**Forecasting Assumptions LTP 2021-31**

All assumptions have medium or low uncertainty unless otherwise specified. The significant lives of assets can be found in the Accounting Policies and the sources of funding for future expenditure can be found in the Revenue and Financing Policy.

Assumptions are also included in the Infrastructure Strategy and Development Contributions Policy. Although the assumptions in these documents are specific to that document they are consistent with the forecasting assumptions used as the basis for the Long-term Plan.

Our assumptions are:

- Limited structural change to population for years 1-3, increased aging structure by 2031 and until 2051. An aging population will put added pressures on specific services.
- 38 – 43 per cent of the District's properties will be owned by non-resident ratepayers (mainly holiday home owners, but also others). As at January 2021 38 per cent of the District's properties are owned by non-resident ratepayers.
- Approximately 30 per cent of the District's properties will be holiday homes.
- There will be economic influences that will impact on Council's business that are out of Council's control.
- There have been delays to the preparation of the Government Policy Statement (GPS) on land transport, the National Land Transport Programme (NLTP), and the Investment Assessment Framework (IAF), which will result in delays to when NZTA funding is finalised. This means that, prior to the Council's adoption of the Long-term Plan 2021 - 31, NZTA will not be confirming the level of funding until late August – mid September 2021. The forecast financial statements are based on the assumption that Council will be able to claim 51 per cent of all maintenance and renewal costs for district roads in line with currently known NZTA work categories and classifications. Should the outcome of the NLTP result in less co-funding being received from NZTA then the work programme for roading could be impacted. Any financial impact to Council will be managed through limiting CAPEX/OPEX work programs to within the Council's affordability of local share.
- Growth in the number of rateable properties is set out in Council's Growth model 2021. (For expected growth numbers see the Prospective Schedule of Rates).
- Long term inflation is consistent with BERL's Local Government Cost Index (LGCI) forecasts (updated in September 2020). If inflation rates were to rise faster than forecast it is expected that Council rate increases would also need to increase to maintain the current levels of service.
- Climate change impacts will not be significant between the 2021 and 2031 infrastructure strategies but we will review data on an ongoing basis to see if this needs to change for infrastructure strategies from 2031. This assumption has a high level of uncertainty. Central government have undertaken modelling to understand the possible impacts but there is always the chance that there might be variations between the impacts and what happens in reality. The implications of this is that the expected changes in climate will be different to what has been modelled.
- Waikato Regional Council will continue to push for higher wastewater quality via consent conditions, with consequential impacts on infrastructure capital and operating costs
- There are no substantial natural disasters within the District. Council has not made financial provision to remedy the consequences of a significant natural disaster. The level of uncertainty for this assumption is high. A major natural disaster will be expensive.
- Legislative change is likely over the next ten years. Where direction has been provided by Central Government this has been taken into consideration. If unknown the status quo has provided the baseline for decisions.

- **Critical variable = COVID 19**
  **Level of uncertainty = High**
  Since alert levels were implemented in March 2020, New Zealand has spent about 60% of this time in alert level 1. This reflects the embedding of government's COVID management plans. Government has also entered into agreements to obtain vaccines and the rollout has commenced in the 1st quarter of 2021. It is therefore assumed that the COVID situation in New Zealand is unlikely to significantly worsen. With the rollout of the vaccine expected to be completed by mid-2022, it is anticipated that New Zealand will return to "normal" thereafter. We do not anticipate there will be any future nationwide lockdowns. Our expectation is the wider economy will remain stable. If there was further lockdowns, then the implications may include reduced revenue from council venues, consent revenue, delay of capital projects etc. This has high uncertainty.

  The Council has made use of BERL in determining the inflation rates used in the Long-term Plan. BERL has considered the impact of COVID-19 on the economy and provided three scenarios. The Council has selected the mid scenario for the Opex and Capex inflation rates. Council therefore accept that COVID-19 has been considered within the economic assumptions.

