

# Significant Forecasting Assumptions

## Summary of Assumptions

The following general and financial assumptions are assumed for the life of this Long Term Plan (2015-25)

Assumption	Confidence Level	Risk	Consequence	
<b>General Assumptions</b>				
1	Population Change	Medium	Low	Minor
2	Household Change	Medium	Low	Minor
3	Useful Life of Significant Assets	Medium	Low	Medium
4	Demographic Changes	High	Low	Minor
5	Joint Venture or Shared Service Arrangements/Council Controlled Organisations (CCOs)	High	Low	Minor
6	Legislative Demands on Council	High	High	Medium
7	Climate Change	Medium	Medium	Minor
8	Resource Consents	High	Low	Medium
9	Service Levels	Medium	Medium	Minor
10	Demand	Medium	Low	Medium
11	Availability of Contractors and Materials	Medium	Medium	Medium
12	Natural Hazards/Local natural disaster	Medium	Medium	Major
13	Strategic Assets	High	Low	Medium
14	Council Political Structure	High	Low	Medium
<b>Financial Assumptions</b>				
1	Inflation	Low	Medium	Medium
2	Interest Rates on Borrowing	Medium	Medium	Medium
3	Return on Investments	High	Medium	Medium
4	Funding Sources	Medium	Medium	Minor
5	Credit Availability	High	Medium	Major
6	Costs	Low	Medium	Medium
7	Currency and Oil Price fluctuations	Medium	Low	Medium
8	NZ Transport Agency Financial Assistance	Medium	Medium	Medium
9	Emissions Trading Scheme	Medium	Low	Minor
10	Asset Depreciation Rates	High	Low	Minor
11	Revaluation of significant assets	High	Low	Minor
12	Rating Base	High	Low	Minor

# Significant Forecasting Assumptions

## Significant Long Term Plan 2015-25 General Assumptions

Assumption	Confidence Level (High, Medium, Low)			Risk	Risk Level (High, Medium, Low)			Consequence of variation to assumption	Approach to mitigation of risk
	H	M	L		H	M	L		
<p><b>1. Population Change</b></p> <p><i>Assumption:</i> The District's Population is projected to increase to 48,853 (+76%) by 2033, peaking in 2038 at 49,091, and declining slightly over the remaining period to 48,660 in 2063. This represents the medium scenario. The population is expected to increase to 48,293 (+6.4%) by 2028 which includes the 2015 LTP period.</p> <p><i>Comment:</i> Population projections do not represent forecasts, but indicate what the future size and structure will be if the underlying assumptions regarding births, deaths and migration prevail. Projections use the 2013 Census based Estimated Resident Population as a base and were prepared by Natalie Jackson Demographics Limited and Waikato University.</p>		✓		Population change across the district occurs at a higher or lower rate than expected			✓	<p>A significant and consistent decline in population may adversely affect the ability of the Council to set rates at a level that is affordable to the community.</p> <p>A significant and consistent rise in population may adversely affect the ability of Council to deliver some services to existing service levels.</p>	<p>Council will continue to monitor population change in the District. Generally, small increases in population can be managed within the existing level of service. Declines in population will not necessarily reflect in lower number of ratepayers as the number of people per household is declining.</p> <p>Where growth requires additional infrastructure (e.g. subdivisions), Council can require financial contributions for this work.</p> <p>Costs over this amount may result in additional Council expenditure which is likely to be funded out of debt.</p>
<p><b>2. Household Change</b></p> <p><i>Assumption:</i> The District's households are projected to grow to 21,105 in 2033 (+13.1%), peaking in 2043 at 21,451 households, and declining slightly to 21,355 by 2063. This represents the medium scenario. Households are expected to increase to 20,680 (+10.8%) by 2028 which includes the 2015 LTP period.</p> <p><i>Comment:</i> Timaru District household change has historically been characterised by steady growth of households, with pockets of stronger growth in some locations and communities. Household size is declining over time as the population ages. Household projections do not represent forecasts, but indicate what future households will be if the underlying assumptions prevail. Projections use the 2013 Census based Estimated Resident Population as a base and were prepared by Natalie Jackson Demographics Limited and Waikato University.</p>		✓		Household change across the district occurs at a higher or lower rate than expected			✓	<p>A slower rate of household growth may mean some activities have overinvested in infrastructure (i.e. have too much capacity too soon).</p>	<p>Council will continue to monitor household change in the District. Existing infrastructure is being managed to address specific growth factors associated with an activity (e.g. traffic demand) which may be generated from an increase in households.</p> <p>Where growth requires additional infrastructure (e.g. subdivisions), Council can require financial contributions for this work.</p>

