



# Transportation Draft Asset Management Plan Summary









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# EXECUTIVE SUMMARY

## 1 The Purpose of the Plan

The City of Adelaide is responsible for an extensive and diverse asset portfolio valued at more than \$2 billion, which represents a significant investment made over multiple generations. These assets play a vital role in providing essential services to our community and it is critical to ensure these assets continue to be effectively managed to enable ongoing service provision and benefits for both current and future generations.

Under South Australia's *Local Government Act 1999*, we are required to develop Asset Management Plans for a period of at least 10 years, which includes information about the operation, maintenance, renewal, acquisition, expansion, upgrade and disposal for each infrastructure asset class under our care and control. The City of Adelaide has six Asset Management Plans, which includes Transportation, Park Lands & Open Space, Buildings, Water Infrastructure, Lighting & Electrical and Urban Elements.

The fundamental purpose of this Transportation Asset Management Plan is to outline the Council's high-level asset management priorities for the operation, maintenance and renewal of our assets over the next 10 years. Additionally, it aims to improve the long-term strategic management of our transportation assets, to cater for the community's required levels of service both now and into the future.

The plan defines the current state of our \$1.14 billion transportation asset portfolio, as well as the asset management activities and associated funding requirements recommended for inclusion into the Long-Term Financial Plan to achieve our asset performance targets.

## 2 Our Transportation Assets

The City of Adelaide's transport network is valued at approximately \$1.14 billion and provides vital services that support pedestrians, cyclists, motorists, and public transport users to move into and around the City and Park Lands. These assets include roads, kerb and watertable, footpaths, bridges and traffic signals.

### Roads

Quantity – 129 kilometres  
Total Value – \$296.5 million

### Kerb and Watertable

Quantity – 292 kilometres  
Total Value – \$119.7 million

### Footpaths

Quantity – 292 kilometres  
Total Value – \$486.4 million

### Traffic Signals

Quantity – 138 sites  
Total Value – \$59.4 million

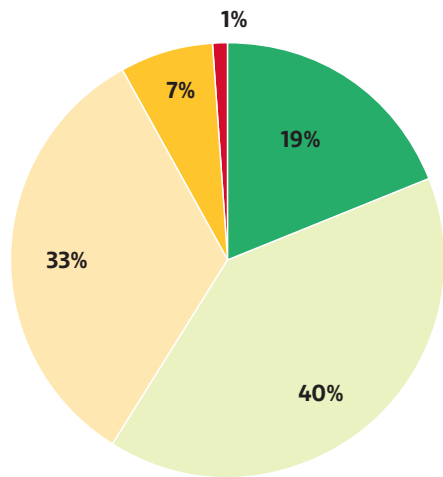
### Bridges

Quantity – 37 sites  
Total Value – \$178.4 million





To monitor the performance of our transportation assets, we undertake regular condition audits (typically every 4 years). Asset condition information is analysed with respect to technical intervention criteria to inform our maintenance and renewal programs. The current condition of our transportation network is rated in a good to fair condition, with an overall condition index rating of 2.3. 92% of assets are rated in a very good to fair condition and 8% of assets are rated in poor or very poor condition, which form the general basis of our future renewal program priorities.