  Council also consider the risks and impacts that material supply from overseas may be disrupted and the supplier market may be unable to cope with the increasing demand. This may impact the capital work programme that Council plans to do in the next three years.
- Three waters reform – nationwide reform of the three waters (drinking water, wastewater, and stormwater) is likely within the next 18 months. As these Government reforms are yet to be finalised we are unable to assess the impact as yet, and Council's financial strategy has been developed on the basis of status quo. The value of Council's three waters assets as at 30 June 2020 was $297m. This accounted for $79m (53%) of Councils borrowings and $25.8m (37%) of Councils total rates.

**Finance**
The main financial assumptions that underpin this Long-term Plan relate to:
- Asset revaluations
- Lifecycle of significant assets
- Financial ratios
- Income from the sale of Council property
- Income from the harvest of Council's forests
- Development contributions income
- Investment returns
- Interest rates on borrowings
- Expenditure on capital projects and debt levels
- Asset management plans – timing of expenditure
- Inflation adjustment

Should any of these assumptions prove substantially incorrect there is likely to be an impact on the Long-term Plan. The methodology used to determine possible effects is:

- Identify the area of interest i.e. income from sale of Council property
- Identify the key variables i.e. the sale price achieved
- Determine how each key variable could change and the possible effect or effects of a change upon the Long-term Plan i.e. some capital expenditure projects may be deferred.

The degree of impact to the Long-term Plan is outlined below.

**1. Asset revaluations**

**Critical variable = Inflation rate**
**Level of uncertainty = Medium**

The asset revaluation amounts are based on the cumulative inflation tables provided by BERL (see below). The effect of a change in the actual rate of inflation will mean a higher/lower asset value and a higher/lower depreciation charge. If a higher depreciation charge is required this will most likely require rates to increase to ensure we continue to fund 100% of the depreciation charge. It is assumed that the depreciation collected on assets and set aside in Council's depreciation reserves will be sufficient to fund future renewals programmes. Should there be a shortfall in reserve funds in the future then Council will need to raise debt to fund these renewal programmes to ensure that it meets the levels of service agreed with the community.
Asset revaluation cycles will in practice differ for each class of asset. The projections of this LTP assume a three yearly staggered revaluation cycle of asset classes.

## 2. Lifecycle of significant assets

**Critical variable = Condition of assets**
**Level of uncertainty = Medium**

Council has a mixture of condition based and age based information to guide its replacement timing for significant assets. We have gained considerable knowledge of the condition of our underground assets over the past 6 years, we still have further condition assessment work to complete. This means that many of our renewal decisions are based on the actual condition of the asset. There is still a however a risk of asset failure for those assets yet to be assessed, resulting in increased replacement costs. Any increase in unplanned costs may cause other projects to be delayed and/or an increase in debt funding if no reserve funds are available.

## 3. Sources of funds for the future replacement of significant assets

**Critical variable = That sources of funds are not achieved**
**Level of uncertainty = Low**

It is assumed that the sources of funds for operating expenditure is as set out in the Revenue and Financing Policy and for capital expenditure in the relevant financial tables. User charges have been set at previously achieved levels. Depreciation is funded through rates. The Council is able to access borrowings at levels forecast within the LTP.

## 4. Financial ratios

The financial ratios set by Council in accordance with the *Treasury Management Policy* allow for the following projected borrowing requirements:

| **Ratio** | **Limit** |
|---|---|
| Net external debt / Total revenue | Must not exceed 200% |
| Net interest on external debt / Total revenue | Must not exceed 20% |
| Net interest on external debt / Annual rates revenue | Must not exceed 25% |
| Liquidity (External term debt + committed bank facilities + liquid investments) / Total external debt | Must be greater than 110% |

## 5. Income from the sale of Council property

**Critical variable = Net sale proceeds and infrastructure costs**
**Level of uncertainty = Medium**

| 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | 2029-30 | 2030-31 |
|---|---|---|---|---|---|---|---|---|---|
| $,000 | $,000 | $,000 | $,000 | $,000 | $,000 | $,000 | $,000 | $,000 | $,000 |
| 3,488 | 2,040 | 2,468 | 2,106 | 1,857 | 344 | 303 | 674 | 674 | 674 |

If estimated net sales proceeds are not achieved, or infrastructure costs are incurred at a higher level than planned, then the net cash flow will be reduced. Failure to achieve the projected number of property sales per year will also impact negatively on projected cash flows.
The consequences of changes as noted above could be the deferral of some capital expenditure projects so that expenditure would be reduced to match the reduced levels of income or an increase in borrowing where it is important that significant projects proceed.

