ -
2034/35	$ 0.09	$ 0.15	$ -	$ -
Total	**$ 0.80**	**$ 1.85**	**$ -**	**$ 0.2**



Example of activities carried out under each expenditure category			
Maintenance	Renewals	Upgrades	New or Extensions
• Level 1, 2 and 3 Inspections • Reactive repairs of defects identified through the inspections	• Replacing damaged Bridge decks • Replacing damaged bridge components • Protective works of abutments and piers	• No upgrade work included in next 10 years	• One new bridge over the Plenty River is included in next 10 years

Comments

- Most of Council's bridges are footbridges used by pedestrians or cyclists only.
- Council carries out Level 2 bridge inspection for the whole network every 2 years.
- Majority of Council's bridges are in good condition or better.
- Current renewal requirement of the bridges is therefore not high.
- In current practice, Council considers replacing damage components rather than renewing whole bridges.
- Council also applies environmentally sustainable materials for replacing bridge deck and other components.

Recommendations

- It is recommended to keep the current renewal funding as it is. This is required to renew bridges at condition 4 and replace poor parts/components of bridges on a regular basis.

8.4 Stormwater Drainage

Assets Included

- Pipes including channels 824 km
- Pits 36,145 no.

Financial indicators

- Renewal Gap Ratio 0.53
- Capital Replacement Ratio 0.61
- Risk Level High

Services Provided

- Conveyance of stormwater from private and public land.
- Protect the community from flooding.
- Improve the quality of stormwater discharge to natural waters.

Assets Life in Years

- Stormwater pits and pipes 100

Total Replacement Value

- $286.7 M
- 22% of Asset Portfolio of $1,282 M

Confidence level of the existing data

- Inventory data 95%
- Condition data 10%

Renewal Required and Funding Gap

10 Year Depreciation: $25.2 M

Scenario-1:

- Total renewal funds allocated $8 M

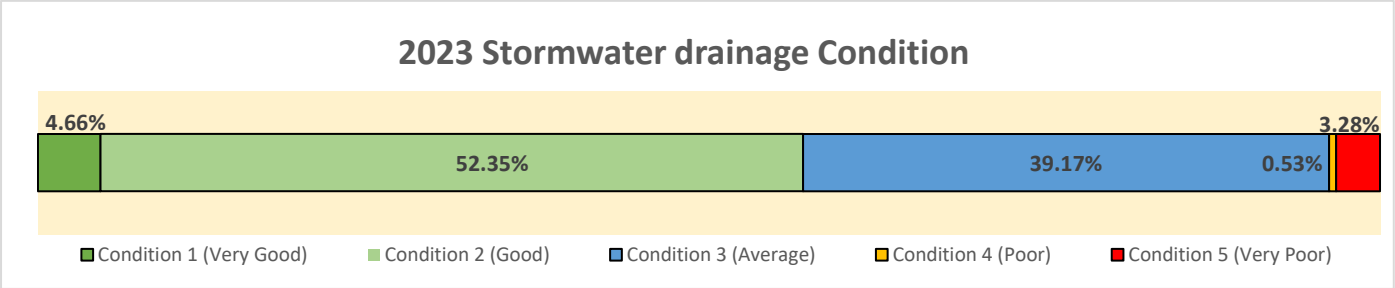
Scenario-1:

- Required funds for intervention at Condition 4 (model output) $10.9 M
  - Funding gap for intervention at condition 4 $2.9 M

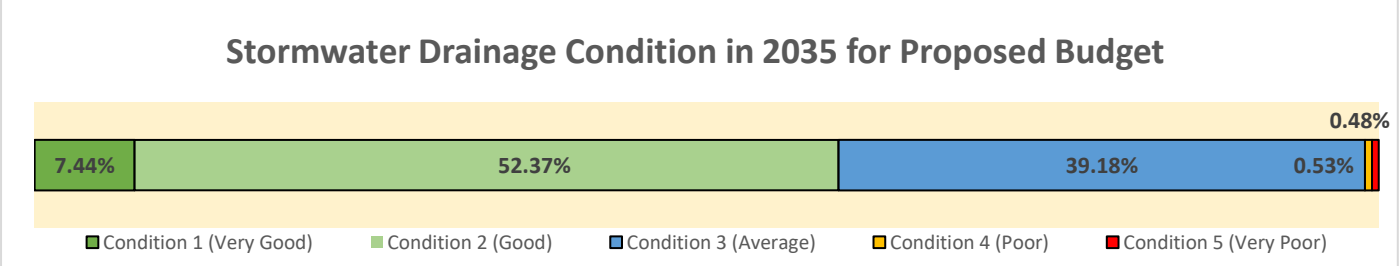
Scenario-2:

- Required funds for intervention at Condition 5 (model output) $9.4 M
  - Funding gap for intervention at condition 5 $1.4 M

Current Condition:

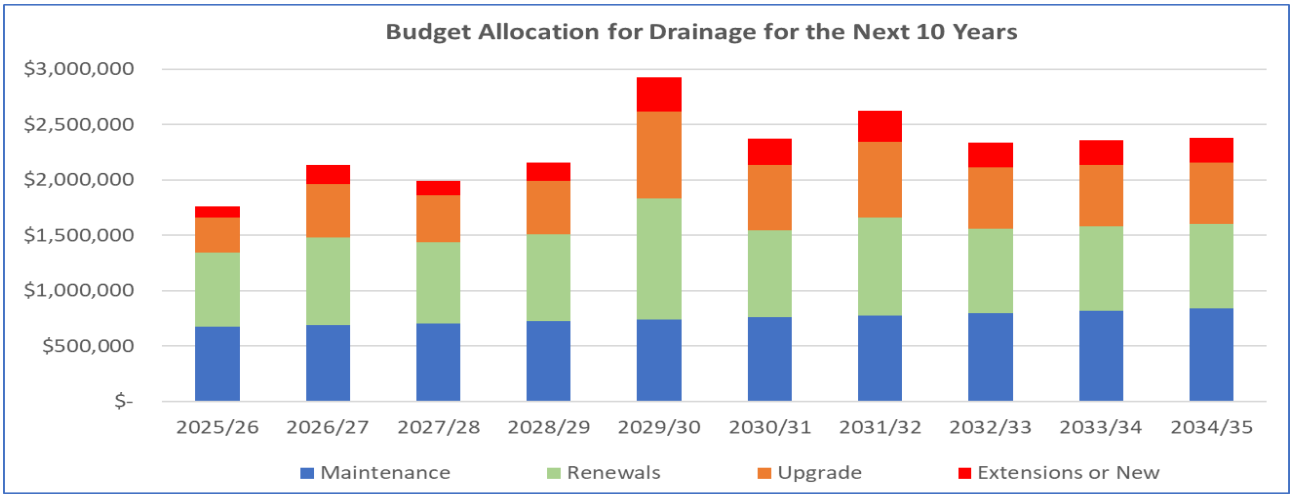


Predicted Condition in 2035 with Proposed Budget:



Recurrent and Capital Expenditure for next 10 years

Year	Maintenance ($M)	Renewals ($M)	Upgrade ($M)	Expansion or New ($M)
2025/26	$ 0.67	$ 0.67	$ 0.32	$ 0.10
2026/27	$ 0.69	$ 0.79	$ 0.49	$ 0.17
2027/28	$ 0.71	$ 0.73	$ 0.42	$ 0.14
2028/29	$ 0.72	$ 0.79	$ 0.48	$ 0.16
2029/30	$ 0.74	$ 1.09	$ 0.79	$ 0.31
2030/31	$ 0.76	$ 0.79	$ 0.58	$ 0.24
2031/32	$ 0.78	$ 0.88	$ 0.68	$ 0.28
2032/33	$ 0.80	$ 0.76	$ 0.56	$ 0.22
2033/34	$ 0.82	$ 0.76	$ 0.56	$ 0.22
2034/35	$ 0.84	$ 0.76	$ 0.56	$ 0.22
Total	**$ 7.52**	**$ 8.03**	**$ 5.43**	**$ 2.06**



Example of activities carried out under each expenditure category			
Maintenance	Renewals	Upgrades	New or Extensions
• CCTV inspections of pipes and pits • Reactive repairs of defects identified • Pipe and pit cleaning	• Replacing damaged pipes and pits	• Replacing under capacity pipes with larger pipes	• Installing stormwater and water sensitive urban design activities • Extending the drainage network • Installation of stormwater quality improvement devices