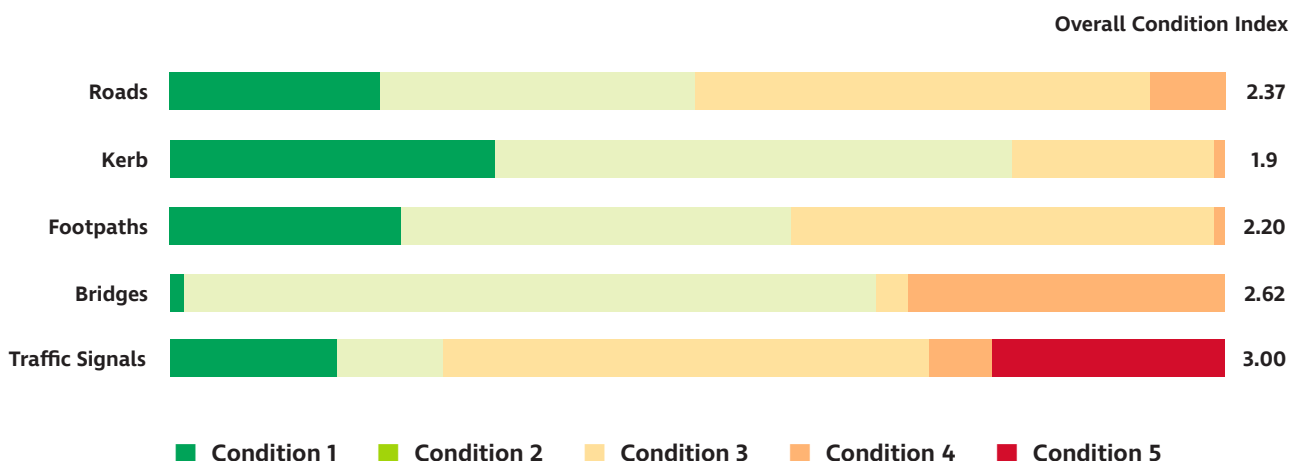
| Condition Grading | Description of Condition   |
|-------------------|--|
| 1                 | <b>Very Good:</b> free of defects, only planned and/or routine maintenance required          |
| 2                 | <b>Good:</b> minor defects, increasing maintenance required plus planned maintenance         |
| 3                 | <b>Fair:</b> defects requiring regular and/or significant maintenance to reinstate service   |
| 4                 | <b>Poor:</b> significant defects, higher order cost intervention likely                      |
| 5                 | <b>Very Poor:</b> physically unsound and/or beyond rehabilitation, immediate action required |

Typical examples of each condition state for our transportation assets are shown in Appendix E.

Overall, the majority of our road, kerb and footpath assets are rated in a very good to fair condition with only a small proportion of assets rated in poor and very poor condition. This is considered a healthy condition distribution, however ongoing investment will be required to ensure levels of service are maintained.

Our bridges are generally rated in a good overall condition, with the exception of Adelaide Bridge, an aging asset constructed in 1931 that is approaching the end of its useful life. Adelaide Bridge primarily accounts for the significant proportion of the bridge network currently rated in poor condition, with the bridge requiring significant rehabilitation or replacement within this Asset Management Plan’s 10-year planning period.

Our traffic signal network has a significant number of assets rated in a poor to very poor condition. While this does not present any immediate operational risks due to effective proactive maintenance programs, accelerated renewal investment will be proposed within the first 5 years of this Asset Management Plan, with priorities informed by a comprehensive condition audit scheduled for 2024.







### 3 Community Engagement & Customer Satisfaction

In November 2021, we undertook an engagement process with City residents and visitors to better understand and measure levels of customer satisfaction for the services provided by our transportation assets. A summary of the responses is shown below.

| Category                | Average Score | Very Poor (<40%) | Poor (40-54%) | Average (55-69%) | Good (70-84%) | Excellent (>85%) |
|-------------------------|---------------|------------------|---------------|------------------|---------------|------------------|
| City Street Roads       | 87 %          |                  |               |                  |               | ●                |
| City Street Footpaths   | 77 %          |                  |               |                  | ●             |                  |
| City Street Cycle Lanes | 52 %          |                  | ●             |                  |               |                  |
| Park Lands Footpaths    | 88 %          |                  |               |                  |               | ●                |
| Park Lands Cycle Paths  | 87 %          |                  |               |                  |               | ●                |

The overall feedback confirmed appropriate levels of customer satisfaction for all transportation assets, with the exception of City street cycle lanes. It is evident that there is a significant gap between current service provisions and the expectations of the community with respect to City street cycling facilities. The community’s view was that on-road cycling infrastructure needs to be more accessible, easier to navigate and safer, in order to better meet their needs. It is anticipated that the completion of the Integrated Transport Strategy in 2024 and the subsequent initiation, funding and delivery of key upgrade/new cycling infrastructure projects will over time incrementally bridge the gap between customer expectations and service provisions.