### 6. Income from the harvest of Council's forests

**Critical variable = Net sale proceeds**
**Level of uncertainty = Medium**

| 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | 2029-30 | 2030-31 |
|---|---|---|---|---|---|---|---|---|---|
| $,000 | $,000 | $,000 | $,000 | $,000 | $,000 | $,000 | $,000 | $,000 | $,000 |
| 825 | 1,477 | 0 | 344 | 0 | 0 | 453 | 0 | 0 | 0 |

If the estimated net sales proceeds are not achieved, then the net cash flow will be reduced. The above estimates are subject to market risk with regard to log prices and are influenced by foreign exchange fluctuations and worldwide demand for logs, particularly from China. Consequences of changes as noted above could be the deferral of some capital expenditure projects so that expenditure would be reduced to match the reduced levels of income or an increase in borrowing where it is important that significant projects proceed.

### 7. Development contributions income

**Critical variable = The assumed rate of growth**
**Level of uncertainty = Medium**

It is probable that the demand for new sections in Taupo District will continue over time. Internationally there is demand for properties with coastal and water access, although how this will be affected by aging populations is not yet clear.
If growth is less than forecast Council's revenue from Development contributions (DC) will be reduced. Any shortfall in DC revenue will not be available for DC debt reduction. This shortfall will need to be funded from the existing community.

### 8. Investment returns

**Critical variable = The return on investments**
**Level of uncertainty = Medium**

The LTP assumes that income will be generated from all Council investment assets. Council seeks to achieve growth in parts of its investment portfolio. Other investments, such as forestry deliver returns in lump sums at time of harvest.
The assumed interest rate on cash and fixed term investments over the ten years is shown in the table below:

| 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | 2029-30 | 2030-31 |
|---|---|---|---|---|---|---|---|---|---|
| 1.31% | 1.43% | 1.60% | 2.05% | 2.27% | 2.49% | 2.67% | 2.81% | 2.87% | 2.97% |

A change of 1% in forecast interest rates on Council's general fund investments would equate to approximately a $750k movement.
The consequence of a reduction in investment income could mean that less income is available to offset rates, or to repay borrowings. This may mean that some capital projects are deferred or borrowing increased where it is important that significant projects proceed. Alternatively it may man that rates need to increase to cover the shortfall in investment income.

## 9. Interest rate on borrowings

**Critical variable = The interest rate on borrowed funds**
**Level of uncertainty = Low**

Currently Council's borrowing is sourced from a combination of bank financing, commercial paper issuance and floating rate notes through the Local Government Funding Agency with the majority of this overlaid by fixed interest rate swaps. These swaps extend out to maturities ranging between 2021 and 2033. The relevant interest rates fixed under the swaps range from 3.70% to 6.16%. The weighted average cost of Councils borrowing at 30 June 2020 was 5.58%. Council has over 50% of its interest costs fixed over the entire 10 year plan period. As such, Council has minimal exposure to any fluctuations in interest rates. The assumed interest rate on borrowings over the ten years is shown in the table below:

| 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | 2029-30 | 2030-31 |
|---|---|---|---|---|---|---|---|---|---|
| 4.50% | 4.28% | 3.84% | 3.50% | 3.31% | 3.12% | 3.13% | 3.12% | 3.07% | 3.00% |

Any increases in the borrowing rate above the planned rates from year 5 onwards could result in a delay in the start date of some projects in order to keep overall costs contained within the annual budgets or alternatively may result in an increase in rates in those years

