3 Executive Summary

3.1 Transport Activity Background

Council provides the transport activity to allow people and goods to move around the District safely and efficiently by any transport mode including cycling, walking or passenger transport.

- The Asset Management Policy supports Council's long term strategic goals found in the LTP of:
- Ensure that the Taupo District remains a great place to live
- Promote economic development
- Protect our water resources and use them wisely
- Maintain the quality infrastructure that we have
- Keep rates and debt affordable

The objective of Council's Asset Management Policy is to:

- ensure service delivery is optimized to deliver agreed community outcomes and levels of service for both residents, visitors and the environment
- optimize expenditure over the life cycle of the assets
- risks are managed appropriately
- provide a service delivery that is sustainable

The following principles will be used by Council to guide asset management planning and decision making:

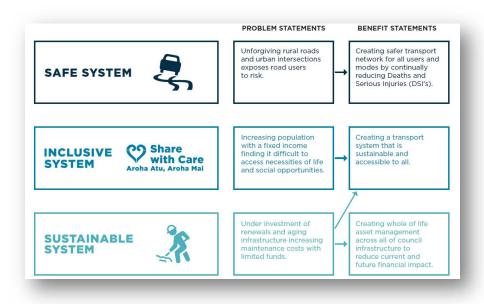
- effective consultation to determine appropriate levels of service
- Integration of asset management within Council's strategic, tactical and operational planning frameworks including corporate, financial, and business planning
- Informed decision making using a lifecycle and risk management and inter-generational approach
- Transparent and accountable asset management decision making
- Sustainable management of assets for present and future needs

3.2 Strategic Issues

Our key strategic issues for Taupo District which we will need to address over the coming years are identified below.

We have recently developed a Transport Strategy, which is yet to be adopted by Council at the time of developing this version, and this will provide strategic network and priorities for the Taupō District roading network.

This strategy has provided priorities for this version of the AMP. The strategy is yet to be endorsed by Waka Kotahi.



3.3 Our transport assets

Council is responsible for the management of road and traffic assets with a replacement value of approximately \$525 million (as per the latest valuation August 2020). Since the last AMP an additional 13km of sealed road has been vested to Taupō District Council. To provide a safe transport network, Council manages the assets listed below:

| Asset | Quantity | | |
|------------------|--|--|--|
| Roads – sealed | 740km | | |
| Roads - unsealed | 54km | | |
| Footpaths | 340km | | |
| Street lighting | 4,238 lanterns | | |
| | 2,828 poles | | |
| Traffic services | 28,118 signs and markings | | |
| Bridges | 21 road bridges (2 with shared ownership) | | |
| Bridges | 4 foot bridges | | |
| Culverts | 61 large culverts (diameter greater than 2m) | | |
| | 2,373 small culverts (diameter less than 2m) | | |
| Kerb and Channel | 543.3km | | |
| Cycle ways | 1.2 km | | |
| Parking | 97,708m2 | | |
| Structures | 9 Taupo urban bus shelters | | |

3.4 State of our assets

The last NZTA Road Infrastructure Assessment Survey was undertaken in June 2018 and it identified the transport network was in very good shape from a road safety point of view and most of the opportunities for improvement were not major issues. The couple of items noted from the audit were;

- Condition of the unsealed road network
- Aging pavements while in still good condition the majority of pavements are well passed their design lives.



3.5 Levels of service

A key objective of this Activity Management Plan (AMP) is to match the level of service provided by the asset with the expectations of customers. This requires a clear understanding of customers' needs, expectations and preferences. The levels of service defined in this section will be used:

- to inform customers of the proposed type and level of service to be offered
- to enable customers to assess suitability, affordability and equity of the services offered
- as a focus for the AMP tactics proposed to deliver the required level of service
- to measure the effectiveness of this AMP
- to identify the costs and benefits of the services offered

While a large amount of the Transportation assets has a high expected service life, this could be impacted by several issues. These include long term funding (not meeting or receiving Waka Kotahi subsidy for a project, a reduction in either Waka Kotahi subsidy and/or no increase in local share), local government amalgamation (assets being delivered through a regional regime) and protentional of privatisation.

Our Council has adopted a number of performance measures which contribute to our community both customer and technical levels of service are used.

Our current levels of service focus on the Department of Internal Affairs which will continue for this AMP but the AMP will also include the new Customer Levels of Service for ONRC.

Mobility

Reliability: the consistency of travel times that road users can expect.

Resilience: the availability and restoration of each road when there is a weather or emergency event, whether there is an alternative route available and the road user information provided.