A Recommended Levels of Service Report was presented to Council, with the recommendations approved in June 2022. This report noted the community consultation undertaken and the associated benchmarking of current user satisfaction. Additionally, Council also approved the development of the Transportation Asset Management Plan based on the planning principles and recommended management strategies presented within the report and its attachments.



## 4 Current and Future Demands

It is anticipated that the City of Adelaide will be subject to considerable change over the next ten years. This will result in our transportation assets being subject to new demands that have the potential to impact future service delivery and the requirements of our assets.

Key demand drivers and future challenges will include:

- City growth
- Changing demographic
- Tourism & event growth
- Climate change and carbon neutrality
- Emerging technology
- Legislation & regulation

Demand for new services will be managed through a combination of managing existing assets, upgrading existing assets, providing new assets and demand management. Demand management practices can include non-asset solutions, such as educating the community around alternative options, which facilitates service provision without the need to invest in new or upgraded infrastructure.

Demand management will include:

- Continuing to engage with our community through annual City User Profile surveys
- Finalising the Integrated Transport Strategy (2024)
- Delivering priority upgrade/new projects identified within the Strategic Plan and strategic documents
- Ensuring climate risk mitigation and adaptation is a key focus for strategic planning, asset management and project delivery
- Continuing to review and update design standards and technical specifications to ensure our assets transition towards having a lower carbon footprint with improved circular economy outcomes through increased usage of recycled materials
- Continuing to partner with industry, to monitor and evaluate new and emerging technologies, with trials of new materials, approaches, and methodologies to inform appropriate changes to standards and practices
- Continuing to monitor changes to legislation and ensure appropriate adaptation into asset management practices





## 5 Strategic Planning

Under the *Local Government Act (SA) 1999*, we are legislatively required to establish a suite of Strategic Management Plans, which guide Council’s future planning, asset management and financial sustainability. An overview of these strategic management plans are shown below:

|  |  |
|--|--|
| <b>Strategic Plan</b><br><i>Community</i>              | Long term with a four year delivery focus.<br><i>Planning for the vision and aspirations of the Adelaide Capital City.</i>                               |
| <b>Long-Term Financial Plan</b><br><i>Financial</i>    | Ten year Plan, revised annually to ensure a ten year view is maintained.<br>Planning for the long-term financial sustainability of the City of Adelaide. |
| <b>Asset Management Plans</b><br><i>Infrastructure</i> | Suite of ten year Plans.<br><i>Planning for the sustainable renewal and maintenance of Council assets.</i>   |
| <b>City Plan</b><br><i>Development / Built Form</i>    | Ten year Spatial Plan.<br><i>Planning for the future land uses and built form of the Adelaide Capital City.</i>  |

Through the City of Adelaide Draft Strategic Plan 2024 – 2028, Council’s vision is:

### **Our Adelaide. Bold. Aspirational. Innovative.**

To ensure we can build on this vision for the future, our aspirations will guide our focus and delivery:

- Our Community:** Vibrant, connected and inclusive
- Our Environment:** Resilient, protected and sustainable
- Our Economy:** Growing, innovative and responsive
- Our Places:** Interesting, purposeful and safe
- Our Corporation:** High performing, customer-centric and bold

As Adelaide grows, we will need to consider economic vitality, social connectivity and wellbeing, distinctive precincts, environmental and financial sustainability, asset management and service delivery. To ensure we maintain our liveability and to support growth, these principles will underpin everything we do:

- Exceptional Amenity - Be bold and courageous in our pursuit of excellence for our city
- Quality Housing - Strive for liveability and affordability to attract and retain residents
- Community Connection - Strengthen connection, accessibility, diversity and inclusivity by putting people first
- Unique Experiences - Create interesting experiences for our residents, workers and visitors
- Climate Resilience - Embed climate resilience in all that we do
- Economic Growth - Encourage innovation, investment and development in current and emerging sectors
- Budget Repair - Provide quality services and ensure long-term financial sustainability