Comments

- Average age of the pipe network is approximately 58 years, which is near the middle of its useful life, 100 years.
- Condition inspection of pipes is comparatively expensive. As a result, Council has very limited drainage condition data. Council has been inspecting one per cent of its network annually to obtain a good sample data.
- Renewal funding requirement has been forecasted based on known condition data and age of the remaining pipes.
- 60% of the pipe network is running full in a 5-year flood event. This means there is a possibility of flooding for higher flood events.
- Current renewal funding is low (53% of depreciation), which focuses on identified flooding problems.
- Upgrading and creating new drainage pipes are considered to cope with future growth.

Recommendations

- It is recommended to continue the current capital funding at this stage. It will require an increase in the future to meet the depreciation and growth.
- Continue flood modelling to identify potential flooding issues throughout the municipality and allocate capital funding to minimise flood impacts.

8.5 Building

Assets Included

• Commercial Properties	18
• Family Services	44
• Health & Aged Services	2
• Leisure Centres & Swimming Pools	9
• Municipal Buildings	10
• Operations/Parks Depots	39
• Pavilions	88
• Public/Community Centres/Halls	42
• Public Toilets	43
• Scout Halls	11
• Shelters	47
Total building facilities included	353

Services Provided

- Community services
- Sports and recreation
- Health services
- Youth services
- Senior citizen services

Total Replacement Value

- $349 M
- 27% of Asset Portfolio of $1,282 M

Financial indicators

• Renewal Gap Ratio	1.66
• Capital Replacement Ratio	1.97
• Risk Level	Low

Assets Life in Years

• Electrical Items	20
• External Services	25
• Fire Protection	20
• Fixtures and Fittings	30
• Hydraulic	30
• Mechanical	25
• Security	12
• Site Infrastructure	40
• Superstructure and Substructure	80

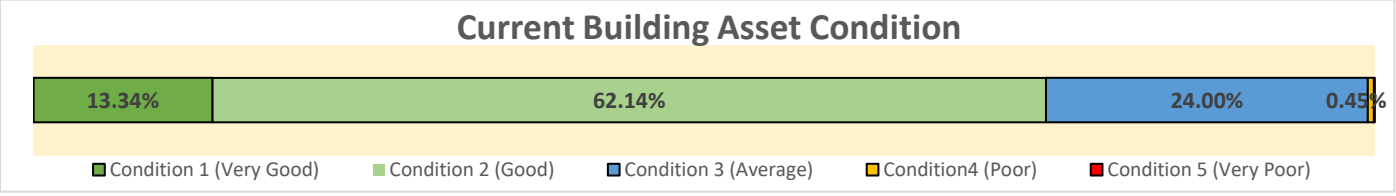
Confidence level of the existing data

• Inventory data	95%
• Condition data	95%

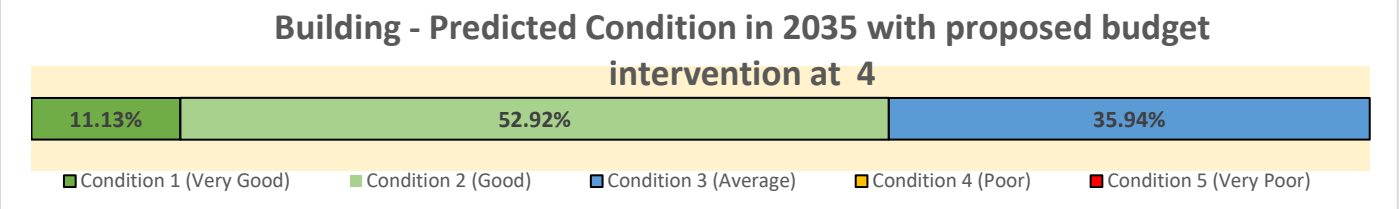
Renewal Required and Funding Gap

10 Year Depreciation:	$42.3 M
Scenario-1:	
• Total renewal funds allocated	$45.9 M
Scenario-1:	
• Required funds for intervention at Condition 4 (model output)	$43.6 M
- Funding gap for intervention at condition 4	-$2.3 M
Scenario-2:	
• Required funds for intervention at Condition 5 (model output)	$27.6 M
- Funding gap for intervention at condition 5	-$18.3 M

