

Navigation page for the Significant Forecasting Assumptions

Introduction

The Local Government Act (section 17, Schedule 10) requires that the long-term plan clearly identify all the “significant assumptions and risks underlying the financial assumptions.” Where a forecasting assumption involves a high level of uncertainty, we have to outline the fact of that uncertainty, and estimate the potential effects of that uncertainty on the financial estimates provided.

This section of the Long-term Plan includes the following significant forecasting assumptions:

01. Population Health
02. Population Growth
03. Distribution of the District’s Growth
04. Household Growth
05. Distribution of Household Growth
06. Demographic Change
07. Land Use Change
08. Climate Change
09. Emergency Events
10. Legislative Change
11. Infrastructural Capacity
12. Achievement of Capital Works Programme
13. Useful Life of Assets
14. New Zealand Drinking Water Standards
15. Transportation Funding Assumption One
16. Transportation Funding Assumption Two
17. Transportation Funding Assumption Three
18. Resource Consents
19. Impact of Inflation on Council Budgets
20. Impact of Insurance Costs on Council Budgets
21. Interest Rates
22. Capital Works Costs
23. Valuations
24. Ability to Borrow
25. Sources of Funds for Future Replacement of Significant Assets
26. Technological Change

Format of Forecasting Assumptions

1. Assumption statement – this is the assumption that Council’s budgets are based on. For some assumptions, this statement is supported by tables, graphs or supporting notes.
2. Alternative Assumption Statement(s) – These are alternative scenarios that Council has used to explore the risks on Council should the assumption not prove true. In understanding the risk of these alternative assumptions Council considers both the impact and likelihood of these alternatives based on the best available information.
3. Reasons & Financial Effect of Uncertainty – The Long-term Plan budget is based on the assumption statements. This section of the forecasting assumptions summarises what the impact would be on Council for each of the alternative scenarios Council has considered.

4. Mitigating Factors – These are actions or strategies that Council uses to minimise the potential risks associated with these alternative assumptions.
5. Source – This is the information that Council has used when preparing both the assumption and the alternative assumption scenarios.

Assessing Risk

Council utilises the following risk matrix when assessing the risk of each alternative assumption scenario on Council's financial estimates. For each alternative, Council considers both the likelihood of the alternative proving true (from rare to almost certain) and the impact on Council if the alternative proves true (from minor to worst case). The overall risk score assigned to each alternative scenario is calculated by multiplying the likelihood score by the impact score.

		IMPACT				
LIKELIHOOD		Minor (1) Temporary disruption or limited impact on ability to deliver the activity. Very few lives affected.	Moderate (2) Moderate impact on ability to deliver activity. Few lives are affected.	Major (4) Major impact on ability to deliver activity or to standard required. Some lives affected.	Severe (8) Serious or long-term impact on ability to deliver activity or deliver to the standard required. Many lives are affected.	Worst Case (16) Impact on delivery of activity is severely compromised or may not occur at all. High % of community affected.
	Almost Certain (5) is expected to occur in most circumstances	Guarded	Moderate	High	Extreme	Extreme
	Likely (4) Will probably occur in most circumstances	Guarded	Moderate	High	Extreme	Extreme
	Possible (3) Might occur at some time	Guarded	Guarded	Moderate	High	Extreme
	Unlikely (2) Could occur at some time	Low	Guarded	Moderate	High	High
	Rare (1) May only occur in exceptional circumstances	Low	Low	Guarded	Moderate	High

Population Health

Assumption: There will not be any Government-mandated restrictions or widespread community transmission of infectious diseases over the life of the Long-term Plan.

Alternative	That there will be a lockdown or significant community transmission over the life of the Long-term Plan.
Impact	Moderate If government restrictions (similar to those seen in response to COVID-19) were introduced, this would impact on the collection of revenue from Council facilities. The government restrictions across the 2019/20 financial year resulted in a decreased revenue intake from Council facilities of \$70,000. Council also made the decision to have a 0% rates increase for the 2020/21 financial year, in an effort to help residents who were suffering economically due to the pandemic. Existing projects were funded from the Council's emergency reserves and there were no increases to staff salaries or wages for that year. The Council could also be required to respond to restrictions which would incur additional costs. The impact on Council finances would depend on the magnitude and nature of restrictions imposed. Widespread community transmission of infectious diseases could result in ongoing issues around staff shortages as was the case with COVID-19. The COVID-19 lockdown in 2020 and ongoing staff shortages due to illness delayed many projects including the Community Hub, and earthquake strengthening of the Council Administration Building. The COVID-19 lockdown also affected the Council's ability to undertake inspections for building and compliance purposes, impacting on its ability to meet measures and targets. It has been widely observed that COVID-19 and associated restrictions have increased social isolation in individuals. Social isolation is particularly impactful on older individuals, as it has serious impacts on many physical and psychological health conditions (National Academies of Sciences, Engineering, and Medicine, 2020). This includes dementia, heart disease, stroke, depression, anxiety, suicide and congestive heart failure. The World Health Organization has increasingly recognised social isolation as being a priority public health issue. Council's purpose includes promoting the social wellbeing of its communities, alongside physical, cultural and environmental wellbeing. This means that Council has a role to play in helping to rebuild social connections, and must consider social wellbeing as one of the key outcomes of projects and services.
Likelihood	Unlikely While uncertainty remains around whether significant community transmission of infectious diseases is likely to re-occur, and whether new strains of the COVID-19 virus will emerge, it is unlikely that the government would impose wide-scale restrictions as have been seen in the recent past. The national response to COVID-19 was successful at limiting widespread community transmission of the disease. The vaccination rollout across the country was widespread, and over 90% of those aged 12 and over have now

	received the primary course (first and second dose) of the vaccine (Te Whatu Ora, 2023). In 2022 there were 216 positive test results submitted by staff, and there have been 37 positive test results in 2023 (as at 04 December 2023). This decrease in positive test results indicates that COVID-19 is having less of an impact on staffing levels over time. While it is possible that there would be further community outbreaks of COVID-19 that would result in government restrictions being imposed, the risk of this is declining due to significant increases in national vaccination rates.
Overall Risk	Guarded (4)
Reasons & Financial Effect of Uncertainty	Reduced revenue from community facilities would impact on the level of funding available for delivery of services.
Mitigating Factors (if applicable)	While the Council would experience negative impacts from the introduction of government restrictions, the local economy would be insulated from the worst impacts of these due to limited reliance on visitors for the collection of Council revenues. In the event of wide-scale restrictions that force council facilities to temporarily close, costs associated with operating the Makino Aquatic Centre would be reduced as energy and casual/seasonal costs would be avoided. This would offset some of the loss in revenue associated with closure of the pool. Council is also able to change the public and private funding splits for Council facilities such as the Makino Aquatic Centre and the Manawatū Community Hub to increase the proportion collected from rates, as opposed to user fees and charges. Changes to the funding split would provide a buffer from the impacts of any government restrictions.
Sources	National Academies of Sciences, Engineering, and Medicine. (2020). <i>Social Isolation and Loneliness in Older Adults: Opportunities for the Health Care System</i>. Washington, DC: The National Academies Press. https://doi.org/10.17226/25663 Te Whatu Ora. (2023). <i>COVID-19 vaccine data</i>. COVID-19 vaccine data – Te Whatu Ora - Health New Zealand

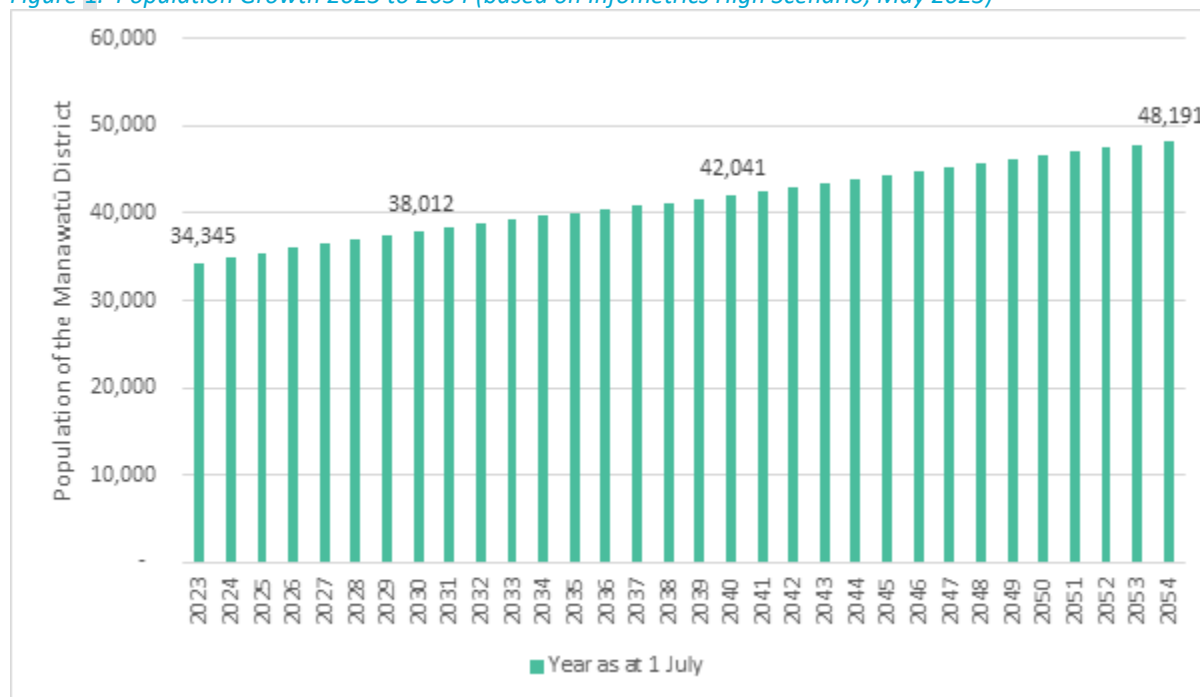
Population Growth

In the absence of Statistics New Zealand subnational projections, the population growth projections for the Manawātū District were commissioned from Infometrics.

Assumption: That the population of the Manawātū District will increase from 34,345 residents in 2023 to 48,191 in 2054 (Infometrics High scenario).

The population of the Manawātū District is expected to grow by an average of 1.5% per annum from 2023 to 2030, by 1.06% per annum over the period from 2030 to 2040 and by 1.04% over the period from 2040 to 2054 (Infometrics High Scenario).

Figure 1: Population Growth 2023 to 2054 (based on Infometrics High Scenario, May 2023)



Alternative 1	That the resident population of the Manawātū District will increase more rapidly than forecast in Figure 1.
Impact	Moderate Significantly higher population growth may impact negatively on levels of service as roading and community infrastructure has insufficient capacity to meet demand. Council may need to rezone land sooner than planned to accommodate increased demand for new houses. Ministries and agencies rely on population growth assumptions contained in Council’s Long-term Plan for their own planning. If Council underestimates the rate of population growth, this will impact on planning for services and facilities such as in the areas of health, education, social housing, community facilities, infrastructure, business etc. If service and facility provision does not match community needs, this can detrimentally affect community wellbeing.
Likelihood	Possible Population forecasts are based on the “High” growth scenario published by Infometrics (May 2023). The population projections follow a traditional cohort component projection method. The projection approach starts with employment forecasts, driven by a combination of historical trends and assumptions for future forecasts, including carbon pricing and further adoption of automation technology. Employment

forecasts inform part of projected net migration. Net migration forecasts also consider housing capacity and commuting patterns, particularly between Palmerston North and Feilding. According to Infometrics forecasts, Palmerston North is expected to take a greater share of the combined area's population growth in the future as large greenfield residential areas become available, and as changes around highly productive land may adversely affect Manawatū's residential land supply.

The introduction of emission pricing in 2025 is expected to have the effect of reducing agricultural intensity and encouraging forestry, resulting in a reduction in on-farm and off-farm (e.g. dairy and meat processing) employment.

International net migration is forecast to recover slowly due to highly competitive global markets for migrants. Positive migration to provincial and rural areas is expected to persist, with post-pandemic trends of working remotely or from home bolstering regional migration.

The long-term ageing of the population means that the gap between births and deaths is closing. By 2050, deaths are projected to outnumber births and the population will be entirely reliant on net migration to avoid any decline.

The above factors are reflected in the population growth scenario adopted as a basis for the 2024-34 Long-term Plan. Council adopted Infometrics "High" scenario as the most likely scenario for the following reasons:

1. The medium 10-year growth scenario is likely to understate growth due to the overly conservative baseline assumptions within Infometrics employment and population forecasts. For example, the assumption of 30,000 net international migration per annum has already been proven to be understated, with a provisional net migration gain of 52,000 in the year ended February 2023.¹
2. MDC considers that the Infometrics projections overstate the impacts of the NPS-HPL on lifestyle development in the Manawatū. MDC will still be enabling rural lifestyle development on class 4 – 7 land.
3. Insufficient consideration has been given to existing residential growth capacity within Precinct 4 to the north of Feilding, within the deferred residential zones 1 – 3 and around the rural villages.
4. Council is in the process of opening up large areas of industrial land for development within the Kawakawa Industrial Park (Precinct 5), facilitated by the construction of the Turners Road Extension. MDC is expecting high employment growth as new industrial businesses become established in this area. The current employment forecasts that inform the population forecasts do reflect this expected growth.