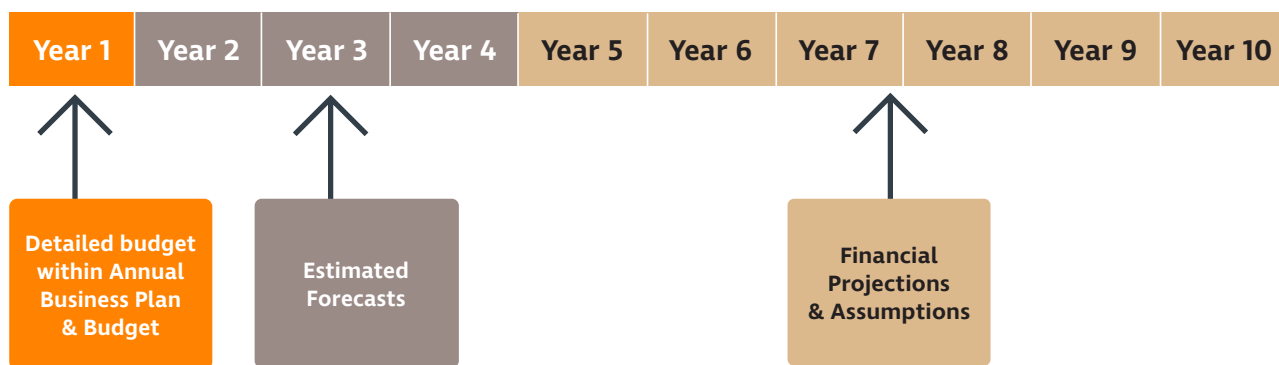
The Strategic Plan is supported by a suite of long and short-term strategies and action plans as well as a Resource Plan. The Resource Plan provides a four-year view of new and upgrade projects, resources, and budget requirements to deliver our Strategic Plan aspirations and objectives.



Integrated Delivery Planning ensures that prudent and efficient decisions are made, with line-of-sight between Council’s Strategic Plan objectives and the major infrastructure projects we deliver. While this Asset Management Plan does not identify financial forecasts associated with new and upgrade projects, it does ensure required asset renewals are aligned (where practical) with key new and upgrade projects specified within the Resource Plan.

Each year our annual business plan and budget formalises funding allocations to continue providing services and progress new projects. It enables existing projects to move from one delivery stage to the next (e.g. progress concept design to detailed design and detailed design to construction) as well as consider emerging risks and opportunities that may result from Council decisions, community requests or other external factors.

## Long Term Financial Plan – 10 Years





## 6 Lifecycle Management

In order to effectively manage our assets, it is important to understand the relationship between all stages of the asset lifecycle. Effective asset management and sustainable financial planning requires a balance between the maintenance, renewal and disposal of existing assets and the delivery of new and upgraded assets.

Our goal is to provide assets that service the needs of the community, providing the agreed levels of service at the lowest lifecycle cost. To enable this, it is important to understand:

- How our assets are performing
- How our assets should be operated and maintained
- When our assets should be renewed
- When we should consider upgrading existing assets or constructing new assets
- How funding for new and upgraded assets is prioritised
- When we should consider disposing underperforming or underutilised assets





This Asset Management Plan's renewal strategy aims to minimise the number of assets that deteriorate into a poor condition and prohibit assets reaching a very poor condition. This strategy ensures we can continue to provide services in line with the community's expectations, appropriately manage risk and optimise whole-of-life costs. Renewal requirements have been identified through a combination of condition audits, engineering recommendations and predictive modelling.

Operational and Maintenance activities are generally evaluated and prioritised with respect to budget provisions within the Long-Term Financial Plan and Annual Business Plan and Budget. Following the completion of this Asset Management Plan, we will be reviewing operations and maintenance standards for transportation assets, with a view to develop more structured and proactive maintenance regimes which provide an acceptable balance between cost, risk, and customer expectations. The associated financial impacts will need to be further considered in future revisions of this Asset Management Plan and the Long-Term Financial Plan.