Current Condition:

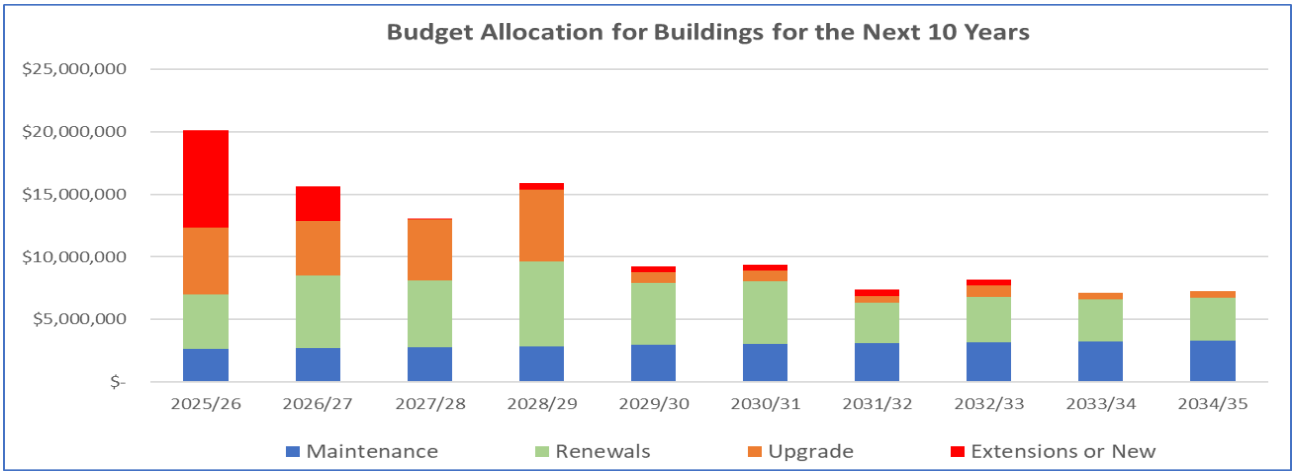


Predicted Condition in 2035 with Proposed Budget:



Recurrent and Capital Expenditure for next 10 years

Year	Maintenance ($M)	Renewals ($M)	Upgrade ($M)	Expansion or New ($M)
2025/26	$ 2.66	$ 4.31	$ 5.35	$ 7.83
2026/27	$ 2.73	$ 5.79	$ 4.36	$ 2.75
2027/28	$ 2.80	$ 5.30	$ 4.91	$ 0.08
2028/29	$ 2.87	$ 6.77	$ 5.72	$ 0.59
2029/30	$ 2.94	$ 5.01	$ 0.82	$ 0.50
2030/31	$ 3.01	$ 5.05	$ 0.88	$ 0.46
2031/32	$ 3.09	$ 3.25	$ 0.53	$ 0.53
2032/33	$ 3.16	$ 3.65	$ 0.88	$ 0.46
2033/34	$ 3.24	$ 3.36	$ 0.54	$ -
2034/35	$ 3.32	$ 3.39	$ 0.53	$ -
Total	**$ 29.82**	**$ 45.87**	**$ 24.51**	**$ 13.19**



Example of activities carried out under each expenditure category			
Maintenance	Renewals	Upgrades	New or Extensions
• Reactive repairs of defects identified through the inspections and customer requests • Essential Safety Measure inspections • Cleaning and pest control • Painting	• Replacing damaged building components • Replacing heating or cooling systems • Replacing damaged assets within the building premises	• Building extensions • Sustainability improvement such as solar panels, water harvesting etc	• Construction of new building to adapt population changes and demand.

Comments

- Council carried out building condition audits in 2023/24, therefore, condition data is up to date.
- Current funding considers renewal of some building components (e.g. structures, fixture and fit outs, mechanical, hydraulics, electrical, fire protection) at Condition 4 in order to ensure that building facilities provide services expected by the community and they are fit for purpose.
- In addition, Council considers climate risks in prioritising building renewals and upgrades. For instance:
  - Replacement of gas equipment is prioritised for renewal over existing electric.
  - Upgrading to energy-efficient heating and cooling systems are prioritised to reduce the cost of achieving thermal comfort as a result of climate change.
- Council is committed to applying the Sustainable Building Guidelines for any building projects including renewals and upgrades to address carbon neutrality target 2028.
- Council also allocates funding for building projects based on the recommendations provided by Banyule's Community Infrastructure Plan (CIP).