## 10. Expenditure on capital projects and debt levels

**Critical variable = Delivering the capital projects on time and on budget**
**Level of uncertainty = High**

The capital expenditure budgets have been set bearing in mind the financial covenants of Council's Treasury Management policy and Council's Financial Strategy. In setting the final programme of capital expenditure, asset maintenance and asset renewal projects were given the highest level of priority so that Council can continue to maintain its existing levels of service. Projects in response to statutory requirements have been given the next highest level of priority. Given the significant increase in the capital programme from the previous LTP and concerns over availability of contractors these two factors may result in delays to the capital programme and borrowings being less than forecast or drawdowns of debt delayed. We have modelled two scenario's (50% and 75% delivery of capital programme) and their potential impacts on borrowings and interest cost are scheduled below:

| | LTP 2021/22 ($000) | LTP 2022/23 ($000) | LTP 2023/24 ($000) | LTP 2024/25 ($000) | LTP 2025/26 ($000) | LTP 2026/27 ($000) | LTP 2027/28 ($000) | LTP 2028/29 ($000) | LTP 2029/30 ($000) | LTP 2030/31 ($000) |
|---|---|---|---|---|---|---|---|---|---|---|
| **50% Delivery** | | | | | | | | | | |
| Debt | 161,875 | 171,680 | 182,492 | 183,666 | 181,049 | 175,035 | 176,730 | 174,414 | 175,117 | 179,791 |
| Interest | 7,130 | 7,138 | 6,800 | 6,408 | 6,036 | 5,555 | 5,505 | 5,478 | 5,365 | 5,324 |
| **75% Delivery** | | | | | | | | | | |
| Debt | 165,313 | 180,020 | 196,238 | 197,999 | 194,074 | 185,053 | 187,596 | 184,121 | 185,176 | 192,186 |
| Interest | 7,207 | 7,390 | 7,224 | 6,899 | 6,489 | 5,914 | 5,832 | 5,799 | 5,669 | 5,660 |

## 11. Asset management plans – timing of expenditure

The assumptions in Council's Asset Management Plans are the basis for the timing of asset-related expenditure, mainly for infrastructure. This includes any amendments following consultation. Asset Management Plans and their assumptions are available separately at www.taupo.govt.nz.

## 12. Inflation adjustment

**Critical variable = Inflation rate**
**Level of uncertainty = Medium**

The figures in all the financial reports have been adjusted to include inflation-adjustment expectations for the relevant year of the LTP. These inflation adjusters have been provided by BERL and have been endorsed for use by the Society of Local Government Managers. The table below details the inflation adjusters for each category of cost.
If inflation rates were to rise faster than forecast it is expected that Council rate increases would also need to increase to maintain the current levels of service.

**Forecast of Price Level Change Adjusters - *Cumulative Inflation Table (%)***

| Year to | Planning and regulation | Roading | Transport | Community activities | Water and environment |
|---|---|---|---|---|---|
| Jun-22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Jun-23 | 2.5 | 3.1 | 2.6 | 2.7 | 3.5 |
| Jun-24 | 4.9 | 6.2 | 5.1 | 5.3 | 6.2 |
| Jun-25 | 7.2 | 9.3 | 7.6 | 7.8 | 9.1 |
| Jun-26 | 9.6 | 12.5 | 10.2 | 10.5 | 12.3 |
| Jun-27 | 12.0 | 15.8 | 12.8 | 13.2 | 15.4 |
| Jun-28 | 14.5 | 19.2 | 15.5 | 16.0 | 19.1 |
| Jun-29 | 17.0 | 22.7 | 18.3 | 19.0 | 23.0 |
| Jun-30 | 19.6 | 26.3 | 21.1 | 22.1 | 27.2 |
| Jun-31 | 22.2 | 30.0 | 24.0 | 25.0 | 31.1 |

## 13. Population changes

**Critical variable = Population**
**Level of uncertainty = medium**

Population growth across our District is expected to reflect the population projections provided by Statistics New Zealand, as formulated from the 2018 growth model. We recognise that these projections are now outdated, and do not reflect recent population growth. However, actual lot creation has been in line with these outdated projections, and we have no better basis for long-term projections at this point in time. At this time, we believe these are reasonable and the sensitivity is low. Were long-term growth to differ dramatically from the current long-term projections – it would require new growth areas, new infrastructure projects and new development contributions arrangements – although a dramatic difference seems unlikely given our previous growth projections reflected matters such as an ageing population, lower fertility etc and these underlying factors remain unchanged.

Since 2013, Taupo district's population is estimated to have grown by around 5,300 people. Over this same period an additional 1,250 houses have been built.

This suggests that to accommodate this growth in population, either previously empty holiday houses have become usually resident homes, or average household sizes have increased – potentially in response to increased house prices.