This Asset Management Plan does not identify financial forecasts associated with asset disposal, however where recommended, significant assets will be identified for decommissioning and disposal through Council Reports, to then be considered within the Long-Term Financial Plan and Business Plan and Budget.



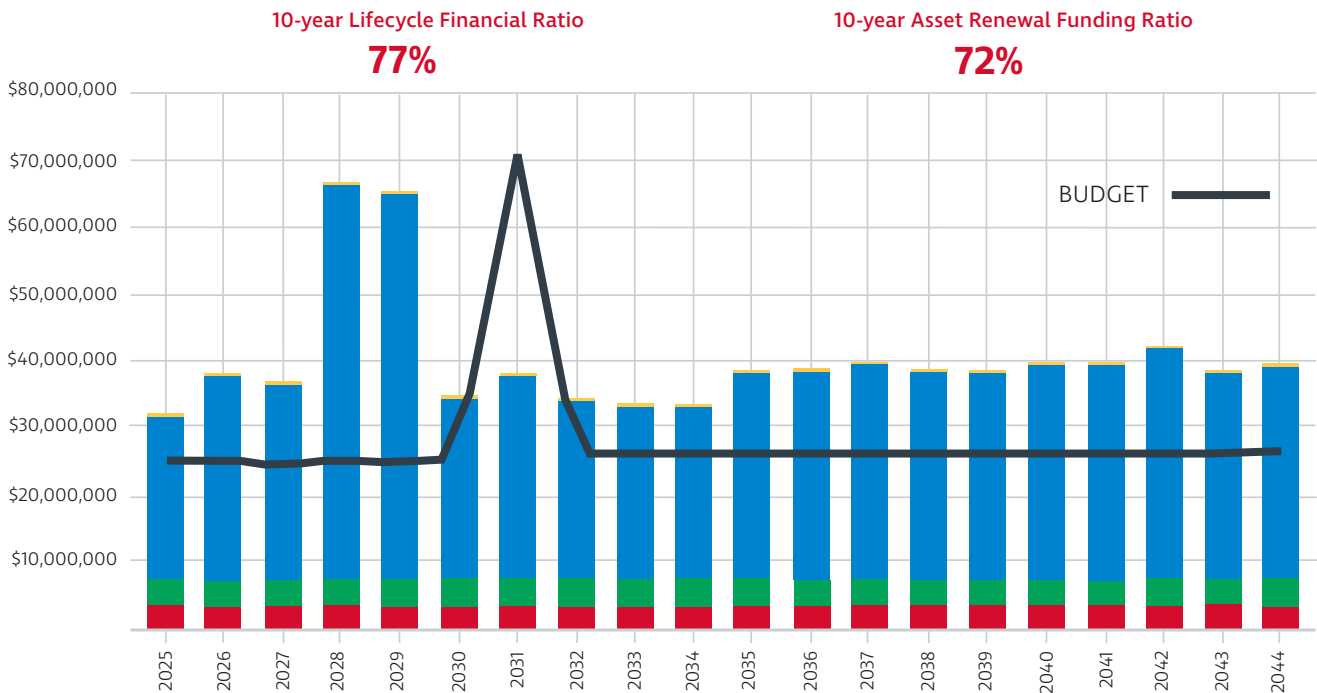


## 7 Financial Summary

This Asset Management Plan defines the asset management activities and associated funding requirements recommended for inclusion into the Long-Term Financial Plan to achieve our asset performance targets. The lifecycle costs necessary to operate, maintain and renew our assets as outlined within this Asset Management Plan is approximately \$41.23 million on average each year across the 10-year planning period. The associated 10-year annual average financial forecasts for renewal, maintenance and operation are presented below for each asset class.