Speed: indicates the optimal speed for each road. The optimal speed is the speed that is appropriate for road function (classification), design (including safety) and use. Optimal speeds support both safety and economic productivity.

Safety

How road users experience the safety of the road.

Amenity

The level of travel comfort experienced by the road user and the aesthetic aspects of the road environment.

Accessibility

The ease with which people are able to reach key destinations and the transport networks available to them, including land-use access and network connectivity.

3.6 Demand Forecasts

Consideration has been given to the optimistic discussions with developers, actual consent numbers over the past three years, demographic considerations and officers' estimates when estimating the potential lot numbers outlined in the *DC Policy* and the *Growth Model*.

The table below outlines those estimates for the next ten years. The areas that are not predicted to have any growth due to current capacity levels, such as, Hatepe, Motuoapa, Whareroa, and Five Mile Bay/Waitahanui have been removed. The total estimated new lots for the district over the next LTP period (2021-2031) is estimated at 1304 lots.

| Financial Year ENDING | Actual 18/19 | Actual 19/20 | Actual + Forecast 20/21 | Forecast 21/22 | Forecast 22/23 |
|--------------------------|-----------------|-----------------|-------------------------------|-------------------|----------------|
| | | | | | |
| Taupō | 104 | 77 | 127 | 98 | 100 |
| Kinloch | 107 | 24 | 29 | 55 | 20 |
| Mapara Valley | 5 | 20 | 12 | 16 | 10 |
| Turangi | 1 | 0 | 0 | 0 | 0 |
| Other | 34 | 23 | 2 | 0 | 5 |
| Total new lots per year | 251 | 144 | 170 | 169 | 135 |

The estimated growth of the district; and water, wastewater, and transportation catchments; models are found in the *DC Policy* and *Taupō Growth Model*.

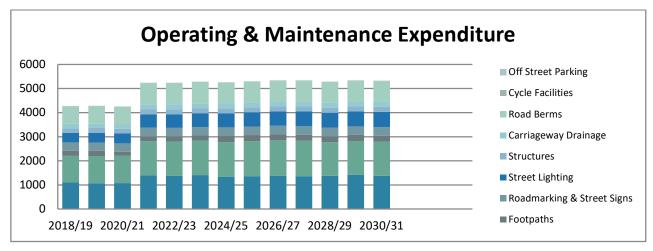
3.7 Financials

Our district is relatively young and as the Taupo district has free draining soils roads generally last longer than in other parts of the country, which means many of our infrastructure assets including roads are in good condition and will not need renewing or upgrading for some years. Budgets within the AMP will be confirmed during the Long Term Plan (LTP) process.

The ten year financial forecast was determined by the continuation/evaluation of current maintenance and renewal strategies within each of the components, i.e. pavements, footpaths, lighting etc and identification of new works. The 30 year projections are summarised below. Note this is based on draft LTP budgets which are still to be consulted on.

3.7.1 Maintenance works

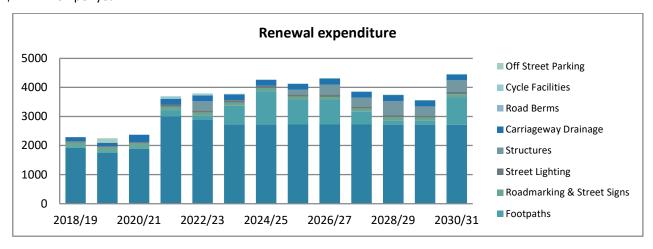
Operation and maintenance costs are budgeted to average approximately \$5.4 million for the next 10 years, which is higher than the average cost over the past five years, mainly because of higher energy prices, traffic management cost increases (due to stricter health and safety practices), tree and vegetation removal has increased and this has had an impact on road maintenance contractors. The majority of the maintenance is likely to be Subsidised with only \$473K per year being funded fully by the community.



3.7.2 Renewal works

TDC has recently run a deterioration modelling (dTIMS) exercise following on from the one in 2018. This is to provide a more accurate long-term programme for predicting reseal and rehabilitation costs and optimal timing. The suggested programme from the latest dTIMS model has an investment range (low to high) from \$1.9M to \$2.6M per year for the renewal funding requirement. The increase in programme quantities are based on the model recommendations and comparing the outputs with common practice and lifecycle achievements. These recommendations do need to be verified and checked in areas such as data accuracy and quality of pavements and achievement of longer design lives. It is proposed to spend on total renewals an average of \$3.8M per year over the next 10 years with an average of \$491K per year being unsubsidised.