Recommendations

- It is recommended to continue with the current renewal funding.
- Continue with the actions outlined in the Community Infrastructure Plan (CIP) to better inform future capital spending needs for buildings.

8.6 Parks and Open Space

Assets Included

• Playgrounds	146
• BBQ	39
• Furniture (Street and parks)	1192
• Retaining Walls	2672
• Other open space assets	1498

Services Provided

- Access to high quality open space.
- To ensure the cities open space and street scape are presentable, aesthetic and pleasing.
- Provide safe walking paths in reserves.

Total Replacement Value

- $97.4 M
- 8% of Asset Portfolio of $1,282 M

Financial indicators

• Renewal Gap Ratio	1.84
• Capital Replacement Ratio	1.93
• Risk Level	Low

Assets Life in Years

• Playgrounds	15
• BBQ	20
• Timber furniture	10
• Steel or aluminium furniture	15
• Recycled plastic furniture	20
• Sleepers R/Walls	50
• Stone R/walls	60
• Concrete R/walls	80

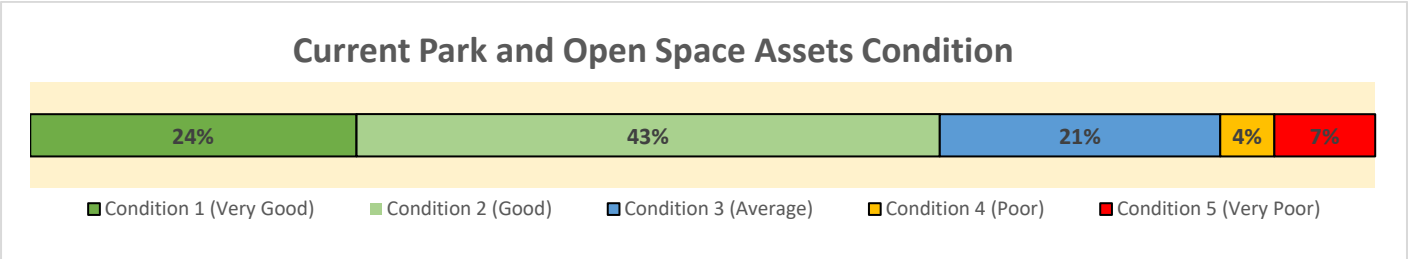
Confidence level of the existing data

• Inventory data	80%
• Condition data	50%

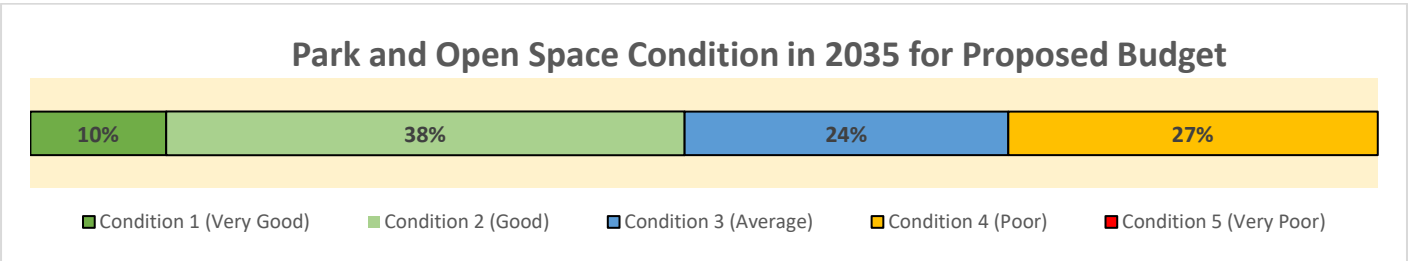
Renewal Required and Funding Gap

10 Year Depreciation:	$36.6 M
Scenario-1:	
• Total renewal funds allocated	$38.3 M
Scenario-2:	
• Required funds for intervention at Condition 4 (model output)	$73.3 M
- Funding gap for intervention at condition 4	$35 M
Scenario-3:	
• Required funds for intervention at Condition 5 (model output)	$35.8 M
- Funding gap for intervention at condition 5	-$2.5 M