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<p><b>3. Useful Life of Significant Assets</b></p> <p><i>Assumption:</i> It is assumed that asset information is reliable and reflects the condition and performance of the assets. It is assumed that no significant assets will fail before the end of their useful lives as determined by the depreciation rates included in the accounting policies.</p> <p><i>Comment:</i> Useful lives are detailed for significant assets in Asset/Activity Management Plans. These provide information to support replacement and renewal plans. Useful lives used in the calculation of depreciation are stated in the Council's Accounting Policies under Depreciation.</p>		✓		Significant assets fail sooner or later than estimated			✓	A significant change in the useful life of a major asset may have significant financial repercussions.	Asset life is based on the estimates of engineers and valuers. These are regularly reviewed through asset monitoring and testing. In the event of assets wearing out earlier than anticipated, capital projects could be brought forward. This may affect borrowing and depreciation expenses. Negative impacts are likely to be at least partially offset by some assets lasting longer than estimated. Mitigation may also involve reprioritisation of the capital expenditure programme.
<p><b>4. Demographic Changes</b></p> <p><i>Assumption:</i> The District's Population is expected to age significantly into the future</p> <p><i>Comment:</i> The most notable change is a projected ageing population with an anticipated 31% (or over 15,000 people) of the Timaru District population above the age of 65 by 2033 (2013 Census: 20.5% or 9,003 people). Population increase is expected to be mainly in age groups above 65. All other age groups are expected to decline. Gender-wise, the population will see a slowly increasing proportion of female to male over time. Ethnically, the population is expected to remain largely NZ European/New Zealander with a slowly increasing Maori population. This represents the medium scenario. Projections do not represent forecasts, but indicate what the future size and structure will be if the underlying assumptions regarding births, deaths and migration prevail. Projections use the 2013 Census based Estimated Resident Population as a base and were prepared by Natalie Jackson Demographics Limited and Waikato University.</p>	✓			Demographic changes across the district occur at a higher or lower rate than expected			✓	Changes to projected demographics may place pressure on some Council services due to increased demand over time, leading to provision of a lower level of service.	Forecast demographic changes for a rapidly ageing population have been projected for western world economies for a number of years. Due to the makeup of the Timaru District population, it will feel these potential effects more acutely.  Council will continue to monitor demographic change in the District and adapt or redirect activity provision to meet needs where possible within reasonable costs.

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<p><b>5. Joint Venture or Shared Service Arrangements/Council Controlled Organisations (CCOs)</b></p> <p><i>Assumption:</i> Existing joint venture or shared service arrangements or Council Controlled Organisations (CCOs) are expected to remain over the life of this plan.</p>	✓			<p>New arrangements are proposed due to circumstances beyond the Council's control or existing arrangements are no longer tenable.</p>			✓	<p>Additional costs may be created as the result of the failure of an existing arrangement.</p>	<p>Joint venture or shared service arrangements or CCO creation are undertaken following analysis of the potential benefits and costs and any proposed changes are subject to robust analysis.</p> <p>Where government legislation is involved, this will be monitored for any impacts on joint venture arrangements.</p> <p>In addition, the Local Government Act 2002 Amendment Act 2014 introduced a requirement for Councils to review all such arrangements every six years. A programme of review and associated process will be developed to meet these requirements.</p>
<p><b>6. Legislative demands on Council</b></p> <p><i>Assumption:</i> Government legislation relating to some activities that Councils are involved in will change over the period of the Long Term Plan.</p> <p><i>Comment:</i> In the next three years, legislative impacts are expected in the following areas of Council operations - Resource Management, Environmental Health, Local Government Planning and Reporting, Water Supply, Building and Transport. Some legislative changes have been signalled by government, but are not yet through the parliamentary cycle.</p>	✓			<p>The impact of government legislation is more or less than expected.</p> <p>New legislation is introduced that alters the nature and scope of one or more Council activities.</p>			✓	<p>Unrealised impacts of legislation may create greater impacts on Council operations, including operating budgets, workloads, time and resource availability. These may lead to additional costs for the resident or ratepayer.</p>	<p>Council will regularly monitor existing and potential legislative change across its activities as it moves through the parliamentary cycle.</p> <p>The Council will submit on legislation where appropriate to encourage reduced or improved impacts on Council operations and value for money for ratepayers.</p> <p>Where legislation requires review of Council processes or staffing, the Council will seek to achieve the most efficient and cost effective way forward.</p> <p>Where legislation requires Councils to provide additional services or increased levels of service, this may require cost recovery through increases to rates or user fees.</p>