| Roads                               | Kerbs                               | Footpaths                           | Bridges                             | Traffic Signals                     | Total                               |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| <b>\$9.57 M</b><br>Renewal Cost     | <b>\$3.08 M</b><br>Renewal Cost     | <b>\$9.85 M</b><br>Renewal Cost     | <b>\$7.26 M</b><br>Renewal Cost     | <b>\$3.86 M</b><br>Renewal Cost     | <b>\$33.62 M</b><br>Renewal Cost    |
| <b>\$1.04 M</b><br>Maintenance Cost | <b>\$0.47 M</b><br>Maintenance Cost | <b>\$1.64 M</b><br>Maintenance Cost | <b>\$0.23 M</b><br>Maintenance Cost | <b>\$0.50 M</b><br>Maintenance Cost | <b>\$3.87 M</b><br>Maintenance Cost |
| <b>\$1.56 M</b><br>Operation Cost   | <b>\$0.03 M</b><br>Operation Cost   | <b>\$1.50 M</b><br>Operation Cost   | <b>\$0.06 M</b><br>Operation Cost   | <b>\$0.59 M</b><br>Operation Cost   | <b>\$3.73 M</b><br>Operation Cost   |
| <b>\$12.17 M</b><br>Lifecycle Cost  | <b>\$3.58 M</b><br>Lifecycle Cost   | <b>\$12.99 M</b><br>Lifecycle Cost  | <b>\$7.55 M</b><br>Lifecycle Cost   | <b>\$4.95 M</b><br>Lifecycle Cost   | <b>\$41.23 M</b><br>Lifecycle Cost  |

Currently, the lifecycle budget allocation within the Long-Term Financial Plan is only \$31.74 million on average each year. This leaves a funding shortfall of \$9.49 million on average each year and means we currently only have 77% of the costs (Lifecycle Financial Ratio) to deliver the required activities to sustain current levels of service.



### LIFECYCLE SUMMARY

Annual Average first 10 years

|                    |              |
|--------------------|--------------|
| Lifecycle Forecast | \$41,255,000 |
| Planned Budget     | \$31,738,330 |
| Shortfall          | -\$9,486,670 |



### MAINTENANCE

Annual Average first 10 years

|                      |             |
|----------------------|-------------|
| Maintenance Forecast | \$3,871,000 |
| Planned Budget       | \$3,871,000 |



### OPERATION

Annual Average first 10 years

|                    |             |
|--------------------|-------------|
| Operation Forecast | \$3,733,500 |
| Planned Budget     | \$3,733,500 |



### RENEWAL

Annual Average first 10 years

|                  |              |
|------------------|--------------|
| Renewal Forecast | \$33,620,500 |
| Planned Budget   | \$24,133,830 |



Noting that this Asset Management Plan has not forecast any additional operational and maintenance requirements, the identified lifecycle funding shortfall is associated with the revised asset renewal forecasting. Each transportation asset class generally requires additional renewal funding across the 10-year planning period.

The Asset Renewal Funding Ratio indicates that over the next 10 years our current budgets within the Long-Term Financial Plan account for 72% of the forecast funding required for the optimal renewal of our transportation assets. Contributing factors for the gap between the forecast renewal costs and current budgets within the Long-Term Financial Plan include:

- Not achieving our Asset Renewal Funding Ratio targets over the past 4 financial years as a result of covid-19 resourcing impacts and project delays associated with post-pandemic market saturation.
- Utilising advanced predictive modelling within this Asset Management Plan, that analyses asset condition information to better recognise the changing asset investment needs over time to maintain service levels.
- Ensuring we accurately recognise asset replacement costs, utilising current unit rates that take into consideration increasing costs associated with inflation and industry escalations (we have experienced significant increases in project unit rates, noting that the Local Government Association (LGA) have indicated that costs and materials have increased up to 25% post pandemic).

Only what is funded within the Long-Term Financial Plan and approved through the Annual Business Plan and Budget can be delivered. Should the Long-Term Financial Plan be unable to accommodate the revised asset renewal forecasts recommended within this Asset Management Plan, there will be associated service and risk impacts.