Overall Risk	Guarded (6)
Reasons & Financial Effect of Uncertainty	Significantly higher population growth than expected will put pressure on existing roading and community infrastructure and services. Council may need to find ways of raising the extra revenue required or consider lower levels of service. Higher than expected population growth will also mean that Council receives more development contributions. This will help to partially offset higher expenditure on servicing this growth.
Mitigating Factors (if applicable)	Council regularly reviews population growth and development trends through the following processes: 1. Monitoring and reporting under the National Policy Statement – Urban Development (NPS-UD);

	2. Annual Estimated Resident Population (ERP) from Statistics New Zealand; 3. Long-term Plan process Major projects and significant changes to levels of service are assessed against affordability through the Annual Plan Process. In addition, subdivision and building consent data is used for annual updates to the schedule of works contained within Council's Development Contributions Policy. Through the above processes, actual growth will be assessed against projected growth enabling review of the need for, and timing of capital expenditure over the 10 Year Plan period. Growth projects may be brought forward due to excess demand for new roading or community infrastructure. Infometrics (Brunsdon, 2023) Manawatū-Whanganui Region population projections, High scenario. International Migration: February 2023 (Statistics New Zealand, 2023).
--	--

Alternative 2	That the resident population of the Manawatū District will increase more slowly than forecast in Figure 1.
Impact	Minor Significantly lower population growth rates than forecast will mean that Council's revenue from rates and development contributions will be less than forecast. This may mean that planned investment in new roading and community infrastructure is deferred. Decreased rates revenue may also increase costs for current ratepayers to fund capital projects and service delivery. If Council significantly overestimates population growth rates, this may result in an over-supply of community facilities and services provided by Ministries and external agencies that rely on this data, including in the areas of health, education, social housing, community facilities, infrastructure and business.
Likelihood	Possible Population forecasts are based on the high growth scenario published by Infometrics in January 2023 and updated in May 2023. These forecasts have anticipated a slow recovery to international net migration as global competition for migrants increases and slowing population growth through natural increase. While the projections are based on the best information currently available, uncertainty is elevated due to uncertainty about the effect of emissions pricing for agriculture on employment in this sector and the effect of national direction such as the NPS-HPL on residential land supply and development trends between Feilding and Palmerston North. The additional layer of uncertainty imposed by national direction and climate change policy has increased the likelihood of lower than forecast population growth from unlikely to possible.
Overall Risk	Guarded (3)
Reasons & Financial Effect of Uncertainty	Lower rates of population growth could increase the costs per property of delivering agreed levels of service. Lower than expected population growth will also mean that Council collects less revenue through development contributions. This will require Council to revisit the need for, and timing of capital projects to support growth.
Mitigating Factors (if applicable)	Council regularly reviews population growth and development trends through the following processes: 1. Monitoring and reporting under the National Policy Statement – Urban Development (NPS-UD); 2. Annual Estimated Resident Population (ERP) from Statistics New Zealand;

3. Long-term Plan process

Major projects and significant changes to levels of service are assessed against affordability through the Annual Plan Process. In addition, subdivision and building consent data is used for annual updates to the schedule of works contained within Council's Development Contributions Policy.

Through the above processes, actual growth will be assessed against projected growth enabling review of the need for, and timing of capital expenditure over the Long-term Plan period. Growth projects may be delayed due to surplus capacity in the existing roading network.

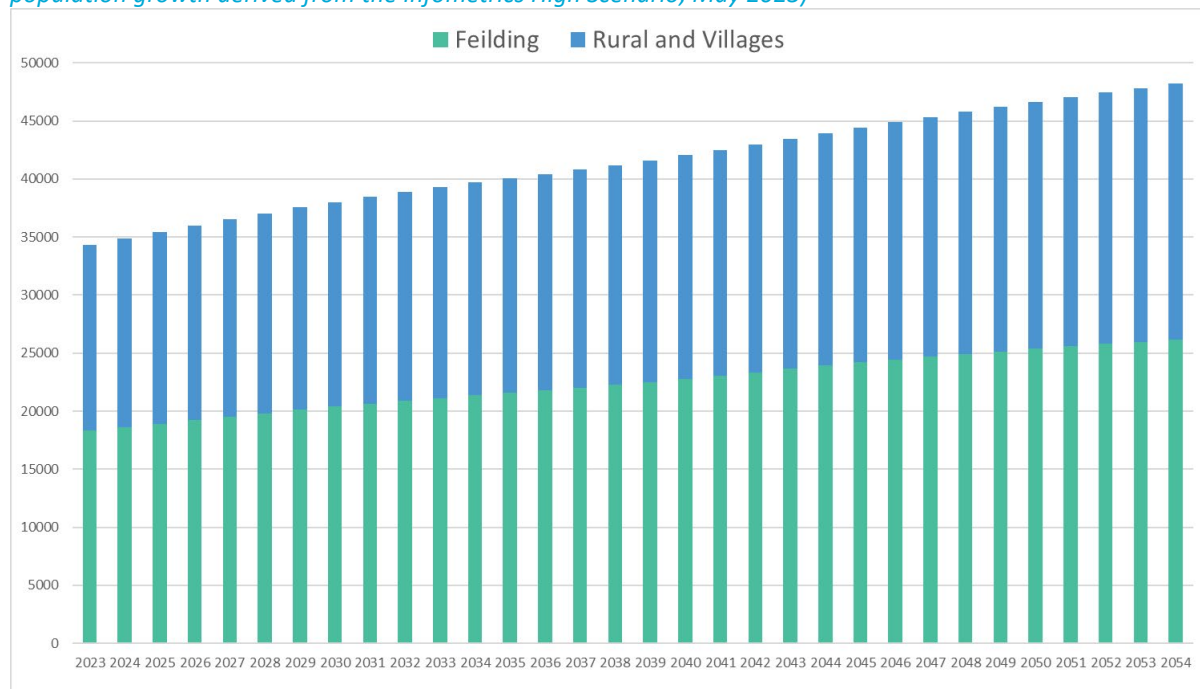
Source	Infometrics (Brunsdon, May 2023) Manawatū-Whanganui Region population projections, High Scenario.
--------	---

Distribution of the District's Population

In the absence of Statistics New Zealand subnational projections, the population growth projections for the Manawātū District were commissioned from Infometrics.

Assumption: That the proportion of the Manawātū District's population living in Feilding will remain constant at 53.4% from July 2024 to July 2026 (years 1 to 3), will increase to 53.6% by July 2028 (start of year 5), to 53.8% by July 2033 (start of year 10), to 54.1% by July 2038 (start of year 15), to 54.5% by July 2043 (start of year 20) and decline slightly to 54.3% of the total population by July 2053 (start of year 30), as illustrated in Figure 1.

Figure 1: Distribution of growth between Feilding, rural and villages areas between 2023 and 2054 (based on population growth derived from the Infometrics High Scenario, May 2023)



If a higher proportion of new residential development occurs in Feilding relative to rural and village areas, we can expect to see an increase in the proportion of residents living in Feilding. Similarly, if people and families relocate from rural or village areas into Feilding, this will result in the proportion of residents living in Feilding increasing. However, if rural or village areas attract a greater proportion of new residential development relative to Feilding, residents relocate from Feilding into rural and village areas, we would expect the proportion of the population living in Feilding to decline.

Assumptions around the distribution of population growth between Feilding, rural and village areas over time is useful to inform Council's growth strategy, the Financial and Infrastructure Strategies and planning for new growth works through Council's Activity and Asset Management Plans.

It is not possible for Council to separate village areas from rural areas when considering the distribution of residents in the Manawātū District as the smallest units of population that Statistics New Zealand produce (SA2's) include a mix of rural and village areas.

The following narrative guided Council's assumptions around the distribution of growth in Feilding relative to rural and village areas over the next 30 years. In assigning proportions, Council considered the current ratio, calculated using Statistics New Zealand statistical areas and the number of new residents forecast for the District as a whole, as forecast by Infometrics ("High" scenario, May 2023).

Narrative for the distribution of future residential growth

Over the next 2 to 3 years we expect to see a continuation of the current patterns of growth – being rural-residential development on existing vacant lots within the rural area and residential growth within Precinct 4 (Council’s priority growth area to the north of Feilding). The current Feilding vs Urban and Villages split is expected to persist over this time. Further, the private plan change request that provides for between 140 to 180 new lots to be created in Rongotea has now been approved.

Between 3 and 10 years we are anticipating a reduction in the proportion of population (and household) growth in rural areas of the District as the number of new rural-residential lots created slows due to restrictions on new rural subdivision imposed by the NPS-HPL, and as the availability of vacant rural lots reduces. Over this period, we expect an increase in the rate of growth in (and surrounding) rural villages on non-highly productive land, and as they attract a greater share of new residents looking for lifestyle development and infrastructure improvements make development in these areas more attractive. Residential development in Rongotea is expected to increase the village share of growth and development, partially offsetting a reduction in rural subdivision. Overall, it is anticipated that the population of Feilding as a proportion of the total District’s population will increase between years 3 and 10, particularly as Horizons completes its flood protection works for Feilding and existing stormwater flooding issues are resolved.

Between years 10 and 15 we expect Feilding to take an even greater proportion of overall growth in the District. However, more of this development will occur as infill development, as greenfield development in Precinct 4 reaches capacity. The proportion of new growth in rural areas is expected to decline due to reduced availability of vacant rural lots, and the proportion of new growth in rural villages and surrounding areas on non-highly productive land is expected to increase slightly as they provide a lifestyle alternative to Feilding.

During years 10 to 15, Council will need to start rezoning and planning for new infrastructure investment in Feilding growth areas identified through the new growth strategy to ensure there is sufficient availability of small-lot residential land available to support future demand. Council will also need to plan for new infrastructural investment in the villages, to provide a large-lot residential alternative to new Feilding growth areas.

Between years 10 and 15 Council will need to rezone and service new greenfield land, identified through the new growth strategy, adjacent to the existing Feilding urban area. Due to development constraints, this may necessitate development on the eastern side of the Ōroua River. Council anticipates growth of large-lot residential development within the rural villages, providing a more affordable and lifestyle alternative to Feilding. We are expecting the ratio of new residential development in Feilding and the villages to plateau between years 15 to 20. A combination of factors, including agricultural emissions pricing, fuel prices, the NPS-HPL, and land use controls will mean that an even smaller proportion of overall growth is located in rural areas. New housing will be concentrated in Feilding (with infill development prioritised over new greenfield development), and in those rural villages with existing capacity for new development.

Between years 20 and 30 greater intensification (infill) in Feilding and small-lot greenfield development in growth areas will continue to provide for demand. If Council has not completed its growth strategy or rezoned and serviced sufficient land to meet demand within Feilding, village growth as a proportion of total growth will increase relative to Feilding. Rural lifestyle development on non-highly productive land will continue to make up a small proportion of new residential growth in the District.

Alternative 1	That the proportion of the residents living in Feilding relative to rural and village areas of the Manawātū District will increase more rapidly than forecast in Figure 1.
Impact	Moderate

Significantly higher population growth in Feilding relative to rural and village areas may impact negatively on levels of service as roading, three waters and community infrastructure has insufficient capacity to meet demand. Council may need to rezone land in or adjacent to Feilding sooner than planned to accommodate increased demand for new houses. Planned investment in villages may be delayed to focus resources to supporting growth in Feilding.

The Manawātū District may attract a smaller proportion of population growth as new residents locate outside of the District.

Greater infill development could lead to capacity issues if the rate of infill exceeds upgrades to existing infrastructure.

Likelihood	Possible Forecasts in relation to the distribution of population growth are based on the population growth forecast by Infometrics (“High” growth scenario, May 2023) and the current distribution of residents as forecast by Statistics New Zealand (SA2s). This forecast is strongly linked to the population growth forecast. If overall population growth is slower than anticipated, it will take longer for precinct 4 to reach capacity, and longer for the supply of vacant lots in rural and village areas to be exhausted. This will influence the patterns of growth, with the current distribution between Feilding, rural and village areas likely persisting for longer than forecast. As outlined in the <i>“narrative for the future distribution of population growth”</i> above, the distribution of population growth is dependent on many factors, including the availability of vacant land, the provision of lead infrastructure to facilitate growth, the attractiveness of certain areas (including the quality of services provided, affordability and lifestyle factors) and external influences including the restrictions imposed on rural subdivision through the NPS-HPL. The distribution of growth in later years will be strongly influenced by the decisions that Council makes around future growth planning, rezoning and provision of new infrastructure. For example, if Council decides to direct growth investment to Feilding and new growth areas adjacent to Feilding rather than investing in village areas, it is likely that the overall proportion of new growth in Feilding will increase at a faster rate than forecast.
Overall Risk	Guarded (6)
Reasons & Financial Effect of Uncertainty	Significantly higher population growth in Feilding relative to other areas will put increased pressure on existing roading, three waters and community infrastructure and services. Council may need to increase the level of investment in new roading, three waters services and community facilities within Feilding, or consider lower levels of service. Council may need to rezone and service additional land in and around Feilding sooner than forecast to meet increased demand.
Mitigating Factors (if applicable)	Council regularly reviews population growth and development trends through the following processes: 1. Monitoring and reporting under the National Policy Statement – Urban Development (NPS-UD);

	2. Annual Estimated Resident Population (ERP) from Statistics New Zealand; 3. Long-term Plan process Major projects and significant changes to levels of service are assessed against affordability through the Annual Plan Process. In addition, subdivision and building consent data is used for annual updates to the schedule of works contained within Council's Development Contributions Policy. Through the above processes, trends in the distribution of population growth will be assessed and used to direct investment in growth-related works. Growth projects in Feilding may be prioritised over planned growth works in rural and village areas.
Source	Infometrics (Brunsdon, 2023) Manawatū-Whanganui Region population projections, High scenario. Statistics New Zealand.
Alternative 2	That the proportion of the residents living in Feilding relative to rural and village areas of the Manawatū District will decrease or increase at a slower rate than forecast in Figure 1.
Impact	Minor Significantly lower population growth rates in Feilding may mean that planned investment in new roading, three waters and community infrastructure in Feilding is deferred. Council may need to plan for new growth works, or to redirect planned investment from Feilding to other areas to support demand for new development in rural and village areas earlier than forecast.
Likelihood	Possible Forecasts in relation to the distribution of population growth are based on the population growth forecast by Infometrics ("High" growth scenario, May 2023) and the current distribution of residents as forecast by Statistics New Zealand (SA2s). As outlined in the "narrative for the future distribution of population growth" above, the distribution of population growth is dependent on many factors, including the availability of vacant land, the provision of lead infrastructure to facilitate growth, the attractiveness of certain areas (including the quality of services provided, affordability and lifestyle factors) and external influences including the restrictions imposed on rural subdivision through the NPS-HPL. The distribution of growth in later years will be strongly influenced by the decisions that Council makes around future growth planning, rezoning and provision of new infrastructure. For example, if Council decides to direct growth investment to support rural lifestyle subdivision on non-highly productive land, or large-lot residential development in village areas, it is likely that the overall proportion of new residents living in Feilding will decrease, or increase at a slower rate than forecast.
Overall Risk	Guarded (3)