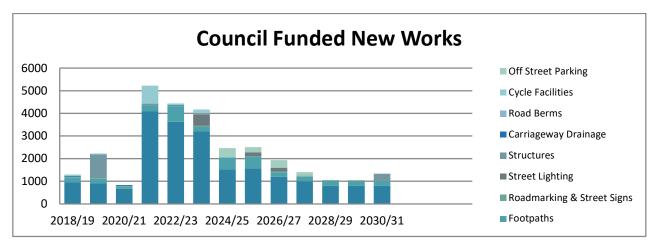
Renewal costs vary according to the age and performance of the plant and network. Because the network is relatively young, Council hasn't had to invest as heavily in renewals as it will later in the life of the assets. At the moment, depreciation is valued at an average of \$6.7 million per year, but the average renewal expenditure is budgeted at only \$4.2 million per year.



3.7.3 New works

Capital expenditure is budgeted at an average of \$2.6M (Subsidised and unsubsidised) per year to improve capacity and safety with an average of \$983K per year being unsubsidised. Council submits a three-yearly land transport programme to Waka Kotahi seeking subsidy for major transport projects. Provided that Council receives the subsidies, the largest components of the programme are intended to be:

| Project | Value | Period |
|--|---------|------------------------|
| Poihipi Road widening continuation | \$2.52M | 2021/2022 to 2026/2027 |
| Broadlands Road | \$1.5M | 2021/2022 to 2029/2030 |
| Whangamata Road | \$2.55M | 2021/2022 to 2023/2024 |
| Tirohanga Road | \$1.25M | 2021/2022 to 2025/2026 |
| Kiddle Drive and Arrowsmith intersection | \$1.95M | 2021/2022 |
| Seal extension (unsubsidised) | \$5.50M | 2021/2022 to 2030/2031 |



Note: Second bridge falls outside the 10 year period. Increase in capex expenditure for year 1 is due to the widening projects and intersection improvement.

3.8 Crown Infrastructure Partner funding

Taupo District Council in 2020 received Crown Infrastructure Partners funding for some of their "shovel ready" project applications. The first one received \$20.1M and relates to the Taupo Town Centre Transformation project or (TTCT) which is to look at implementing the Commercial and Industrial structure plan involving diverting of traffic from Tongariro Street to Titiraupenga Street and back on to Lake Terrace. Also included in this project is the upgrade of Tongariro Street and Tuwharetoa Streets to be more pedestrian focused and complete the CBD intersection projects. The other project is to continue kerb and channel renewal work in Turangi and resurface the shared path alongside the East Taupo Arterial, both of these total of \$10.6M. It is unclear what the exact impact of these projects will mean on our budgets moving forward but there is likely to be an increase in maintenance particularly if traffic signals are to be proposed.

3.9 Lifecycle management tactics

3.9.1 New works

New works are planned as a result of growth or where a change in level of service is required or where improvements are planned for quality and/or safety purposes. New works are planned at a longer time frame according to the Councils funding ability.

3.9.2 Renewal

Replace assets as their condition falls below the level of service, rather than at theoretical end of life based on age of asset. This includes replacement and rehabilitation of existing assets to their original condition and capacity.

3.9.3 Operations & maintenance

To maintain the asset in good repair and condition, in order to increase its lifecycle and decrease its renewal component. The operations team via contractor has scheduled preventive maintenance programmes so as to optimise the life of the asset and reduce renewal cost.

3.9.4 Disposal

Where transport assets are surplus to requirements or no longer meet the required level of service, they are renewed and the existing asset is disposed of at this time. E.g. signs, streetlights.

3.10 Risk management

Risk management is an important element in the development and management of Council assets. The high risk areas in transport are:

- vehicle crashes, due to weather conditions such as ice and/or snow. This is mitigated by our road safety improvements (low cost/low risk programme), regular road maintenance, road safety campaigns and design of roads to best practice standards.
- damaged or blocked roads and road structures, due to slips fallen trees, floods and storms. This is mitigated by regular road maintenance programmes and condition assessments.

3.11 Asset Management Practices

Council uses a range of decision making tools to establish its maintenance, renewal and new works expenditure, including: process, analysis and evaluation techniques for life cycle asset management; information systems to store and manipulate data; and data and information from a number of sources (technical, financial, customer service).

3.12 Plan Improvement Programme

Councils are required to have plan improvement programmes to improve their asset management planning. Council staff will continue to work through the various elements of the improvement plan.

Our top improvement items are:

- Improving quality data
- Continuing with condition assessments
- Further data collection and verification of data
- Future forward works programme to be developed through RAMM