Continuing to leverage off external funding opportunities will allow us to maintain and enhance the quality of the service we provide, while reducing financial pressures through the efficiencies in an increased revenue. We will continue to work in partnership with both the State and Federal Governments to pursue these opportunities for both renewal and significant new and upgrade projects.



## 8 Potential Service and Risk Impacts

If the forecast activities outlined within this Asset Management Plan (operations, maintenance, renewal) are unable to be accommodated into the Long-Term Financial Plan, there will be potential service consequences for users. These service consequences include:

- Reduced levels of service for the transportation network (maintenance and renewal backlog)
- Reduced customer satisfaction levels associated with the management of our existing assets
- Intergenerational inequity (burdening future generations)

The associated risk consequences include:

- Increased safety risks associated with assets deteriorating beyond recommended intervention levels
- Increased reputational risks associated with services not aligning with community expectations
- Increased financial risks associated with additional maintenance requirements that cannot be accommodated within existing budgets
- Increased financial risks associated with higher renewal and/or rehabilitation treatments as asset renewals are not funded at the optimal point in time
- Increased economic risk associated with reduced business activity, events and tourism
- Intergenerational inequity (passing on costs and risk to future generations)

If the forecast activities outlined within this Asset Management Plan are unable to be accommodated into the Long-Term Financial Plan, we will endeavour to manage these risks within available funding by:

- Continuing to undertake regular asset condition and maintenance inspections
- Prioritising all asset renewal and maintenance activities with respect to available budget
- Revising our levels of service to establish an acceptable balance between cost, level of service and risk
- Developing a communication strategy to manage expectations and educate the community around affordable levels of service
- Continuing to seek out external funding opportunities
- Prioritisation of the delivery of key actions from the Improvement Plan



## 9 Monitoring and Improvement Program

The next steps resulting from this Asset Management Plan to improve asset management practices are:

| Improvement Plan Actions |  |
|--------------------------|--|
| 1                        | Finalise a 4-year Resource Plan to identify key upgrade/new projects to deliver Council's Strategic Plan objectives. Once key projects are recognised within the Long Term Financial Plan, Asset Management Plans will be updated to ensure associated acquisition costs (upgrade/new) and ongoing operational and maintenance costs are appropriately recognised, in conjunction with any scheduling adjustments required for asset renewal programs. |
| 2                        | Finalise Integrated Transport Strategy in 2024 and identify key priority projects for inclusion within the Resource Plan. Asset Management Plans to be reviewed and updated where required, considering any impacts to planned asset renewal programs.   |
| 3                        | Revise asset renewal forecasts for Adelaide Bridge following the completion of Options Analysis (currently underway).  |
| 4                        | Continue to work in partnership with both the State and Federal Governments to pursue external funding opportunities for both renewal and significant upgrade/new transportation projects.   |
| 5                        | Review and update operations and maintenance standards, to develop more structured and proactive maintenance regimes which provide an acceptable balance between cost, risk, and customer expectations. Include changes into future revisions of this Asset Management Plan and Long Term Financial Plan.  |
| 6                        | Continue to undertake regular condition audits and revaluation for all our transportation assets within the nominated 4-year cycles, including regular review of asset useful lives.   |
| 7                        | Continue to review our technical standards and their application across the transportation network with respect to climate resilience, circular economy, recycled materials, durability and performance, whole-of-life cost, amenity, and heritage requirements.   |
| 8                        | Continue to monitor forecast climate change impacts to ensure we remain resilient through proactively implementing appropriate mitigation and adaptation controls.   |
| 9                        | Improve the capture of carbon emission data for technical standards and project procurement to support lower carbon decision making.   |
| 10                       | Review of corporate performance measure targets for customer satisfaction, to assist with performance gap analysis.  |
| 11                       | Review and standardise asset hierarchies for all asset classes within Streets and Park Lands.  |
| 12                       | Review customer service requests codes to better align with Level of Service reporting and operational and maintenance sub-activities.   |
| 13                       | Further develop processes to ensure asset data is updated following the completion of contracted maintenance work and emergency asset replacement resulting from vandalism or knockdowns.  |