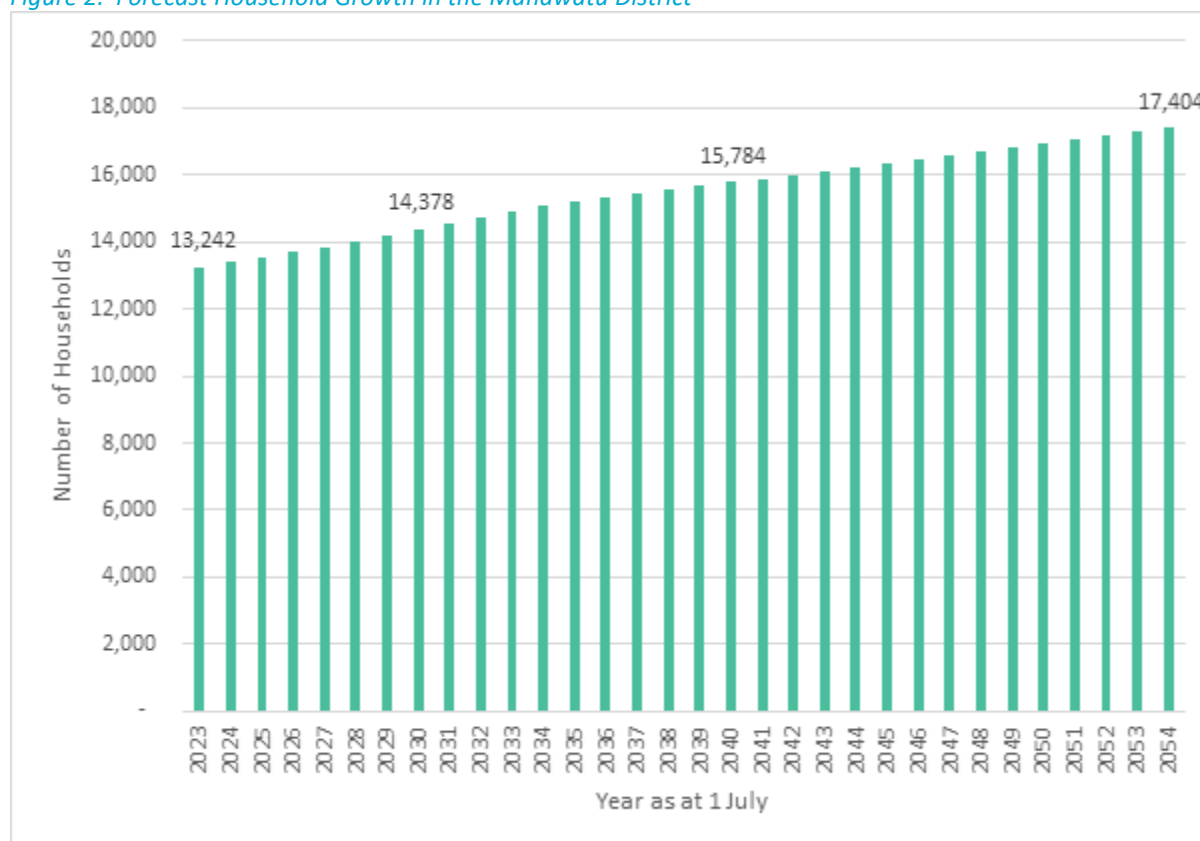
Reasons & Financial Effect of Uncertainty	Significantly higher population growth in rural or village areas relative to Feilding will put increased pressure on the rural roading network and existing services in villages. Council may need to redirect planned growth works from Feilding to rural or village areas to support this growth, or consider lower levels of service. Council may need to rezone and service additional land in and around village areas sooner than forecast to meet increased demand.
Mitigating Factors (if applicable)	Council regularly reviews population growth and development trends through the following processes: 1. Monitoring and reporting under the National Policy Statement – Urban Development (NPS-UD); 2. Annual Estimated Resident Population (ERP) from Statistics New Zealand; 3. Long-term Plan process Major projects and significant changes to levels of service are assessed against affordability through the Annual Plan Process. In addition, subdivision and building consent data is used for annual updates to the schedule of works contained within Council's Development Contributions Policy. Through the above processes, trends in the distribution of population growth will be assessed and used to direct investment in growth-related works. Growth projects in rural or village areas may be prioritised over planned growth works in Feilding.
Source	Infometrics (Brunsdon, 2023) Manawatū-Whanganui Region population projections, High scenario. Statistics New Zealand.

Household Growth

Household growth projections for the Manawātū District were commissioned from Infometrics. The forecasts are based on average household size based on projected changes in gender and age structure of the population and trends in household formation. The actual number of households will depend on availability of dwellings.

Assumption: That the number of households in the Manawātū District will increase from 13,242 in 2023 to 17,404 in 2054 as illustrated in Figure 2 below. The number of households in the district are forecast to increase by 1.14% per annum over the first three years of the Long-term Plan, increasing to 1.08% growth per annum between 1 July 2028 (year 4) and 1 July 2034 (year 10) and an average of 0.68% growth per annum over the period from 1 July 2035 (year 11) to 2054 (year 30).

Figure 2: Forecast Household Growth in the Manawātū District



Alternative 1	That the number of households in the Manawātū District in 2054 will be significantly more than forecast in Figure 2.
Impact	Moderate Demand for land and new roading and community infrastructure will be greater than anticipated. This may mean that additional land needs to be rezoned and new infrastructure provided to meet this demand.
Likelihood	Possible Household forecasts are based on the high growth scenario published by Infometrics (May 2023). These forecasts are based on average household size based on projected changes in gender and age structure of the population and trends in household formation. The Infometrics population forecasts follow a traditional cohort component projection method. The projection approach starts with employment forecasts, driven by a combination of

	historical trends and assumptions for future forecasts, including carbon pricing and further adoption of automation technology. International net migration is expected to recover slowly to around 30,000 over the long-term. The pattern of net migration into provincial and rural areas is expected to persist, with post-pandemic trends of working remotely expected to bolster regional migration. Net migration forecasts also consider housing capacity and commuting patterns, particularly between Palmerston North and Feilding. Palmerston North is expected to take a greater share of the combined area's population growth in the future as large greenfield residential areas become available, and as changes around highly productive land may adversely affect Manawātū's residential land supply. The above factors are reflected in the household growth scenario adopted as a basis for the 2024-34 Long-term Year Plan. While the projections are based on the best information available, uncertainty is currently elevated due to national direction and climate change policy that influences land use development.
--	---

Overall Risk	Guarded (6)
Reasons & Financial Effect of Uncertainty	Household growth generally results in new subdivisions and therefore an increase in the rating base. This spreads the costs of providing Council services, providing no major roading or community infrastructure investment is required. We may not have sufficient land available in the range of locations needed to provide the level of choice demanded by the market.
Mitigating Factors (if applicable)	Council regularly reviews development trends through the following processes: 1. Monitoring and reporting under the National Policy Statement – Urban Development (NPS-UD); 2. Annual Estimated Resident Population (ERP) from Statistics New Zealand; 3. Long-term Plan process Major projects and significant changes to levels of service are assessed against affordability annually through the Annual Plan Process. In addition, subdivision and building consent data is used for annual updates to the schedule of works contained within Council's Development Contributions Policy. Through the above processes, actual growth in households will be assessed against projected growth enabling review of the need for, and timing of capital expenditure over the Long-term Plan period. Planned rezoning and investment in growth infrastructure may be brought forward to reflect greater than anticipated demand.

Alternative 2	That the number of households in the Manawātū District in 2054 will be significantly less than forecast in Figure 2.
Impact	Minor Demand for land and infrastructure will be less than anticipated. This may mean that additional land has been rezoned and new roading and community infrastructure provided well in advance of demand, which could impact on Council's ability to fund levels of service.
Likelihood	Possible

	Household forecasts are based on the high growth scenario published by Infometrics (May, 2023). These forecasts are based on average household size based on projected changes in gender and age structure of the population and trends in household formation. The population forecasts that form the basis of the household projections have been developed using a traditional cohort component projection method. The projection approach starts with employment forecasts, driven by a combination of historical trends and assumptions for future forecasts, including carbon pricing and further adoption of automation technology. The model also considers anticipated changes in net international migration, housing capacity and commuting patterns and the impact of national direction and emissions pricing on employment and development patterns. While the projections are based on the best information available, uncertainty is currently elevated due to national direction and climate change policy that influences land use development. If population growth is significantly less than forecast or if the average household occupancy rate is higher than forecast, the number of new households is likely to be lower than forecast.
Overall Risk	Guarded (3)
Reasons & Financial Effect of Uncertainty	If the number of households in the urban areas do not increase as forecast, then there will be limited increases in the rating base. This will mean that the costs of providing the planned levels of service for roading and community infrastructure will be higher per household and there will be more rating pressure on existing households and businesses.
Mitigating Factors (if applicable)	Council regularly reviews development trends through the following processes: 1. Monitoring and reporting under the National Policy Statement – Urban Development (NPS-UD); 2. Annual Estimated Resident Population (ERP) from Statistics New Zealand; 3. Long-term Plan process Major projects and significant changes to levels of service are assessed against affordability annually through the Annual Plan Process. In addition, subdivision and building consent data is used for annual updates to the schedule of works contained within Council’s Development Contributions Policy. Through the above processes, actual growth in households will be assessed against projected growth enabling review of the need for, and timing of capital expenditure over the Long-term Plan period. Reduced development pressure will mean that available land is not exhausted as quickly. Planned rezoning and new infrastructure may be delayed until such time as demand warrants the expenditure.

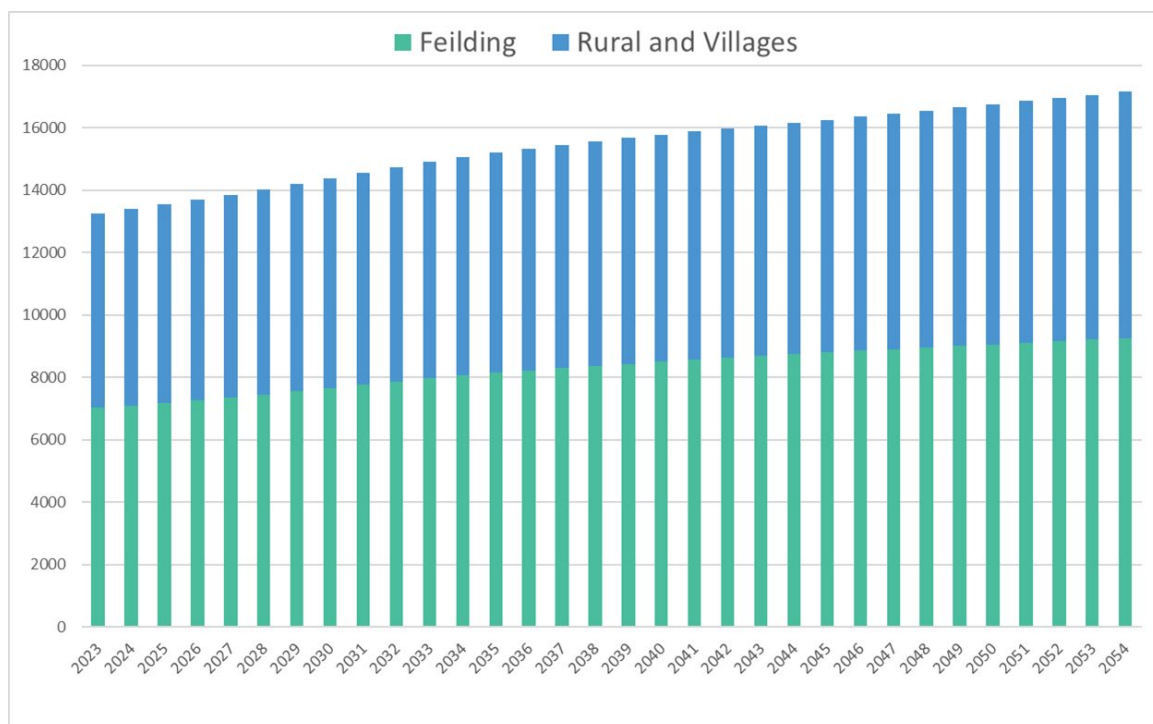
Distribution of Household growth

Household growth projections for the Manawātū District were commissioned from Infometrics. The forecast growth in new households are based on average household size, based on projected changes in gender and age structure of the population, and trends in household formation. In forecasting the number of new households by location (Feilding vs rural and village areas), Council divided the forecast proportion of the population living in Feilding by the average household size.

Assumption: That the number of households located in Feilding will increase from 7,106 (as at July 2024) to 7,265 by July 2026 (start of year 3), to 7,458 by July 2028 (start of year 5), to 7,974 by July 2033 (start of year 10), to 8,369 by July 2038 (start of year 15), to 8,696 by July 2043 (start of year 20), and to 9,215 by July 2053 (start of year 30), as illustrated in Figure 2.

The number of households in rural and village areas will increase from 6,284 (as at July 2024) to 6,425 by July 2026 (start of year 3), to 6,554 by July 2028 (start of year 5), to 6,942 by July 2033 (start of year 10), to 7,205 by July 2038 (start of year 15), to 7,372 by July 2043 (start of year 20), and to 9,215 by July 2053 (start of year 30), as illustrated in Figure 2.

Figure 2: Forecast Distribution of Households in the Manawātū District



Alternative 1

That there will be considerably more households in Feilding and fewer households in rural and village areas than forecast in Figure 2.