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<p><b>7. Climate Change</b></p> <p><i>Assumption:</i> Climate change will impact on the Council's operations and will require an appropriate response to adapt and prepare for potential impacts.</p> <p><i>Comment:</i> Climate change effects on Timaru District may include an increase in temperature, stronger winds, sea level rise, longer dry periods and more intense rainfall events.</p> <p>These may impact directly on several Council services, such as stormwater, water supply and emergency management.</p>		✓		The effects of climate changes are more or less severe than expected.		✓		<p>Unrealised effects of climate change are likely to create additional costs to mitigate their impacts, such as improving protection of critical infrastructure.</p> <p>More severe weather events resulting from climate change may increase damage to infrastructure and place pressure on Council finances.</p>	<p>Council activities will build appropriate mitigation responses into infrastructure development.</p> <p>The Council will continue to monitor climate change science and the response of central government and adapt its response where required.</p>
<p><b>8. Resource Consents</b></p> <p><i>Assumption:</i> Resource consents will be obtained with reasonable conditions and expiring resource consents will be renewed with similar conditions during the period of the Long Term Plan.</p> <p><i>Comment:</i> Resource consents due for renewal can be found within the relevant Activity Management Plan for individual activities. There are no major resource consent renewals during the period of this Long Term Plan.</p>	✓			A resource consent is not obtained or renewed or conditions imposed are unacceptable.			✓	<p>The non-granting or non-renewal of a major resource consent for a Council activity would have significant impacts on costs and the ability to provide that activity. A major non-renewal may mean an entirely new approach to the activity would be required. Non-granting of resource consents may delay project benefits.</p>	<p>Appropriate planning for resource consent applications/renewals should ensure that they are obtained.</p> <p>Existing monitoring of compliance with existing resource consent conditions will provide a record of compliance for future processes.</p> <p>The renewal of consents is dependent upon the legislative and environmental standards and expectations that exist at that time.</p>

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<b>9. Service Levels</b> <i>Assumption:</i> Levels of service do not significantly change <i>Comment:</i> Where there are increased community expectations or demand or a need to vary level of service across the district, there may be changes to levels of service. Government legislation may also impose significant new service levels on the Council.		✓		Significantly enhanced service levels are demanded by the community or imposed by the government on local authorities in one or more area of activity		✓		Increased or improved service levels inevitably require additional cost and/or resources to provide them.	The Council regularly monitors existing service provision within its operation on a day to day basis and through activity management planning Minor changes may be made to service levels where budget, contracts and resources allow. These will generally occur within existing budgets. Major changes in service levels will be confirmed with the community via consultation. These will generally require increases to fees or rates, depending on how the service involved is funded.
<b>10. Demand</b> <i>Assumption:</i> Actual demand will be within projected levels		✓		Changes in demand are significantly higher or lower than expected			✓	Significant and consistent variation from projected levels may adversely affect TDC's ability to meet levels of service at an affordable cost.	Council will continue to monitor growth and development changes and adapt or redirect activity provision to meet needs within reasonable costs.
<b>11. Availability of Contractors and Materials</b> <i>Assumption:</i> Contractors and materials will be available to undertake the work required to agreed standards, deadlines and cost.		✓		Projects could be delayed if there is a shortage of contractors or materials or contractors will not deliver to agreed standards, cost and timeframes		✓		Might increase cost and/or delay projects	Spread projects as much as possible. Continue to engage with contractors. Ensure robust contracts are in place. Look at alternative resources such as concrete roads.

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Assumption	Confidence Level (High, Medium, Low)			Risk	Risk Level (High, Medium, Low)			Consequence of variation to assumption	Approach to mitigation of risk
	H	M	L		H	M	L		
<b>12. Natural Hazards/Local natural disaster</b> <i>Assumption:</i> There are no significant local disasters during the term of this Long Term Plan <i>Comment:</i> The district is at risk from natural hazards such as flooding, earthquakes, storms, tsunami and wildfire. These events can strike without warning.		✓		Natural disasters occur that have a significant impact on the district and Council services		✓		A disaster event can potentially cause significant unbudgeted costs, beyond the capacity of the Council to cope.	Council is a member of the Local Authority Protection Programme Disaster Fund Trust (LAPP) and has a variety of insurance cover which would cover some emergency works.  Council also has a Disaster Relief Fund for the replacement of infrastructural assets excluding roading in the event of a natural disaster. Central government has a role in disaster recovery after a natural disaster.
<b>13. Strategic Assets</b> <i>Assumption:</i> Council will remain involved in all activities involving strategic assets and continue to own and control all strategic assets.	✓			Changes in control or ownership of strategic assets are required			✓	Changes in control or ownership of strategic assets will likely affect the level of service provided to the community.	Changes in control or ownership of strategic assets must occur as part of an LTP development or amendment, with a full Special Consultative Procedure process required.
<b>14. Council Political Structure</b> <i>Assumption:</i> There will be no changes to the Council political structure	✓			Changes in the Council political structure are made			✓	Changes in the political structure could either be minor or major depending on the nature of the changes. For example, an amalgamation will have a significant impact on the delivery of Council services.	Any changes in political structure will occur through either representation review processes or formal processes driven either by the community, Council or central government.