Current Condition:

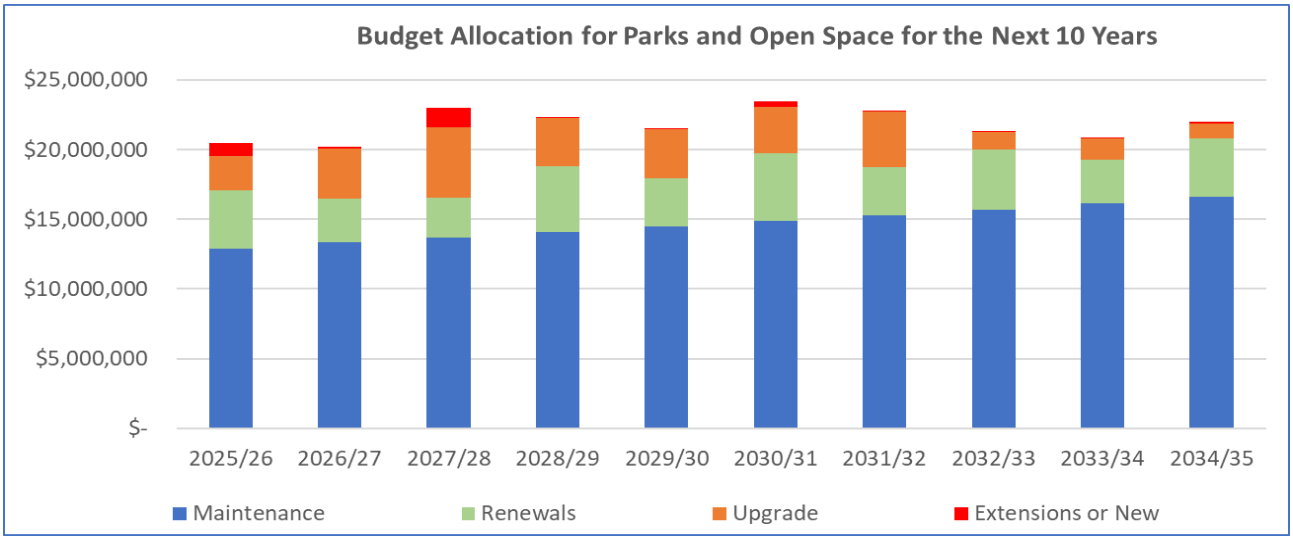


Predicted Condition in 2035 with Proposed Budget:



Recurrent and Capital Expenditure for next 10 years

Year	Maintenance ($M)	Renewals ($M)	Upgrade ($M)	Expansion or New ($M)
2025/26	$ 12.92	$ 4.19	$ 2.43	$ 0.92
2026/27	$ 13.34	$ 3.17	$ 3.55	$ 0.17
2027/28	$ 13.71	$ 2.86	$ 5.03	$ 1.40
2028/29	$ 14.09	$ 4.76	$ 3.45	$ 0.07
2029/30	$ 14.48	$ 3.44	$ 3.55	$ 0.07
2030/31	$ 14.88	$ 4.84	$ 3.36	$ 0.37
2031/32	$ 15.29	$ 3.44	$ 4.00	$ 0.08
2032/33	$ 15.71	$ 4.28	$ 1.30	$ 0.08
2033/34	$ 16.15	$ 3.14	$ 1.49	$ 0.08
2034/35	$ 16.60	$ 4.20	$ 1.11	$ 0.09
Total	**$ 147.17**	**$ 38.30**	**$ 29.26**	**$ 3.33**



Example of activities carried out under each expenditure category			
Maintenance	Renewals	Upgrades	New or Extensions
• Proactive inspections • Reactive repairs of defects identified through the inspections and customer requests • Mowing, vegetation and weed control • Litter collection and cleaning • Graffiti removal	• Replacing damaged or old equipment in playgrounds and parks • Replacing damaged park and street furniture and signs. • Replacing existing playground	• Refurbishment of existing parks and reserves	• Constructing new playgrounds and reserves

Comments

- Council's Parks and Open Space (POS) assets inventory and condition require improvements.
- Regular condition audit of POS data is expensive due to having a large portfolio and the diversity of these assets.
- An additional $10 million for POS asset renewal and upgrade was included from 2026/27 to 2031/32 to improve the level of service as proposed in the Asset Plan 2022.
- It is required to undertake a full condition audit of POS assets, which is proposed in 2026/27.