Impact

Moderate

Demand for land and new roading and community infrastructure will be greater than anticipated. Significantly higher household growth rates in Feilding relative to rural and village areas may impact negatively on levels of service as roading and community infrastructure has insufficient capacity to meet demand. Council may need to rezone land in or adjacent to

	Feilding sooner than planned to accommodate increased demand for new houses. Planned investment in villages may be delayed to focus resources to supporting growth in Feilding.
Likelihood	Household growth forecasts are based on the population growth forecasts by Infometrics (“High” growth scenario, May 2023) and the current distribution of residents as forecast by Statistics New Zealand (SA2s). This forecast is strongly linked to the assumptions on population growth and the distribution of this population growth between Feilding, rural and village areas. If overall population growth is slower than anticipated, it will take longer for precinct 4 to reach capacity, and longer for the supply of vacant lots in rural and village areas to be exhausted. This will influence the patterns of household growth, with the current proportions of new households constructed in Feilding relative to village and rural areas persisting longer than forecast. As outlined in the <i>“narrative for the future distribution of population growth”</i> above, the distribution of population and household growth is dependent on many factors, including the availability of vacant land, the provision of lead infrastructure to facilitate growth, the attractiveness of certain areas (including the quality of services provided, affordability and lifestyle factors) and external influences including the restrictions imposed on rural subdivision through the NPS-HPL. The distribution of household growth in later years will be strongly influenced by the decisions that Council makes around future growth planning, rezoning and provision of new infrastructure. For example, if Council decides to direct growth investment to Feilding and new growth areas adjacent to Feilding rather than investing in village areas, it is likely that Feilding would attract a greater proportion of new household growth. By concentrating investment to support growth in Feilding, we would expect the overall number of households in Feilding to be more than forecast and the number of households in rural and village areas to be proportionally less than forecast.
Overall Risk	Guarded (6)
Reasons & Financial Effect of Uncertainty	Significantly higher household growth in Feilding relative to other areas will put increased pressure on existing roading and community infrastructure and services. Council may need to increase the level of investment in new roading and community facilities within Feilding, or consider lower levels of service. Higher than expected growth in households in Feilding will reduce the rating burden for those rates that are targeted to Feilding. Lower than expected growth in the number of households in rural and village areas will increase the costs to provide planned levels of service for those services that are targeted to rural and village areas. Council may need to rezone and service additional land in and around Feilding sooner than forecast to meet increased demand.
Mitigating Factors (if applicable)	Council regularly reviews population and household growth and development trends through the following processes: 1. Monitoring and reporting under the National Policy Statement – Urban Development (NPS-UD);

	2. Annual Estimated Resident Population (ERP) from Statistics New Zealand; 3. Long-term Plan process Major projects and significant changes to levels of service are assessed against affordability through the Annual Plan Process. In addition, subdivision and building consent data is used for annual updates to the schedule of works contained within Council's Development Contributions Policy. Through the above processes, trends in the distribution of population and household growth will be assessed and used to direct investment in growth-related works. Growth projects in Feilding may be prioritised over planned growth works in rural and village areas.
Source	Infometrics (Brunsdon, 2023) Manawatū-Whanganui Region population projections, High scenario. Statistics New Zealand.

Alternative 2	That there will be considerably fewer households in Feilding and more households in rural and village areas than forecast in Figure 2.
Impact	Minor Significantly lower household growth rates in Feilding than forecast may mean that planned investment in new roading and community infrastructure in Feilding is deferred. Council may need to plan for new infrastructure to support household growth in rural and village areas earlier than forecast, or to redirect planned investment from Feilding to these areas.
Likelihood	Possible Household growth forecasts are based on the population growth forecast by Infometrics ("High" growth scenario, May 2023), and the current distribution of residents as forecast by Statistics New Zealand (SA2s). As outlined in the <i>"narrative for the future distribution of population growth"</i> above, the distribution of population and household growth is dependent on many factors, including the availability of vacant land, the provision of lead infrastructure to facilitate growth, the attractiveness of certain areas (including the quality of services provided, affordability and lifestyle factors) and external influences including the restrictions imposed on rural subdivision through the NPS-HPL. This forecast is strongly linked to the assumptions on population growth and the distribution of this population growth between Feilding, rural and village areas. If overall population growth is slower than anticipated, it will take longer for precinct 4 to reach capacity, and longer for the supply of vacant lots in rural and village areas to be exhausted. This will influence the patterns of household growth, with the current proportions of new households constructed in Feilding relative to village and rural areas persisting longer than forecast. If the impact of the NPS-HPL or rural subdivision and development is less than anticipated, the number of new households constructed in rural areas (on non-highly productive land) will be greater than forecast.

The number of new households located in Feilding vs rural and village areas in later years will be strongly influenced by the decisions that Council makes around future growth planning, rezoning and provision of new infrastructure. For example, if Council decides to direct investment to support new rural lifestyle subdivision on non-highly productive land, or large-lot residential development in village areas, it is likely that these areas will attract a greater share of new household growth, and therefore the number of households in Feilding would increase at a slower rate than forecast.

Overall Risk Guarded (3)

Reasons & Financial Effect of Uncertainty If the number of households in Feilding do not increase as quickly as forecast, there will be limited increases in the rating base. This will mean that the costs of providing the planned levels of service for those services that are targeted to Feilding will be higher per household. If the number of households in rural and village areas increases more quickly than forecast, the rating base for these areas will increase relative to Feilding, reducing the rating burden for those rates that are targeted to rural and village areas.

Mitigating Factors (if applicable) Council regularly reviews development trends through the following processes:

1. Monitoring and reporting under the National Policy Statement – Urban Development (NPS-UD);
2. Annual Estimated Resident Population (ERP) from Statistics New Zealand;
3. Long-term Plan process

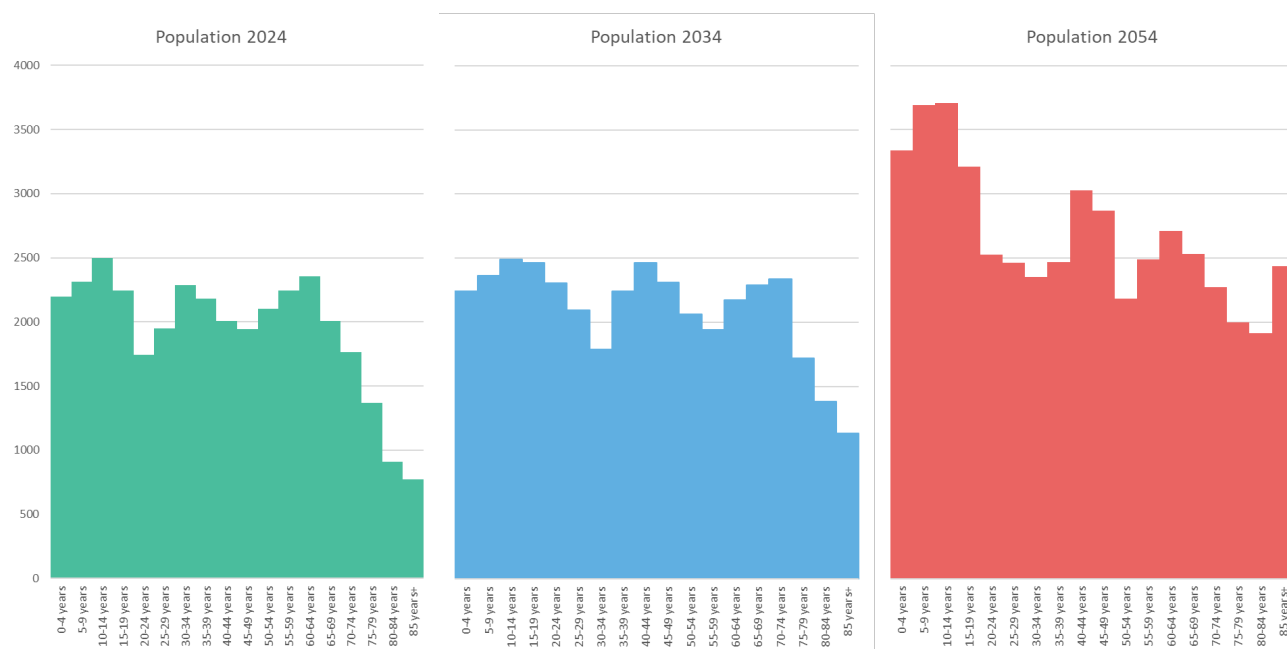
Major projects and significant changes to levels of service are assessed against affordability annually through the Annual Plan Process. In addition, subdivision and building consent data is used for annual updates to the schedule of works contained within Council’s Development Contributions Policy.

Through the above processes, actual growth in households will be assessed against projected growth enabling review of the need for, and timing of capital expenditure over the Long-term Plan period. Reduced development pressure will mean that available land is not exhausted as quickly. Planned rezoning and new infrastructure may be delayed until such time as demand warrants the expenditure.

Demographic Change

Assumption: That the demographics of the Manawātū District will follow the Infometrics demographic projections (high growth scenario, May 2023) over the period 2024 to 2034 and to 2054 as illustrated in Figure 5 below.

Figure 5: Demographic change



Alternative That the demographics of the Manawātū District will differ significantly from the Infometrics high age group projections (May 2023) to 2034 and 2054 as described in Figure 5.

Impact

Minor

The forecast demographics of the Manawātū District Community is relevant when considering the types of services, projects and activities delivered by Council.

If the actual demographics differ significantly from the forecasts, this will influence demand for Council facilities, including parks, reserves and sports facilities. Greater than forecasted growth in the young adult to middle age brackets could place pressure on housing availability and the delivery of services to support young families. Greater than forecasted shifts towards older demographics could change the mix of services demanded from Council, and the ability to pay for those services.

Likelihood

Possible

The forecasts from Infometrics show increases in the total population across all age brackets between 2024 and 2054. There is no significant population growth forecasted between 2024 and 2034 with some age groups seeing a decline. However, there are significant increases forecasted for the 80-84 years and 85+ year age groups, with both increasing by over 100%, between 2024 and 2054. The proportion of residents aged 80+ is forecast to increase from 5% of the total population in 2024 to 9% of the total population in 2054. With people living longer, and easing fertility and birth rates, the proportion of

residents aged over 65 years is expected to continue to increase to 2054. The forecast increase in older residents is relatively certain and is supported by current trends.

Employment in the wider region would likely have a long-term impact on the mid age population. With the employment growth in industries such as construction currently occurring this may lead to an increase in the age groups of 20-29 years. The Manawātū District Council is also expected to pick up a greater share of both international and internal migration due to the ability to work remotely (Bell, 2023).

In the short term between 2024 and 2034 there is a decline forecasted in the working age population (the 30-34, 50-54, 55-59 and the 60-64 year age groups). These short-term demographic shifts are likely due to various factors, including the expectation that Palmerston North will attract a greater share of population growth as large greenfield areas become available; and the departure of people from the 25-29 and 45-49 year age groups. This could also indicate that while we are seeing employment growth in the District, this growth is not going to be even across all skill levels and types of roles.

The total population is forecast to increase by 38% between 2024 and 2054, with only 8% growth forecasted between 2024 and 2034. The age groups of 40-44 and 45-49 years are projected to increase to 2054 by 51% and 48% which is higher than average increase across all age groups of 38%.

Based on birthrate assumptions, a growth in the middle age groups is likely to lead to an increase in the school age groups. All age groups from 0-19 years are forecast to increase above the 38% total district increase, with the 5-9 year olds increasing by 60% between 2024 and 2054.

Given the number of factors that contribute to population demographics, it is not possible for Council to have a high level of certainty around these forecasts. As the demographic forecasts from Infometrics take into consideration anticipated growth based on known regional projects, the likelihood that these forecasts prove false is considered “possible.”

Overall Risk	Guarded (3)
--------------	--------------------

Reasons & Financial Effect of Uncertainty	Uncertainty in the future demographic characteristics of the Manawātū District impacts on the ability to plan for the needs of future communities and the priority that Council places on certain projects and services in its future planning.
---	---

Mitigating Factors (if applicable)	Council reviews demographic trends based on census data every five years and estimated resident population data from Statistics NZ every 12 months. Council’s overall strategic direction with respect to changes in population demographics is reviewed every three years as part of each 10 Year Plan process. Data provided to Council will help with ongoing monitoring of community wellbeing. In addition, major projects and significant changes to levels of service are assessed against affordability annually through the Annual Plan process. The above processes will enable Council to respond to changes in the demographic characteristics of the district over time, including the prioritisation of projects and service delivery to meet the needs of the community.
------------------------------------	---

Land Use Change

Assumption: On the basis of current and anticipated Government Legislation and policy instruments, current land uses will change to a moderate extent over the next 3 years. More significant changes in land use are anticipated between years 4 and 10 of the Long-term Plan, as described below.

Note: Significant changes in land use are anticipated over the life of Council's Infrastructure Strategy as current legislative reform is implemented. However, given the high level of uncertainty associated with these reforms, this forecasting assumption focusses on the life of the Long-term Plan. Ongoing monitoring of land-use change will ensure that these trends are recognised and responded to in Council's Annual and Long-term Planning.. As Council develops its Environmental Strategy this may drive further land use change as priorities around emissions reduction are identified and implemented.

The types of land use changes anticipated over the life of this Long-term Plan include:

- Some diversification of land use from agricultural activities towards forestry and other low emissions land uses and innovation and technology to reduce on farm emissions from livestock farming to meet our obligations under the Zero Carbon Act, the Paris Agreement and for carbon credits.
- A significant reduction in rural subdivision on highly productive land as a result of the requirements of the National Policy Statement for Highly Productive Land, which seek to avoid this type of development. Some new lifestyle development will continue as existing vacant titles are developed.
- A reduction in new rural subdivision will result in greater demand for subdivision within urban areas (including both infill and Greenfield subdivision within identified growth areas), and adjacent to rural villages on non-highly productive land. Some increase in rural development will occur as a lifestyle alternative.
- Constraints on expansion of agricultural activities due to more stringent discharge requirements in the One Plan as the requirements of the National Policy Statement – Freshwater Management are implemented.
- Highly versatile land will be retained for productive uses, including land conversions for food production on suitable land, as growers relocate from neighbouring Districts including the Horowhenua due to inability to meet the discharge requirements of the One Plan.
- The Kawakawa/Turners Road Industrial Park is fully developed, requiring additional industrial land to be identified in, or around, Feilding.
- Changing transport patterns influence land use decisions as a consequence of the rural ring road, Te Ahu a Turanga (the Manawatū Gorge replacement road) and Te Utanganui (Central New Zealand distribution hub).
- Areas of native vegetation will be protected from development and areas of land within urban areas will be set aside for revegetation to meet the requirements of the National Policy Statement for Indigenous Biodiversity and the Regional Biodiversity Strategy.
- Changes in housing preferences including the shifting rental/ownership split, different forms of housing in recognition of rising housing costs, and more mixed-use activity. For example, future amendments to the District Plan will facilitate more mixed-use development in the Feilding Town Centre.

Alternative 1 That current land use in the Manawātū District will change more rapidly, or in different locations or ways than anticipated.