# Significant Forecasting Assumptions

## Significant Long Term Plan 2015-25 Financial Assumptions

Assumption	Confidence Level (High, Medium, Low)			Risk	Risk Level (High, Medium, Low)			Consequence of variation to assumption	Approach to mitigation of risk
	H	M	L		H	M	L		
<b>1. Inflation</b> <i>Assumption:</i> The LTP is prepared on the inflation rates assumed in the table below for periods beyond 2015/16 which is based on Local Government Cost Index (LGCI) prepared by BERL Economics: 2016/17 2.45% 2017/18 2.53% 2018/19 2.61% 2019/20 2.75% 2020/21 2.90% 2021/22 3.04% 2022/23 3.19% 2023/24 3.36% 2024/25 3.53%			✓	The rate of inflation differs from that assumed		✓		A significant change in inflation will result in changed revenue and expenditure. This could be significant and may adversely affect the ability of the Council to set rates at a level that is affordable to the community.	The Council will review its budget annually through the LTP/Annual Plan process and may adjust work programmes/budgets where necessary.
<b>2. Interest Rates on borrowing</b> <i>Assumption:</i> Interest on borrowing is assumed to be between 6.5 – 8.0% (to be reviewed again before LTP finalised).		✓		Forecast interest rates on borrowing are higher or lower than forecast		✓		Council costs could increase or decrease as interest rates fluctuate up and down.  Based on Council's projected debt levels, interest cost would increase/decrease by between \$989,000 and \$1.417M per year for each 1% movement in effective interest rate.	Council hedges interest rate exposures as per the Liability Management Policy.
<b>3. Return on investments</b> <i>Assumptions:</i> <ul style="list-style-type: none"> <li>■ Bank deposits and bond portfolio assumed return is 3.5% to 5%</li> <li>■ Timaru District Holdings Limited assumed return is \$2.04 dividend per share annually</li> <li>■ Forestry assumed return is \$0 over the 10 years</li> </ul>	✓			Forecast returns are higher or lower than forecast		✓		Council income could increase or decrease as investment returns fluctuate up and down.  A 1% decrease in dividend will reduce Council's income by up to \$20,400 per annum.	Council maintains a long term investment portfolio with fixed interest rates which minimises fluctuations. Investments are also managed using the Investment Policy to minimise risks. Changes in investment returns are generally partially offset by a change in borrowing costs.



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<p><b>4. Funding Sources</b></p> <p><i>Assumptions:</i> Funding sources (including external funding sources) do not change over the three year life of this plan</p> <p><i>Comment:</i> Funding sources are specified in the Revenue and Financing Policy and Financial Strategy. This applies to user fees, charges and external funding towards projects and assets. It is assumed that the policy of not collecting Development Contributions will continue.</p>		✓		<p>Projected revenue from user charges or financial assistance is not achieved.</p> <p>Levels and sources of funding differ from those forecast</p>		✓		<p>Revenue could reduce without the ability to reduce expenditure proportionately. In this event, the account would run in deficit, with charges reviewed for the next financial year.</p> <p>Project and asset funding could result in projects being revised or alternative funding sources used.</p>	<p>Levels of revenue from user charges have been set at realistic levels in accordance with the ratios outlined in the Revenue and Financing Policy.</p> <p>There is a concentration of risk associated with a small number of industrial consumers for some revenue streams (e.g. extraordinary water charges and trade waste charges). Regular liaison is maintained with these consumers.</p> <p>Funding for projects and assets is considered before the commencement of each project or asset.</p> <p>A significant impact from changes in funding or funding sources may result in a revised capital work programmes, or changes in the level of user fees and charges, borrowing or rating requirements.</p>
<p><b>5. Credit availability</b></p> <p><i>Assumption:</i> Credit can be obtained from financial markets on competitive terms and conditions.</p>	✓			<p>Required credit cannot be obtained from financial institutions</p>		✓		<p>Funding would need to be obtained from alternative sources or work programmes adjusted.</p>	<p>Prudent debt levels are maintained to mitigate risk for financial institutions. Relationships are maintained with various financial institutions and Council regularly monitors credit markets.</p>
<p><b>6. Costs</b></p> <p><i>Assumption:</i> Costs will remain stable over the period of the Long Term Plan (refer also to inflation assumption).</p> <p><i>Comment:</i> Maintenance expenditure has been based on historical trends.</p>			✓	<p>Costs are higher or lower than anticipated</p>		✓		<p>Variability of prices, such as for oil, could cause variability in costs.</p>	<p>The Council and management will review its budget annually through the LTP/Annual Planning process and may adjust work programmes/budgets where necessary.</p>

