Forecasting assumptions

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 (LTP).

Our assumptions are:

- Population growth across our District is expected to reflect the population projections provided by Statistics New Zealand. Refer to the Demographic Snapshot which can be viewed on our website taupo.govt.nz.
- Limited structural change to population for years 1-3, increased aging structure by 2028 and until 2048. An aging population will put added pressures on specific services.
- 40-45% of the District's properties will be owned by non-resident ratepayers (mainly holiday home owners, but also others). As at June 2016 42% of the District's properties are owned by non-resident ratepayers.
- Approximately 30% of the District's properties will be holiday homes.
- Our expectation is that the wider economy will remain stable. There will be economic influences that will impact on Council's business that are out of Council's control.
- The funding assistance rate (FAR) from New Zealand Transport Agency will remain at 51%. The FAR for the special purpose road (Huka Falls Road) will continue to be 100% reducing to 51 % in the fourth year of the LTP.
- Growth in the number of rateable properties is set out in Council's Growth model 2018 and is based on information contained in the Demographic Snapshot 2016/17. (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 2017). 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 2018 and 2028 infrastructure strategies but we will review data on an ongoing basis to see if this needs to change for infrastructure strategies from 2031. Refer Challenges Paper 2016/17 which can be viewed at taupo.govt.nz. 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.

- That no re-organisation of local government which affects the Taupo District Council in the first three years of the LTP
- 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.
- Taupō Airport upgrade - towards the end of 2017 Council submitted a business case to the Minister of Transport outlining the need to upgrade both the terminal building, carpark and entranceways as Taupō Airport is 50 per cent owned by the Crown. Since then we have engaged with the Ministry of Business, Innovation and Employment and provided a business plan to the Regional Economic Development Fund seeking assistance with funding the upgrade. We hope to attract some Government funding to upgrade the facilities and have allowed $2.5 million in the plan as our contribution. If Council is unsuccessful in attracting Government funding then the project will be reassessed based on what is affordable for the community.

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 LTP. 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 LTP i.e. some capital expenditure projects may be deferred.

The degree of impact to the LTP 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. Although we have gained some more knowledge of the condition of our underground assets over the past 3 years, we still have further condition assessment work to complete. This means that some of our renewal decisions are based on when we expect the end of life of the asset to occur, rather than making decisions based on the actual condition of the asset. This may compromise levels of service and means that there is an increased risk of an asset failing, 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. 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%

4. Income from the sale of Council property

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

2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
$,000	$,000	$,000	$,000	$,000	$,000	$,000	$,000	$,000	$,000
3,994	684	2,287	173	1,745	198	366	1,667	1,454	362

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.

5. Income from the harvest of Council's forests

Critical variable = Net sale proceeds
Level of uncertainty = Medium

2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
$,000	$,000	$,000	$,000	$,000	$,000	$,000	$,000	$,000	$,000
1,964	2,010	0	0	0	1,215	0	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.

6. 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.

7. 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 e.g. TEL fund, but such growth has been dependent upon Council funding requirements. From July 2020 it is intended that the TEL Fund will no longer subsidise operational Council funding requirements and the fund will continue to grow.
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:

2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
3.30%	3.50%	3.70%	3.87%	4.02%	4.15%	4.25%	4.35%	4.45%	4.55%

A change of 1% in forecast interest rates on Council's general fund investments would equate to approximately a $500k 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.

8. 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 debentures 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 2020 and 2029. The relevant interest rates fixed under the swaps range from 4.05% to 6.16%. The weighted average cost of Councils borrowing at 30 June 2017 was 5.88%. Council has over 80% of it's interest costs fixed over the first 5 years of the long term plan and as such 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:

2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
5.94%	5.84%	5.80%	5.86%	5.66%	5.59%	5.31%	4.91%	4.47%	4.43%

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

9. Expenditure on capital projects and debt levels

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

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.

10. 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.

11. 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-19	0.0	0.0	0.0	0.0	0.0
Jun-20	2.1	2.2	2.0	2.0	2.5
Jun-21	4.2	4.4	4.1	4.1	4.9
Jun-22	6.4	6.9	6.4	6.3	7.4
Jun-23	8.8	9.4	8.8	8.7	10.0
Jun-24	11.3	12.0	11.3	11.2	12.7
Jun-25	13.8	14.8	13.9	13.7	15.6
Jun-26	16.6	17.8	16.8	16.5	18.6
Jun-27	19.4	21.0	19.7	19.2	21.8
Jun-28	22.3	24.4	22.9	22.3	25.3