Impact	Moderate Rapid changes in land use could result in unanticipated demand for new (or upgrades to) services and the need to undertake additional road maintenance or improvement works, particularly if housing development increases in the villages, and/or there is additional housing/industrial development around Feilding. New activities can generate additional employment that can increase the rate of population and household growth and stimulate economic activity. If land use change occurs more rapidly than forecast this could alter council's priorities for infrastructural investment. Should Council not have enough serviced urban land available, this will necessitate changes to the timing around new infrastructure investment to support growth. If Council is unable to meet demand for new serviced land, this could result in development shifting outside of the District, or the ad-hoc provision of infrastructure, leading to poorer outcomes.
Likelihood	Unlikely for years 1 – 3, Possible for years 4 to 10 The interplay between new legislation, National Policy Statements under the Resource Management Act 1991 and Horizons One Plan mean that land use change in the moderate to long term is inevitable, but there is a high level of uncertainty about where, how and when that land use change will take place. The level of uncertainty increases over time as new targets are set in legislation and through National Policy Statements and plans. Certain changes in land use are less desirable for our District, such as shifts from agricultural activities for food production to forestry or carbon farming. At present, Council has limited ability to control forestry expansion through the District Plan. However, Central Government has suggested statutory change to enable controls through the District Plan or other mechanisms to slow or restrict land use change to certain types or locations. The rate of land uptake for residential and industrial development is dependent on several factors including population growth, household growth, migration patterns, inward investment and economic prosperity. The supply of land in neighbouring cities and districts also has a significant influence – particularly Palmerston North. Significant changes in any of these factors will affect when additional land needs to be rezoned. While Council is aware of current land use trends, including rural land being used more intensively than it was in the past, these trends may slow or reverse as new requirements are introduced to the District Plan and to the One Plan to ensure compliance with legislative requirements. Council is also aware that large areas of forestry in the District will reach harvestable age between 2021-2030.
Overall Risk	Guarded for years 1 to 10 (4–6)
Reasons & Financial Effect of Uncertainty	Significant changes in land use can impact Council's District Planning and the delivery of infrastructure. For example, if growth occurs in areas where Council currently has no plans for infrastructure investment. Given the process and investment associated with installing lead infrastructure, there are risks with opening up multiple areas at one time.

There is uncertainty regarding the response to highly productive land protections and future housing development trends. A large shift of development to rural villages will see the need for additional infrastructure programmes or lowering levels of service.

Council's infrastructure programme is currently focused on development in Precinct 4 (housing) and Precinct 5 (industrial). Any change in the rate of development will have a significant financial impact.

Significant changes in land use may also impact on Council's investment and priorities for three waters infrastructural investment, prior to transfer to the new Water Services Entity.

Mitigating Factors (if applicable)

The new growth strategy is scheduled to be completed in Year 1 of this Long-term Plan. This strategy will help to guide future rezoning and give effect to new legislative requirements, including the National Policy Statements for Highly Productive Land, Urban Development and Indigenous Biodiversity.

Council monitors land use change through the monitoring and reporting requirements of the NPS-UD. This includes monitoring of land use, subdivision and building consents. The zoning of land and the activities permitted on land is managed through the District Plan Review, informed by expert advice and investigations.

New infrastructure and roading needed to support residential and industrial growth are controlled through Structure Plans that have been incorporated into the District Plan through the Plan Change process and will be funded by development contributions.

The cost for new services to support new residential, industrial or commercial areas will be partially funded by development contributions.

Rural land is largely self-serviced so changes in land use will not alter demand for reticulated networks, but may impact on roading.

Council has already anticipated increased pressure on the rural roading network, with increasing numbers of heavy vehicles to service forestry harvest. As a result, additional funding has been set aside for road maintenance and renewals in the Roothing Activity Management Plan.

Council monitors, reports and submits on new legislative requirements as they are notified by Government. Additional budget has been included within the Long-term Plan in anticipation of the new responsibilities and resource implications of new legislative requirements.

Alternative 2 That current land use in the Manawatū District will persist or that land use change will occur at a much slower rate or in fewer locations or ways than forecast.

Impact

Minor

Less significant land use change will mean less demand for new services and road maintenance or improvement works.

Continuation of current land uses, or a more gradual change in land use than anticipated will mean greater stability in economic and social performance due to our capability and capacity being maintained within established industries.

	Slower land use change in our District compared to neighbouring territorial authorities may mean that our District is slower in responding to central government direction and new legislative requirements. It may also mean that the District has not capitalised on regional projects and developments or new and emerging industries and may therefore be comparatively disadvantaged.
Likelihood	Possible for years 1 – 3, Unlikely for years 4 to 10 As a lot of the forecast land use change is as a result of new legislative requirements, it is unlikely that there would be little or no land use change over the life of this Long-term Plan and the 30-year period of the Infrastructure Strategy. However, given the number of different factors that influence land use change, it is possible that the rate of change, and the location and nature of change is different and less significant than forecast. For land use change to occur at a slower rate than forecast, a significant shift in central government policy direction would be required.
Overall Risk	Guarded (3) for Years 1 – 3, Low (2) for years 4 to 10
Reasons & Financial Effect of Uncertainty	Slower or less significant land use change will mean less demand on the roading network and other Council-owned infrastructure. Investment to facilitate or manage land use change may need to be deferred.
Mitigating Factors (if applicable)	Council monitors land use change through monitoring and reporting requirements under the NPS-UD. This includes monitoring of land use, subdivision and building consents. The zoning of land and the activities permitted on land is managed through the District Plan Review, informed by expert advice and investigations. Funding within the Long-term Plan that is intended to service land use change and new legislative requirements can be reduced through subsequent Annual Plans and Long-term Plans if it is not required.

Climate Change

Assumption: That climate change will continue to exacerbate the intensity and frequency of extreme weather and climate events in the Manawātū District as predicted by NIWA based on the IPCC Fifth Assessment Report. Some of the climatic changes anticipated are:

- Temperature increases up to 1.5°C across the region by mid-century, and 3.5°C toward the end the century.
- Annual average precipitation will increase by up to 15% in the north of the Region and decrease by up to 20% in the southeast of the region. Increased precipitation could lead to increased frequency and intensity of inland flooding events in the district
- Change in number of annual hot days across the region up to 10 days by mid-century and up to 50 hot days toward the end of the century
- Fewer wet days up to minus 15 in the northeast of the region by mid-century and up to minus 30 toward the end of the century.
- The annual mean relative humidity change decreases up to 2.5 percent in both scenarios by mid-century and towards the end of the century.

New Zealand-focused regional modelling and quantitative analyses based on the Coupled Model Intercomparison Project Phase 6 (CMIP6) models are yet to be performed. There is no regional or localised modelling projections available for this Long-term Plan based on the more recent IPCC 6th Assessment Report (AR6). NIWA advises that future regional projections based on CMIP6 would not differ significantly from previous regional projections. MfE also advised that until the CMIP6-based regional downscaling is completed, the regional climate model projections reported in Ministry for the Environment (2018) can continue to be used with reasonable confidence. The assumptions below capture both MfE's recommended minimum and mid-range emission scenario SSP/RCP 4.5 and a high emissions scenario of RCP/SSP 8.5 for hazard assessment. It is crucial to note that the climate modelling used for these scenarios are based on 2011 data that are provided by the Ministry of Environment.

There is a risk that the dated data used for the modelling is inconsistent with recent adverse climatic events. A recent OECD report suggests taking a precautionary approach to climate change mitigation, particularly noting that some climate tipping points have already been crossed. It is prudent to approach our mitigation and adaptation planning using the upper-range emissions scenario.

The impacts of climate change are discussed in more detail in the Climate Change section of the Long-term Plan.

Alternative 1 That climatic changes in the Manawātū District, including the intensity and frequency of extreme weather events, are more extreme than predicted by NIWA based on the IPCC Fifth Assessment Report.

Impact

Major

Under the assumption that natural disasters will occur with increasing frequency, significant climatic events would affect demand for Council services and could adversely affect infrastructure. Incidences of extreme weather events such as increased rainfall leading to inland flooding are a concern for council. Risks include more frequent or costlier storm damage from flooding, and that stormwater standards will not be met. This would increase costs from repair works, and possibly lead to demand for increased levels of service. Other risks include

	impacts on the economic and social wellbeing of our communities through more frequent or severe flooding, drought and/or heavy snowfall. Such events also cost Council in terms of infrastructure repair, Civil Defence and emergency management response to events, and community assistance (such as provision of a supplementary water supply).
Likelihood	Unlikely Ministry for the Environment and NIWA reports have predicted change in weather patterns including wind, rainfall, drought and snowfall. There is more certainty that weather patterns in the short term will have predictable impacts due to climate change that can be provided for through our Asset Management Plans and Activity Management Plans. There is less certainty about impacts of weather patterns in the long term as predictions are less reliable.
Overall Risk	Moderate (8)
Reasons & Financial Effect of Uncertainty	Significant impacts are not expected to be frequent in the next decade. Council has a policy of holding depreciation renewal reserves. Insurance claims from damage associated with extreme weather are likely to rise as the incidence of these events increases in the future. This is expected to increase the costs of insurance cover. Operating programmes to mitigate impacts of climate change such as reducing peak demand for water and leak detection in wastewater are already underway and are built into the operating budgets of Council.
Mitigating Factors (if applicable)	Financial impacts will be mitigated by ensuring adequate insurance cover and appropriate maintenance is undertaken as a preventative measure. Major flood protection works (stopbanks) have been completed for the lower Manawatū, the Kīwitea Stream and Ōroua River flood control scheme. These stopbanks are designed to withstand the current 1% Annual Exceedance Probability (AEP) flood event, 1 in 100-year flood. Technology is always changing, and it is likely that new and cost-effective plant and materials will be available to meet some of the challenges in the future. Council has also established a Resilience Fund, which puts aside funding in anticipation of climate change impacts. It is expected that a portion of the fund can be used to mitigate some adverse impacts of climate change. As part of its environmental strategic priorities MDC is committed to improving our infrastructure assets resilience to climate change impacts.
Source	NIWA based on the IPCC Fifth Assessment Report.

Alternative 2	That climatic changes in the Manawatū District, including the intensity and frequency of extreme weather events, are less extreme than predicted by NIWA based on the IPCC Fifth Assessment Report.
Impact	Minor If climatic changes are less extreme than predicted, expenditure on infrastructure repairs and maintenance will be lower.
Level of Certainty	Uncertain Ministry for the Environment reports have predicted change in weather patterns including wind, rainfall, drought, and snowfall.

	There is more certainty that weather patterns will have predictable impacts due to climate change in the short term, that can be provided for through our Asset Management Plans and Activity Management Plans. There is less certainty about impacts of weather patterns in the long term as predictions are less reliable.
Overall Risk	Low (2)
Reasons & Financial Effect of Uncertainty	Fewer significant weather events such as flooding, droughts, or heavy snowfall, means that expenditure on infrastructure repairs and maintenance and insurance claims from weather events will be lower. Renewal reserves will need to be retained to address climate change impacts in the longer term.
Mitigating Factors (if applicable)	Financial impacts will be mitigated by ensuring adequate insurance cover and appropriate maintenance is undertaken as a preventative measure.
Source	NIWA based on the IPCC Fifth Assessment Report.

Emergency Events

Assumption: The Manawātū District Council is prepared to respond and recover from emergency events that impact the district over the life of the Long-term Plan. However, a catastrophic event, (such as a major earthquake or major weather event) or several consecutive extreme weather events will exceed Council's financial provision to recover costs incurred.

Alternative That an emergency event occurs that exceeds Council's financial ability to recover costs incurred to repair critical infrastructure.

Impact **Major to Severe**

Manawātū District Council and other businesses in the district could be subject to a break in business continuity in the event of a catastrophic emergency event and this would have a major impact on the district economy.

Council services including the provision of critical infrastructure could be disrupted for considerable periods of time.

Depending on the severity and/or timing of an emergency event, Council may not have the resources on hand to respond or recover from such an event should it occur.

Several consecutive extreme weather events may exhaust Council reserves and prudent borrowing ability. There is a risk that Council may not have access to Government support in the future to recoup costs incurred.

Emergency events elsewhere in New Zealand and across the world may mean that there are periods of time where insurance cover may not be available, or unavailable for certain types of emergency events.

The repair or renewal of critical infrastructure may be delayed due to a lack of borrowing ability and the need to focus resources on high priority infrastructure.

Likelihood **Unlikely**

The top 10 hazards for the Manawātū District, in order of priority, are severe earthquake, river flood, tsunami, drought, landslide (widespread hill country), human pandemic, animal epidemic, transportation incident (HAZNO spill), rural fire (widespread) and high wind/storm event.

The likelihood and consequences of an event is different for each hazard. This complicates efforts to assign a single likelihood score; however, the chances of an emergency event occurring in the District that exceeds Council's ability to recover costs incurred, such as a strong earthquake, is considered low. Earthquake forecasts from GeoNet in December 2017 provide a best estimate of 30% (unlikely) of a magnitude 7 or higher earthquake occurring within the Central North Island within the next 10 years.

Overall Risk **Moderate (12) to High (24)**

Reasons & Financial Effect of Uncertainty A catastrophic emergency event would impact on Council by demanding immediate funding to repair critical infrastructure. This would reduce the resilience of the Council to meet future unforeseen costs.

Additional borrowing would impact on future rating levels.

Mitigating Factors (if applicable)	Emergency Management planning and preparedness aligns with Council’s Business Continuity Plan 2020. This plan covers Council’s response to an event. It outlines the actions that will be taken internally, to ensure that the critical services Council delivers continue throughout and following an event. The Council also continues to be part of the Manawatū-Whanganui Civil Defence Emergency Management Group working to ensure preparedness for any emergency event, ability to deliver a coordinated response and recovery. Council has a \$5 million buffer between our self-imposed debt cap and the Borrowing Management Policy to ensure we have adequate borrowing facilities in case of emergencies. Council also maintains a resilience fund that it uses to offset some of the costs for recovery from emergency events, particularly the local share of any roading emergency works that are not funded by the New Zealand Transport Agency (NZTA) emergency works subsidy. Catastrophic emergency events are assumed to attract Government and private charitable sector support.
------------------------------------	--

Legislative Change

Assumption: That the Manawātū District Council is prepared to respond to signalled legislative change. However, there will be resource implications as Council will need to increase its capacity to meet the requirements of additional central government legislation and legislative instruments.

Alternative That the Manawātū District Council will be unable to meet the requirements under new legislation and legislative instruments due to insufficient capacity.