# Significant Forecasting Assumptions

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	H	M	L		H	M	L		
<b>7. Currency and oil price fluctuations</b> <i>Assumptions:</i> <ul style="list-style-type: none"> <li>■ Currency fluctuations are not forecast to cause significant variability in Council costs</li> <li>■ Exchange rates are forecast to remain unchanged from current rates</li> <li>■ Oil prices will continue to fluctuate due to international influences and exchange rate movement</li> </ul>		✓		Exchange rates fluctuate more than expected. Oil prices fluctuations are greater than expected			✓	Variability of prices from international suppliers could cause variability in Council costs.  This may impact on the ability of Council to complete programmed work within budget.	Council purchases goods predominantly from New Zealand suppliers with contracts in New Zealand dollars.  Currency exchange rates and oil prices will be continually monitored. Work programmes may need adjustment depending on the scale of any changes.
<b>8. NZ Transport Agency Financial Assistance</b> <i>Assumption:</i> There will be no further changes to the financial assistance approach for transport funding administered by the New Zealand Transport Agency (NZTA), including funding criteria and NZTA funding. <i>Comment:</i> Financial assistance rates are currently between 53% and 63% depending on the nature of the project.		✓		Changes in NZTA Subsidy rates or to criteria for roading and footpath projects have a positive or negative effect on Council's transport budget			✓	Funding would need to be obtained from alternative sources or work programmes adjusted. Levels of service may need to be adjusted.  If sufficient funding is not available, it may mean that projects are delayed or scrapped.	The Council and management will review the budget annually through the LTP/Annual Plan process and may adjust work programmes/budgets where necessary.  NZTA Financial Assistance Rates have been set at 55% for 2015/16, 54% for 2016/17 and 53% for 2017/18. It will continue to reduce 1% annually to a final rate of 51%. These rates apply to all work.
<b>9. Emissions Trading Scheme</b> <i>Assumptions:</i> Emissions Trading Scheme is retained in its present form <i>Comments:</i> Some NZU's will be surrendered over the term of the LTP for deforestation. It will cost \$5.75 per tonne of waste based on a price of \$5 per NZU and using the default emissions factor for landfill emissions.		✓		Changes could be made to the scheme by the government that have an adverse impact on TDC or the carbon price could be higher or lower than expected.			✓	Council could hold more or less NZU's for forestry assets.  Landfill costs could vary resulting in changing landfill user charges.	Forestry assets are maintained with a long term view but programmes are reviewed annually.  Any sale of forestry land will compensate for the loss of NZUs and associated benefits.  Landfill costs and waste volumes are monitored continuously.  Carbon credits (NZU's) are held for a portion of future obligations to mitigate NZU price changes.

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	H	M	L		H	M	L		
<b>10. Asset depreciation rates</b> <i>Assumption:</i> Asset depreciation rates will not change as shown in the Accounting Policies.	✓			Further work on planned capital works may alter the depreciation expense			✓	Increased depreciation costs would result from assets that have shorter useful lives.	Asset life is based on the estimates of engineers and valuers. These are regularly reviewed through asset monitoring and testing. Negative impacts are likely to be at least partially offset by some assets lasting longer than estimated.
<b>11. Revaluation of significant assets</b> <i>Assumption:</i> The Council have adopted deemed cost as its approach to revaluation. <i>Comment:</i> This has been applied from 1 July 2005 for most assets. Investment properties and forest assets will be revalued annually in terms of their respective accounting policies.	✓			Minimal risks as asset revaluations will not occur in the future for property, plant and equipment			✓		Revaluation affects the carrying value of fixed and infrastructural assets and the depreciation charge in the years subsequent to the revaluation. Annual revaluations are undertaken for investment properties and forestry assets.
<b>12. Rating Base</b> <i>Assumption:</i> The number of rating units will not change significantly over the 10 years in the LTP	✓			Rating units could grow at an increased rate or could contract.			✓	An increase in the overall rating base could result in a decrease in rates for rating units as the total rates are spread across a larger base. If the rating base was to reduce, there could be an increase in rates.	The rating base is reviewed annually when determining the rates for the year.