Recommendations

- Scenario 1 is recommended, which is over the annual depreciation and funding required to renew assets reaching at condition 5, and review following obtaining improved condition data.
- A condition audit is recommended for all POS assets to improve the data integrity and better understand the renewal needs, which is included in the draft initiative budget 2026/27.

9 Summary and Recommendations

Council's recurrent expenditure is required to keep Council's services operational and safe for the community.

Figure 14 depicts the proposed capital funding distribution among various asset categories over the next 10 years.

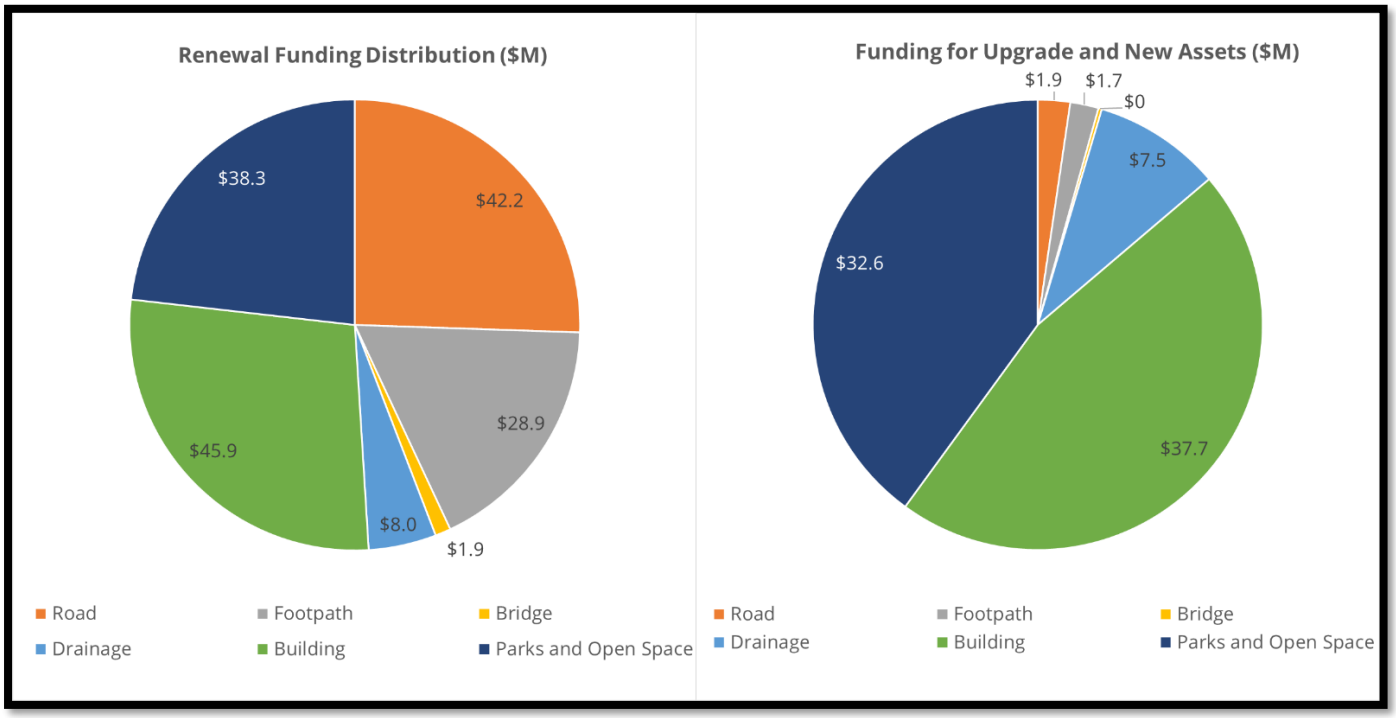


Figure 14: Capital Funding Distribution

Comments

- Council's renewal budget over the next 10 years is $165.1 million. This is 67 per cent of the total budget, which is consistent with the community feedback to prioritise maintaining existing assets and facilities.
- Building and POS consume 51 per cent of the total renewal allocation. Road and footpath are 26 and 18 per cent respectively.
- Council's total budget for upgrading and creating new assets is $81.5 million over the next 10 years. This is 33 per cent of the total capital budget. This is consistent with the community feedback to ensure the needs of Banyule's changing and increasing population.
- A major part (46 per cent) of upgrade or new assets is allocated towards buildings. Creating new buildings also increases operational and maintenance costs significantly.
- A significant part (40 per cent) of the upgrade and new assets is allocated for POS, which also impacts operational and maintenance costs.
- Road, footpath, bridge and drainage have 14 percent of the upgrade and new assets, which is reasonable as these assets are long life and meeting the current needs.

Proposed Renewal Funding Vs Renewal Funding Required

A comparison between renewal funding allocated and required for different asset categories along with Renewal Gap Ratio is summarised in Table 4.

Table 4 | Proposed Renewal Funding Vs Renewal Funding Required

Asset Category	VAGO Financial sustainability indicators		Renewal Modelling Financial Indicator			
	Renewal Gap Ratio	Risk Level	Renewal Funding Allocation, ($M)	Required Renewal Funding ($M)	Renewal Intervention, Condition	Financial Sustainability (%)
Road	0.78	Medium	42.2	33.4	5	126%
Footpath	0.84	Medium	28.9	5.4	4	540%
Bridge	0.88	Medium	1.9	1.4	4	137%
Drainage	0.53	Medium	8	9.9	5	81%
Building	1.66	Low	45.9	43.6	4	105%
Parks and Open Space	1.84	Low	38.3	35.8	5	107%
Total			**165.1**	**129.4**		**128%**

Comments

- Council's overall renewal funding is 28 per cent higher than that required to keep up with asset consumption (depreciation).