Impact **Major**

The impact of Council being unable to meet its obligations under new legislation and legislative instruments due to insufficient capacity and/or capability is dependent on what penalties are imposed by Government for non-compliance. If all or most councils are unable to meet new obligations, this will likely lessen the response from Central Government and may result in a reconsideration of the timeframes or scope of new legislation or legislative instruments. However, if the Manawātū District Council is alone in its inability to meet its obligations, the worst-case scenario is that Government will appoint commissioners to take over the governance role of Council.

Likelihood **Possible**

We are within a significant period of legislative change. The Coalition Government repealed the Natural and Building Environment Act 2023 and the Spatial Planning Act 2023 on 24 December 2023, and the Three Waters Legislation on 14 February. The Coalition Government has signalled several other changes to regulation and legislative instruments that will impact on Council's roles and responsibilities including:

- Replacing the Resource Management Act 1991 (RMA) with new resource management laws premised on the enjoyment of property rights as a guiding principle;
- Undertaking an urgent review into the implementation of the National Policy Statement (NPS) on Indigenous Biodiversity before any implementation, including ceasing the implementation of new Significant Natural Areas;
- Streamlining the plan preparation process in Schedule 1 of the RMA
- Introducing financial incentives for councils to enable more housing
- Simplifying the planning system and related statutes including the Public Works Act and the Reserves Act
- Replacing the NPS – Freshwater Management 2020 and the National Environmental Standards (NES) for Freshwater, including by:
 - Rebalancing Te Mana o te Wai to better reflect the interests of all water users
 - Allowing district councils more flexibility in how they meet environmental limits and seeking advice on how to exempt councils from obligations as soon as practicable
- Amending the NES for Plantation Forestry regulations to place a duty upon harvesters to contain and remove post-harvest slash
- Establishing a National Infrastructure Agency that prioritises the delivery of regional and national projects of significance

-
- Preparing a new Government Policy Statement (GPS) Transport (100-day plan)
 - Reducing expenditure on cycleways
 - Amending the Building Act and resource consent system to make it easier to build small structures of up to 60sqm.

When considering the cumulative cost and resourcing requirements of new legislation and legislative instruments, it is possible that Council will be unable to meet all its obligations. For example, Council may be unable to attract or retain staff with the necessary skills and experience to meet the requirements of new legislation or legislative instruments. Even if Council has the capability to meet new roles and responsibilities, the cost of doing so may exceed Council's debt cap or makes rates unaffordable.

Overall Risk **Moderate (12)**

Reasons & Financial Effect of Uncertainty If Central Government does not provide local government with the financial assistance it needs to meet new obligations, the costs will fall on ratepayers. The cumulative impact on rates may exceed the Council's debt cap or other financial controls or exceed ratepayer's ability to pay.

Council recognises that there is a national shortage of specialist staff, such as ecologists and planners, that will be needed to meet the new requirements of legislation. The inability to attract the necessary staff could result in more shared arrangements and outsourcing of work to consultants, potentially increasing costs.

Mitigating Factors (if applicable) Council monitors, reports, and submits on new legislative requirements as they are notified by Government to advocate on behalf of the community and inform our preparedness to these legislative changes. Additional budget has been included within the Long-term Plan in anticipation of the new responsibilities and resource implications of new legislative requirements.

Infrastructural Capacity

Assumption: That the infrastructure projects outlined in the Infrastructure Strategy are necessary to ensure that there is sufficient capacity to meet forecast population, household and business growth.

Alternative 1 That our infrastructure will have excess capacity due to lower than forecast growth.

Impact	Minor Maintenance costs to maintain the current level of service may not be sustainable. This means that levels of service may need to be reduced.
Likelihood	Unlikely Population forecasts are based on the Infometrics high scenario population projections (May 2023). Business growth is based on trends from past and current development and the consideration of current and the expectation of future economic circumstances. Decisions around infrastructure investment are based on past and current development trends and information that Council holds on the capacity of the current networks. Changes in population growth rates, growth demand and the location of growth within the District can all influence what infrastructure projects are needed and when.
Overall Risk	Low (2)
Reasons & Financial Effect of Uncertainty	If the number of new households connecting to reticulated infrastructure networks is lower than forecast, the revenue from rates and development contributions will be lower. This means that the costs for maintenance and renewal will be higher per ratepayer.
Mitigating Factors (if applicable)	Any major changes to the growth trend will be identified through processes in place to monitor population growth and patterns of development across the district. As each project needs to be economically justifiable, projects are unlikely to proceed until there is sufficient demand.

Alternative 2 That our infrastructure will have insufficient capacity to meet growth demand.

Impact	Moderate: Additional investment will be required in new infrastructure if the level of service is not being met. The Three Waters distribution and collection networks and treatment facilities have capacity to meet some increased forecast growth related needs. The networks overall are in good condition.
Likelihood	Unlikely Population forecasts are based on the Infometrics high scenario population projections (May 2023). Business growth is based on trends from past and current development and the consideration of current and the expectation of future economic circumstances. Decisions around infrastructure investment are based on past and current development trends and information that Council holds on the performance of the existing network. Changes in population growth rates, growth demand and the location of growth within the District can all influence what infrastructure projects are needed and when.
Overall Risk	Guarded (4)
Reasons & Financial Effect of Uncertainty	Growth significantly above forecast rates will mean that major infrastructure networks will need to be expanded earlier than planned. If infrastructure is not able to keep up with demand, levels of service may suffer, making the District a less attractive place to live.

Mitigating Factors (if applicable)	Funding for growth projects will be partially funded through development contributions. Growth will need to be significantly above forecast levels before additional investment in infrastructure is required. Any major changes to growth trends will be identified through processes in place to monitor development trends across the District. Council has proactively invested in growth related developments, particularly in Maewa (Precinct 4) and the Kawakawa Industrial area (Precinct 5).
------------------------------------	---

Achievement of Capital Works Programme

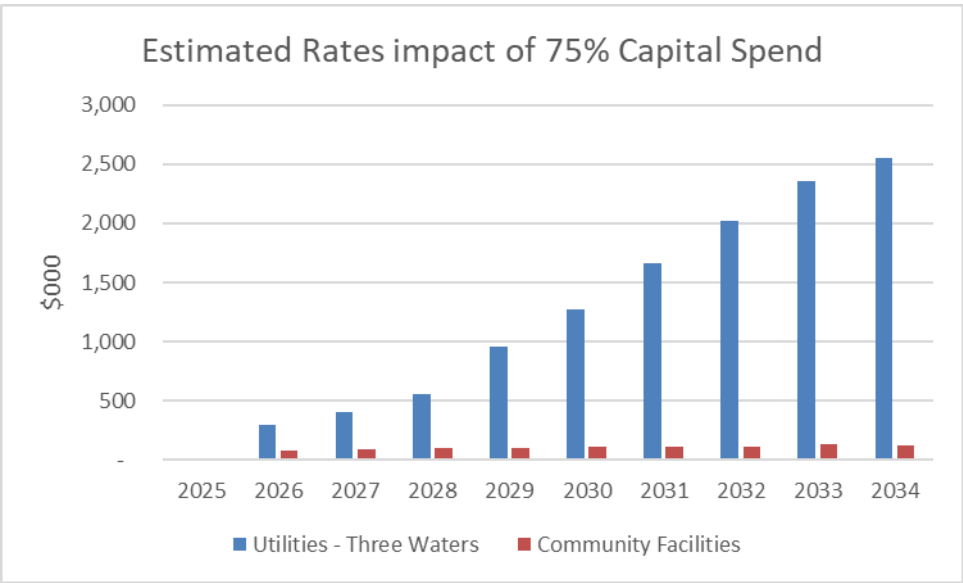
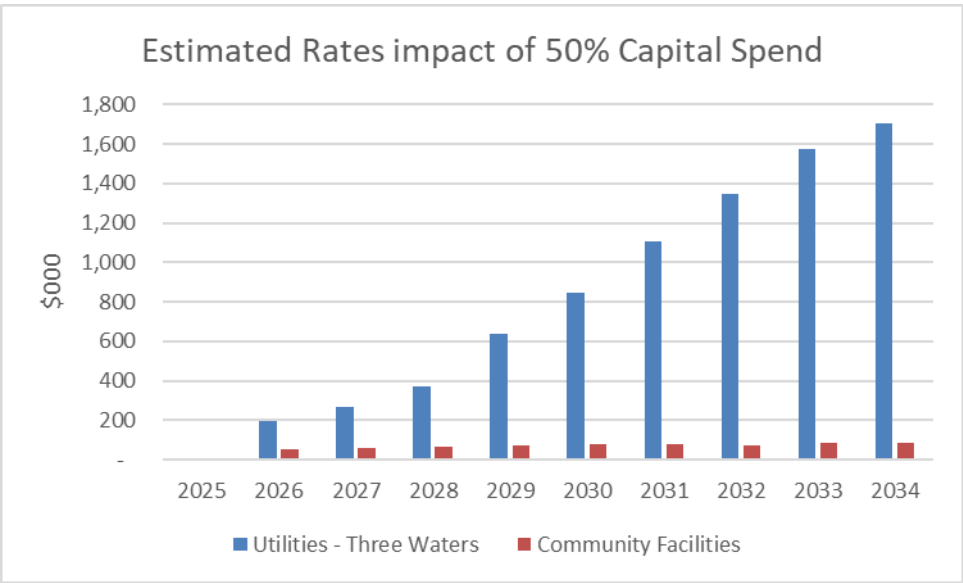
Assumption:	That Council will have both the internal and external resources required to achieve 85% to 105% of its annual capital works programme over the life of the 10-year Plan.
Alternative 1	That Council will not have the resources available to achieve 85% to 105% of its annual capital works programme over the life of the 10-year plan.

Impact **Moderate**

Council has adopted the target to complete between 85%-105% of its capital works programme annually. This target is included as a Key Performance Indicator for the Chief Executive.

If Council is unable to meet this target, the cost of capital (interest payments) to service debt on loans for capital works would be minimised. This would have a positive impact on rates but may impact on availability and/or levels of service to the community.

The following graphs indicate the impact on rates resulting from 50% and 75% capital expenditure of utilities and community facilities capex over the life of the 10-Year Plan.



Likelihood	Likely While Council is proceeding on the expectation that capital works programme targets will be met, it is acknowledged that average annual capital expenditure of 79% has been completed over the period 2015-2020. To support the completion of the capital works programme, internal resourcing has been boosted with the appointment of an additional Project Manager and Design Engineer, and administration support staff. The additional resources will support staged and integrated project management and procurement practices, with the objective of bundling multiple projects into tenders to attain contractor commitment and ensure delivery. This includes bundling of projects across multiple agencies. Allowances will be made at the time of tender acceptance to add stages to the contracts, and contract completion times may be extended to allow contractors to programme their work effectively. This has been taken into account within projected project milestone and completion dates. Factors that may affect delivery are the availability of additional specialist engineering expertise and external contractors (including prequalification requirements for contractors), the capacity of Regional Council to process resource consent applications within statutory timeframes, and the ability to procure products and equipment from offshore. An additional risk is elevated demand due to the large capital works programmes of both neighbouring Councils and central government in the region. It is expected that the bundling of projects will drive resource efficiency and support completion of capital projects across the region.
Overall Risk	Moderate (8) We are currently well resourced to deliver to capital works programme targets however factors outside the control of Council may impact on the achievement of targets.
Reasons & Financial Effect of Uncertainty	Planned upgrades, renewals and maintenance works will continue as set out in the Infrastructure Strategy, the 10 Year Plan and the Forward Works Programme in the Three Waters Asset Management Plan. Any deferral of planned capital works will have a positive impact on rates affordability in that year.
Mitigating Factors (if applicable)	Staging and integrated project management and procurement processes will be employed to support capital works programme delivery. As above, this includes seeking opportunities to bundle capital works projects across the wider region.

Useful Life of Assets

Assumption: That assets will deliver the required level of service over their documented useful life.

Alternative	That older assets will fail earlier than their documented useful life
Impact	Major Critical asset failure would impact on the reliability of the service we provide to businesses, schools, rest homes, medical providers and the wider public. Insufficient investment for renewal of critical network and plant assets will increase the likelihood of these assets to fail. This failure also increases the risk of environmental risk, public health risk, reputational harm, breaches of resource consent resulting in abatement notices and prosecution. Significant asset failure would require additional funding which would impact on debt levels and rates increases.
Likelihood	Possible Various factors can affect when an asset is replaced, including an extraordinary event such as extreme weather, increased demand from growth, or an increased rate of deterioration from material failure. Council has very few water supply assets dating before 1950 and large numbers of sewer and stormwater reticulation with a default installation date of 1931. This network profile skews the current age-based renewals programme. The gaps in the accuracy of asset information impact on the timing of renewals and the reliability of service delivery. This is relevant to assessing the risk and timing of an optimised renewals programme. To address this, CCTV inspections have been conducted in older parts of the network. Council is in the process of preparing a procurement going out to tender for the CCTV and condition assessment programme. The budget for this has been added to the 2024-34 Long-term Plan along with the renewals programme to follow based on the information collated from the condition inspection information. The targeted renewals programme will reduce the likelihood of asset failure across the network.
Overall Risk	Moderate There is little evidence to indicate that large scale asset failures are imminent. The inspection programme will further define this risk to increase certainty and inform risk management practices.
Reasons & Financial Effect of Uncertainty	A renewals programme based on a combination of age, material type and criticality has been included in the Long-term Plan. Funding is included in the Long-term Plan for a CCTV and condition assessment programme. Information from these condition assessments will inform the renewals programme, minimising the risk of bulk failure of assets.
Mitigating Factors (if applicable)	Council has recognised where there are gaps in asset information and has implemented a maintenance and monitoring programme to inform a targeted renewals programme.
Source Data	IPWEA. (2015). International Infrastructure management Manual. <i>Institute of Public Works Engineering Australasia</i>. International Edition.

New Zealand Drinking Water Standards

Assumption: That Council can deliver safe and cost-effective water supplies to the community in accordance with the Drinking Water Quality Assurance Rules (DWQAR 2022).

Alternative 1 The national regulations and the delivery model remain unchanged.	
Impact	Minor All drinking water supplies will be required to comply with the DWQAR, and aesthetic values. Water supply activities will continue as planned and improvements have been budgeted for in the Long-term Plan.
Likelihood	Unlikely The expectation is that there will be some form of legislation change to the delivery model as set by Central Government. However, no major changes are expected
Overall Risk	Low (2) We are currently well placed to deliver under the current criteria and performance standards.
Reasons & Financial Effect of Uncertainty	Planned upgrades, renewals and maintenance works will continue to be set out in the Infrastructure Strategy, the Long-term Plan and the Forward Works Programme in the Three Waters Asset Management Plan.
Mitigating Factors (if applicable)	Following completion of planned upgrades to water treatment plans, all of Councils reticulated drinking water networks will comply with the current drinking water regulatory requirements.

Alternative 2 That the changes to the drinking water regulations and the delivery model are greater than anticipated.	
Impact	Moderate All of Council's water supplies are already chlorinated and all surface water takes have UV treatment. Hence, we are well placed under the current regulatory requirements and can easily implement minor additional changes to achieve compliance if required. The changes to date have consisted of a more rigorous testing regime to monitor total coliforms and enumeration testing for E. coli. The changes to the water delivery model, however, could be significant as these could fundamentally change how and who is responsible for supplying drinking water. Councils' debt profile places council at financial risk if significant changes are needed, and significant costs are incurred to comply with standard and requirements for drinking water supplies.
Likelihood	Possible The department of Internal Affairs Report on the Havelock North Drinking Water Inquiry: Stage 2, recommended significant changes to be made to the regulatory system for water supplies and to the Drinking Water Standards for New Zealand.

	The new regulations have since been released with relatively minor increases in compliance criteria.
Overall Risk	Guarded (6)
Reasons & Financial Effect of Uncertainty	The delivery model is beyond the control of the Territorial Authorities. Through its lobby group LGNZ, Council has recommended the status quo with respect to the delivery model. This may be amended however to a more regional or national approach delivery model. It is likely that changes will result in additional capital and operational expenses for Council.
Mitigating Factors (if applicable)	Council is already well placed as all urban drinking water supplies are chlorinated. In addition, all surface water takes for water supply networks are UV treated. These mitigation measures were already in place when increased compliance requirements came into force in 2022.

Transportation Funding – Assumption One

Assumption: That the Council will receive funding from Waka Kotahi NZ Transport Agency (NZTA) for the maintenance and renewal of roads.

Alternative 1	That roading maintenance and renewal projects will not secure Waka Kotahi NZTA funding.
Impact	Severe The land transport network is a core facility maintained by the Council to assist it in meeting its Community Outcomes through enabling the efficient movement of people and goods throughout the Manawatū District and into neighbouring districts. The removal of Waka Kotahi funding for roading maintenance and renewal projects would impose substantial additional costs on Council and threaten the affordability of providing a roading network that is both fit for purpose and meets the expectations of the community.
Likelihood	Unlikely The current 51% subsidy from NZTA is assumed to remain constant. However, as Council's roading network exceeds NZTA 'expectations' of performance, it is possible that the allocation of funds may reduce to balance constraints in funding availability.
Overall Risk	High (16)
Reasons & Financial Effect of Uncertainty	The removal of subsidies for roading maintenance and renewal would limit the capacity of local government to respond to the changing needs of the community in addition to placing a substantial burden on Council budgets.
Mitigating Factors (if applicable)	The Council intends to maintain its awareness of any issues that impact on the ability of Council to access Waka Kotahi NZTA funding. Funding for the changing needs and expectations of the community has been recognised in the Long-term plan.
Alternative 2	That there are delays in finalising Waka Kotahi NZ Transport Agency funding, impacting on Council's delivery of maintenance and renewal projects.
Impact	Major A delay in funding could temporarily delay projects or put pressure on Council roading budgets. These considerations are built into Council planning processes to ensure the impact on the community is minor.
Likelihood	Possible Based on recent experiences, the risk of budget confirmation beyond a timely manner is increasing. There is less scope to manage deferral of activities in order to reduce expenditure if this issue presents itself.
Overall Risk	Moderate (12)
Reasons & Financial Effect of Uncertainty	Significant delays in securing funding for maintenance and renewal projects could result in lower quality roads, particularly in rural areas. Council would

	have to either increase rates or bring forward planned projects to ensure that the communities' expectations are met and that local roads are fit for purpose.
Mitigating Factors (if applicable)	The Council intends to maintain its awareness of any issues that impact on the timing of Waka Kotahi NZTA funding. Funding for the changing needs and expectations of the community has been recognised in the Long-term Plan.

Transportation Funding – Assumption Two

Assumption: That the Council will receive 51% of the cost of roading maintenance and renewal projects from Waka Kotahi NZ Transport Agency over the life of the Long-term Plan, as published within the Waka Kotahi NZ Transport Agency Funding Assistance Rates Policy issued in February 2021.

Alternative	That the level of subsidy from Waka Kotahi NZTA for maintenance and renewal of roads is reduced.
Impact	Severe The land transport network is a core facility maintained by the Council to assist it in meeting its Community Outcomes through enabling the efficient movement of people and goods throughout the District and into neighbouring districts. Any reduction in the level of Waka Kotahi NZTA funding for the maintenance and renewal of the local roading network will impact on Council budgets and the affordability of maintaining a roading network that is safe and efficient and meets the expectations of the community. Rather than the level of subsidy available to Council, the biggest impact on Council budgets would come from the need to reduce budgets further to fit within a reduced level of central government funding available to local government for roading maintenance and renewal. This is considered separately in the following Forecasting Assumption.
Likelihood	Unlikely Risk of reduction in the Funding Assistance Rate, FAR (currently at 51%) is unlikely at this time, but impact of such an event happening increases due to cost of materials and provision of contracting services having increased substantially.
Overall Risk	High (16)
Reasons & Financial Effect of Uncertainty	Further reduction in the rate of subsidy for roading maintenance and renewal would limit the capacity of local government to respond to the changing needs of the community in addition to placing a substantial burden on Council budgets.
Mitigating Factors (if applicable)	The Council intends to maintain its awareness of any issues that impact on the level of Waka Kotahi NZTA funding. Funding for the changing needs and expectations of the community has been recognised in the Long-term Plan.

Transportation Funding – Assumption Three

Assumption: That the total amount of central government funding available to local government to subsidise roading maintenance and renewal programmes will not reduce from levels released within the National Land Transport Fund (NLTP).

Alternative	That the total level of Waka Kotahi NZTA funding for local government maintenance and renewal of roads is reduced from levels released within the National Land Transport Fund (2020).
Impact	Severe The land transport network is a core facility maintained by the Council to assist it in meeting its Community Outcomes through enabling the efficient movement of people and goods throughout the District and into neighbouring districts. Council was asked to reduce the budget for roading maintenance and renewal by \$2m in February of 2021, to fit in with funding constraints currently being experienced by Waka Kotahi NZTA. Council reduced the budget as requested. Any further reduction in the level of Waka Kotahi NZTA funding available to Council for the maintenance and renewal of the local roading network will have a major impact on Council budgets and the affordability of maintaining a roading network that is safe and efficient and meets the expectations of the community. Council can either fund the additional expenditure required to maintain the roading network, which will impact on rates, or delay roading maintenance and renewal works to fit within funding constraints.
Likelihood	Possible A reduction of funding is possible due to provision of ‘emergency response’ funding for recent storm events to NZ being announced by central government. This ‘emergency funding’ is potentially going to be sourced from the National Land Transport Fund, meaning a reduction in available funding for ‘Business as Usual’ activities.
Overall Risk	High (24)
Reasons & Financial Effect of Uncertainty	Further reduction in the level of funding available to support local government roading maintenance and renewal programmes would limit the capacity of Councils to respond to the changing needs of the community in addition to placing a substantial burden on Council budgets.
Mitigating Factors (if applicable)	The Council intends to maintain its awareness of any issues that impact on the level of Waka Kotahi NZTA funding. Funding for the changing needs and expectations of the community has been recognised in the Long-term Plan.

Resource Consents

Assumption: That applications to renew resource consents will be granted but that Council will face additional costs and delays through the application process, particularly in relation to wastewater discharges. Monitoring costs and requirements will be higher for consent renewals due to more stringent conditions.

Alternative 1 That consents will be renewed in a timely manner and issued without any major changes to existing conditions or requirements.	
Impact	Minor If consents are renewed without major changes to conditions and requirements, there will be no need to increase the budget for consent monitoring and renewal included in the Asset Management Plans. Those that have already been adjusted in anticipation of new requirements, may have a surplus.
Likelihood	Unlikely Consents already approved under the One Plan have been subject to more stringent conditions and requirements than those issued under the previous Regional Plans. Given the Environment Court decision that ruled against Horizons Regional Council (NZEVC ENV-2016-WLG-000038), Council thinks it is likely that the trend towards increasing consent costs, delays, and more stringent consent requirements will continue.
Overall Risk	Low (2)
Reasons & Financial Effect of Uncertainty	Council has a good understanding of its existing consent requirements and monitors expiry dates through Asset Management Plans. However, while Council can advocate to Regional Council, there is limited flexibility in terms of determining consent conditions.
Mitigating Factors (if applicable)	Council has a good working relationship with Horizons, and knowledge and understanding of working under the Horizons One Plan. The Council will monitor and work with Horizons to ensure it has sufficient notice of and is well-placed to manage any consent changes required. Council works in a partnership alongside Ngāti Kauwhata within Mana Whakahaere (Ōroua River Governance Group). This group was formed under the Ōroua Declaration in 2015, and meets at least once per year. During 2023, the group met four times. In relation to resource consents, Council's membership on this group helps to demonstrate Council's commitment towards improved outcomes for the Ōroua River, and helps to ensure that Council activities impacting or improving the health of the Ōroua River are understood by Ngāti Kauwhata members. This in turn contributes to Ngāti Kauwhata representatives feeling well informed when making decisions on Resource Consent applications where iwi endorsement is required.
Alternative 2 That existing resource consents are not renewed and/or granted.	
Impact	Severe If existing consents cannot be renewed and/or granted, our existing treatment facilities would be potentially redundant. For new consents, new works could be delayed, impacting on provision of services. Council would need to develop

	alternative ways of managing infrastructure to find solutions that are able to be consented.
Likelihood	Rare While we are anticipating increased costs and time delays in meeting new consent requirements, we consider it highly unlikely that Council will fail to obtain consent. Council may need to make changes, such as eliminating any water-based treatment of wastewater discharges, but should be able to find solutions that meet the requirements of the One Plan and are supported by iwi, the community and other stakeholders.
Overall Risk	Moderate (8)
Reasons & Financial Effect of Uncertainty	If Council continued to operate its treatment facilities and/or discharge without consent, it may face enforcement action and fines. Affordability of services in small communities could become increasingly difficult.
Mitigating Factors (if applicable)	Council has a good working relationship with Horizons and knowledge and understanding of working under Horizons One Plan. The Council will monitor and work with Horizons to ensure it has sufficient notice of and is well-placed to manage any consent changes required. Council works in a partnership alongside Ngāti Kauwhata within Mana Whakahaere (Ōroua River Governance Group). This group was formed under the Ōroua Declaration in 2015, and meets at least once per year. During 2023, the group met four times. In relation to resource consents, Council's membership on this group helps to demonstrate Council's commitment towards improved outcomes for the Ōroua River, and helps to ensure that Council activities impacting or improving the health of the Ōroua River are understood by Ngāti Kauwhata members. This in turn contributes to Ngāti Kauwhata representatives feeling well informed when making decisions on Resource Consent applications where iwi endorsement is required. Additional budget has been included in Asset Management Plans to offset the increased costs for consent renewals and to ensure compliance with new consent conditions.

Impact of Inflation on Council Budgets

Assumption: Costs will increase as set out in the Business and Economic Research Ltd (BERL) Local Government Cost Adjustor Forecast “Legacy Local Government Cost Index (Legacy LGCI)” (i.e. including three waters infrastructure) (October, 2023), with the exception of insurance.

The local government annual growth rates across groupings are included below:

Table 1

BERL group	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Planning & regulation	2.6	2.1	2.2	2.1	2.0	1.9	1.9	1.9	1.8	1.8
Roading	2.9	2.0	2.3	2.3	2.2	2.1	2.0	2.0	2.0	1.9
Transport	2.6	2.1	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9
Community	2.7	2.0	2.2	2.2	2.1	2.0	1.9	1.9	1.9	1.8
Water & Environment	3.6	2.5	2.7	2.6	2.5	2.3	2.3	2.2	2.1	2.1
LGCI OPEX Mid-point	2.9	2.2	2.3	2.3	2.2	2.1	2.0	2.0	1.9	1.9
LGCI CAPEX Mid-point	3.0	2.2	2.4	2.3	2.2	2.1	2.1	2.0	2.0	1.9
LGCI Combined Mid-point	2.9	2.2	2.3	2.3	2.2	2.1	2.0	2.0	1.9	1.9

Note: The Local Government Cost Index (LGCI) is a composite index that measures the changes in the prices of a basket of goods and services that are purchased by local governments in New Zealand. The LGCI grows more slowly than the Consumer Price Index, reflecting the difference in bargaining power between local authorities and households. BERL produced three versions of LGCI cost adjustor forecasts for Local Government in October 2023. Council has chosen to use the “Legacy LGCI” which includes the same basket of goods as previous years (i.e. includes waters infrastructure). Council opted to use the “Legacy LGCI” series for consistency with our assumption that the three waters reforms will be repealed by Government and that three waters infrastructure will remain the responsibility of Council.

Alternative 1	That inflation costs will increase at a significantly higher rate than forecast by BERL.
Impact	Major Council may face increased costs if inflation rates differ significantly from forecasts. The biggest impact in the short term would be to threaten the rates affordability in subsequent years. Significant (and unexpected) cost increases will raise questions over levels of service and affordability.
Likelihood	Likely The inflation forecasts in Table 1 have been used to prepare the financial information within the Long-term Plan. These forecasts are updated each year, and each new Long-term Plan uses the most recent update. These forecasts are the best available information that is specific to Local Government that we can use. However, given persistently high core inflation (including volatile energy prices), Council considers it likely that inflation costs could be much higher than forecast by BERL.
Overall Risk	High (16)

Reasons & Financial Effect of Uncertainty	Councils may face increased costs if inflation rates differ significantly from forecasts. The biggest impact would be the need to re consider the levels of services provided.
Mitigating Factors (if applicable)	Council utilises industry specific advice on current inflation and predicted trends. Major projects and most infrastructure maintenance are subject to tenders. These tend to be multi-year contracts that reduce the risk to Council in the short term. Council can decide to halt projects if tendered costs exceed the budget. Council closely monitors its budget and performance against budget. Emerging trends in the economy affecting inflation can be identified at early stages and budgets and spending adjusted if necessary to ensure there are no sudden impacts. Council also utilises several sources of funds, including external and internal borrowing at different rates, so the risk of inflation does not apply to all sources of funding.
Source	BERL. (October 2023). <i>Cost Adjustor 2023 final update</i> . Taituarā.