- This additional renewal funding is required to renew any premature failures of assets, legislative and safety compliance, and also to implement best practice energy standard to address Banyule's carbon neutrality target 2028.
- Council's spending on renewing roads, footpaths, bridges, building and POS is appropriate. These assets are financially sustainable for the next 10 years.
- Council's renewal funding for drainage asset is low considering the renewal requirement ($9.9M). Drainage has $15.5M for capital works, however half of the amount is estimated as upgrade and new. It leaves only $8M for renewal. The RGR (0.53), which considers depreciation, also indicates that renewal funding is insufficient. Therefore, drainage renewal funding may require to be increased in the future.
- Council aims to renew footpath and bridges early at condition 4 to ensure these are safe for the community.
- Buildings are also renewed at condition 4 in order to ensure these facilities are fit for purpose and meet expected level of service. Council addresses climate risks in prioritising building renewals and upgrades. For instance:
  - Replacement of gas equipment is prioritised for renewal over existing electric.
  - Upgrading to energy-efficient heating and cooling systems are prioritised to reduce the cost of achieving thermal comfort as a result of climate change.
  - Applying the Sustainable Building Guidelines for any building projects including renewals and upgrades to address carbon neutrality target 2028.
- Roads and drainage assets considered for renewal when they reach at condition 5. These are comparatively low risks facilities and renewing them earlier is not considered a priority.
- Parks and Open Space are estimated to be renewed at condition 4 at this stage, since the data integrity of this asset class is low. It is required to improve the data integrity by undertaking a comprehensive condition audit of this asset.

Recommendations

1. It is recommended to implement the renewal funding proposed by this plan, as summarised in Table 4.
2. This includes maintaining the additional renewal funding of $6.3 million from 2026/27 to 2031/32 for roads (including carparks and kerb and channel) proposed by the previous Asset Plan 2022. Current modelling shows carpark condition will deteriorate significantly over the next 10 years based on the current funding. A part of the additional funding ($200k) should be allocated for carparks.
3. Continue flood modelling to identify potential flooding issues throughout the municipality and allocate capital funding to minimise flood impacts.
4. Undertake a condition audit of POS assets which is proposed in the draft initiative budget 2026/27 to improve the data integrity and better renewal estimate.
5. Continue implementing actions recommended within the Community Infrastructure Plan to better inform future capital spending needs for buildings.