Alternative 2	That inflation costs will increase at a significantly lower rate than forecast by BERL.
Impact	Minor It is possible that rates requirements will reduce, affecting a one year surplus and potentially reducing rate requirements for the future year.
Likelihood	Unlikely The inflation forecasts have been used to prepare the financial information within the Long-term Plan. These forecasts are updated each year, and each new Long-term Plan uses the most recent update.
Overall Risk	Low (2)
Reasons & Financial Effect of Uncertainty	Councils may face reduced costs if inflation is significantly lower than forecast. This would have a positive impact on Council budgets as costs associated with capital and operational spending would be less than anticipated.
Mitigating Factors (if applicable)	Council utilises industry specific advice on current inflation and predicted trends in addition to closely monitoring performance against budget. Through this process, emerging trends that may impact on inflation can be identified at an early stage and budgets and spending adjusted where necessary to ensure there are no sudden impacts.
Source	BERL. (October 2023). <i>Cost Adjustor 2023 final update</i> . Taituarā.

Impact of Insurance costs on Council Budgets

Assumption: That insurance costs will increase by 32% in Year 1 of the LTP as advised by Council's insurance provider, and then will then increase annually at the same rate as the Local Government Cost Index ("Legacy LGCI") combined mid-point (BERL, 2023).

Alternative 1	That insurance costs will increase at a significantly higher rate than forecast.
----------------------	---

Impact	Severe Council will face increased costs if insurance price pressures are higher than forecast. Forecast insurance cost increases are already high for Year 1 as the insurance industry recovers from recent shocks including COVID-19, Cyclone Hale and Cyclone Gabrielle. Any additional increase in insurance costs above what is forecast will impact on Council's ability to afford to insure Council's assets and will shorten the timeframe by which Council must explore alternative options, such as reducing the schedule of assets insured or increasing reliance on self-insurance reserves, to reduce insurance costs.
Likelihood	Possible While expert advice provided by Council's insurer indicates that insurance prices will increase at high levels in the short term, Council expects the insurance industry to recover from recent shocks and to resume more sustainable premium increases after Year 1. Any future significant emergency events are likely to result in further "spikes" to insurance premiums. However, the timing of any future spikes in insurance premiums is unknown. Council chose to use the "Legacy LGCI" from Business and Economic Research Ltd (BERL) for consistency with our assumption that the three waters reforms would be repealed by the incoming Government. This information is considered the best available information for predicting price increases for local government goods and services.
Overall Risk	Moderate (12)
Reasons & Financial Effect of Uncertainty	Insurance claims from damages associated with extreme weather are likely to rise as the incidence of these events increases in the future. This is expected to increase the costs of insurance cover. In addition, emergency events elsewhere in New Zealand and across the world may mean that there are periods of time where insurance cover is unavailable, or unavailable for certain types of event.
Mitigating Factors (if applicable)	Council closely monitors actual expenditure against budget. Emerging trends in insurance markets that impact on the cost of insurance to Councils, can be identified at an early stage and budgets and spending adjusted, if necessary, to manage impacts. Council is building a self-insurance reserve that will be used for minor events when this is preferable to making an external insurance claim. Council plans to build the self-insurance reserve over the life of this Long-term Plan to reduce reliance on external insurance providers.
Sources	Aon New Zealand projected premium increases and advice to MWLASS, Oct 2023. BERL. (2023). <i>Cost Adjusters 2023 final update</i>. Taituarā, Oct 2023.

Alternative 2	That insurance costs will increase at a significantly lower rate than forecast.
----------------------	--

Impact	Minor The impact of lower than forecast growth in insurance costs would be positive for Council budgets and may enable the release of funds to support other Council activities. Council is building a self-insurance reserve over the life of this
--------	--

	Long-term Plan. If insurance costs increase at a lower rate than forecast Council will either be better placed financially to deal with unexpected events, or could reduce future budgeted contributions to the self-insurance reserve.
Likelihood	Unlikely Council has assessed the likelihood of lower than anticipated insurance costs over the life of the Long-term Plan as unlikely.
Overall Risk	Low (2)
Reasons & Financial Effect of Uncertainty	Councils may face lower costs if the increase in insurance costs are significantly less than forecast. The most significant impact would be the release of funds to support other Council activities.
Mitigating Factors (if applicable)	Council has applied the latest insurance industry advice and the “Legacy LGCI” inflation forecasts from BERL to forecast the impact of insurance cost inflation over the 10-year period covered by this Long-term Plan. These forecasts are updated each year, and each new Long-term Plan uses the most up-to-date information, ensuring responsiveness to changes in price pressure over the life of the Long-term Plan.

Source BERL. (2023). *Cost Adjusters 2023 final update*. Taituarā, Oct 2023.

Interest Rates

Assumption: That the interest on loans raised will be as projected in the table below. It is assumed that all new loans will be drawn at the end of each financial year, so the rates used for budgeting purposes are those as at June.

Table 2:

Year as at 30 June	Average Cost of funds
2025	5.06%
2026	5.16%
2027	5.56%
2028	5.86%
2029	6.12%
2030	6.22%
2031	6.31%
2032	6.37%
2033	6.55%

2034	6.63%
------	-------

Alternative 1	That interest rates on loans raised will be significantly higher than forecast.
Impact	Minor Significant increases in interest costs may impact on Council's ability to fund infrastructure and community activities in addition to major upgrades and planned asset renewals. Investment rates, however, generally follow interest rates and maintain a consistent difference, reducing the impact on Council budgets of higher than expected interest rates on loans.
Likelihood	Likely The Reserve Bank of New Zealand has indicated that interest rates will remain elevated for some time since inflation is still far from being in the target range of one to three percent (BERL, Oct 2023). There remains considerable uncertainty around the timing and pace of eventual interest rate cuts.
Overall Risk	Guarded (4)
Reasons & Financial Effect of Uncertainty	Interest rates in New Zealand are influenced by the Official Cash Rate (OCR), which is set by the Reserve Bank of New Zealand. Interest rates are also affected by global economic conditions and uncertainty, which can impact trade, financial markets, and confidence. Supply disruptions from COVID-19 have not dissipated completely and the war in Ukraine has added further geopolitical tension.
Mitigating Factors (if applicable)	The Liability Management policy outlines the mitigating strategies that Council has around interest rate risk. The Council is also a member of the LGFA and as such has access to lower interest rates. The term of existing debt is spread out to 2033 using a combination of fixed and floating rates. This enables Council to be less affected by fluctuations in interest rates.
Sources	Reserve Bank of New Zealand, Nov 2022. Accessed on 16 Nov 2023 from: Higher interest rates necessary - Reserve Bank of New Zealand - Te Pūtea Matua (rbnz.govt.nz) BERL. (2023). <i>Cost Adjusters 2023 final update</i>. Taituarā, Oct 2023.

Alternative 2	That interest rates on loans raised will be significantly lower than forecast.
Impact	Minor A significant decline in interest rates may improve the affordability of Council capital expenditure and service delivery. Depending on Council budget decisions, this may either reduce rates increases or enable greater investment in community infrastructure and the delivery of services to the community. Investment rates, however, generally follow interest rates and maintain a

	consistent difference, moderating the impacts on Council of fluctuating interest rates.
Likelihood	Unlikely The Reserve Bank of New Zealand has indicated that interest rates will remain elevated for some time since inflation is still far from being within the target range of one to three percent.
Overall Risk	Low (2)
Reasons & Financial Effect of Uncertainty	Interest rates in New Zealand are influenced by the Official Cash Rate (OCR), which is set by the Reserve Bank of New Zealand. Interest rates are also affected by global economic conditions and uncertainty, which can impact trade, financial markets, and confidence.
Mitigating Factors (if applicable)	The Liability Management policy outlines the mitigating strategies that Council has around interest rate risk. The Council is also a member of the LGFA and as such has access to lower interest rates.
Source	Bancorp, October 2023. Treasury Trends issue 449 – October 2023. Accessed on 14 Nov 2023 from: Treasury-Trends-449-October-2023.pdf (bancorp.co.nz) BERL. (2023). <i>Cost Adjusters 2023 final update</i>. Taituarā, Oct 2023.

Capital Works Costs

Assumption: Capital works costs will not vary significantly from those budgeted.

Alternative 1	That capital works costs will be significantly more than budgeted.
Impact	Major The effect on the community depends on the scale of the variance. Council could face higher than budgeted costs that do not fit within the Financial Strategy limits.
Likelihood	Unlikely Financial budgeting is indicative, and it is common for projects to incur cost overruns or under-budget results. More time is spent on estimating projects in the first three years of the Long-term Plan, with generally less confidence given to projects in years 4-10. Greater certainty of conditions during the initial years of the Long-term Plan reduces the likelihood that actual costs would be significantly more than budgeted.
Overall Risk	Moderate (8)
Reasons & Financial Effect of Uncertainty	Significantly higher costs than anticipated could result in increased debt levels and unbudgeted interest repayments, or deferral of programmes.
Mitigating Factors (if applicable)	The following processes reduce the likelihood of costs being significantly higher than forecast, in addition to mitigating impacts of any budget overruns: 1. Project planning and business case processes to increase the accuracy of planned projects;

2. Projects are re-assessed as part of each Long-term Plan process and costs are updated to reflect the latest costings and technology changes; and,
3. Where needed, levels of service can be revised annually.
4. Council's Delegation Manual sets approval thresholds for contracts. Any variation to a contract that is above the approved contingency amount and pushes the total contract value into the next approval threshold, will trigger the need for approval at the higher level. Any contract with a value of \$500,000 or more must be approved by Council, including any variations to those contracts that are above the approved contingency amount.

Alternative 2	That capital works costs will be significantly less than budgeted.
Impact	Minor Lower than budget capital works costs would have a positive impact on Council budgets.
Likelihood	Unlikely Financial budgeting is indicative, and it is common for projects to incur cost overruns or under-budget results. More time is spent on estimating projects in the first three years of the Long-term Plan, with generally less confidence given to projects in years 4-10. Greater certainty of conditions during the initial years of the Long-term Plan reduces the likelihood that actual costs would be significantly less than budgeted.
Overall Risk	Guarded (2)
Reasons & Financial Effect of Uncertainty	If costs are lower, Council could increase levels of service or reduce rate increases.
Mitigating Factors (if applicable)	Lower than anticipated costs result in a net benefit to Council, as this may either release resources to other projects or provide an opportunity to increase levels of service or reduce rates. The re-assessment of projects through the Annual Plan and Long-term Plan processes enables regular review of actual costs against forecast, enabling decisions to be made regarding reallocation of budgets.

Valuations

Assumption: The value of infrastructure, land and buildings will increase at the same rate as the relevant inflation category as published by Business and Economic Research Ltd (BERL, October 2023). The relevant average annual growth rates for infrastructure (three waters and roading) are included below. Land and buildings are revalued and therefore adjusted every three years. The growth rates below indicate the forecast cumulative increase in the value of Council's land and buildings over the life of the Long-term Plan.

Yr 1 Yr 2 Yr 3 Yr 4 Yr 5 Yr 6 Yr 7 Yr 8 Yr 9 Yr 10

Three waters	2.6	2.1	2.2	2.1	2.0	1.9	1.9	1.9	1.8	1.8
Roading	3.0	2.2	2.4	2.3	2.2	2.1	2.1	2.0	2.0	1.9
Land and buildings	2.7			9.1			15.1			20.7

Alternative 1	That the value of infrastructure, land and buildings will increase at a higher rate than forecast.
Impact	Moderate Increased valuations would require higher than forecast depreciation funding. This would impact on Council's ability to spend in other areas.
Likelihood	Unlikely The process for review of valuations will enable depreciation funding to be adjusted regularly throughout the Long-term Plan process.
Overall Risk	Guarded (4)
Reasons & Financial Effect of Uncertainty	Higher valuations could result in higher depreciation requirements that impact on Council level of services and the ability of Council to deliver planned projects within the forecast funding limits.
Mitigating Factors (if applicable)	Infrastructure assets are revalued annually on 1 July by internal staff members in accordance with the Council's Policy. As accounting standard PBE IPSAS 17 Property, Plant and Equipment no longer requires internal revaluations to be subject to external peer review, the Council has chosen to obtain an independent peer review every third year rather than annually. A peer review will be undertaken for the revaluation as at 1 July 2025 and three yearly thereafter. This process enables regular adjustments to levels of depreciation funding. Council undertakes an annual market movement assessment for all Council's land and buildings. If this assessment shows a material change in valuations this triggers a revaluation earlier than the scheduled three-yearly review. Any revaluation is done externally by a third party.
Source	BERL. (2023). <i>Cost Adjusters 2023 final update</i> . Taituarā, Oct 2023.

Alternative 2	That the value of infrastructure, land and buildings will increase at a lower rate than forecast.
Impact	Moderate Lower valuations will require lower than forecast depreciation funding.
Likelihood	Unlikely Strong asset price inflation in the district and across New Zealand is expected to continue, reducing the likelihood that the value of assets would increase at a lower rate than forecast.
Overall Risk	Guarded (4)

Reasons & Financial Effect of Uncertainty	Council predominantly funds for depreciation. If depreciation costs are lower than anticipated, funding could be released to fund increased levels of service or reduce pressure on rates.
Mitigating Factors (if applicable)	Infrastructure revaluations are performed annually to mitigate any large changes to budget. Council undertakes an annual market movement assessment for all Council's land and buildings. If this assessment shows a material change in valuations this triggers a revaluation earlier than the scheduled three-yearly review. Any revaluation is done externally by a third party.
Source	BERL. (2023). <i>Cost Adjusters 2023 final update</i> . Taituarā, Oct 2023.

Ability to Borrow

Assumption: Council will be able to borrow at the approved borrowings level.

Alternative	That Council is unable to borrow at the required level.
Impact	Severe If Council is unable to borrow, then Council will either have to defer capital works, reduce levels of service, or increase rates or other operating funding (fees and charges, grants) to fund capital works. If capital works are deferred or delayed, this would lead to lower levels of service.
Likelihood	Rare The likelihood is considered rare as Council has access to the LGFA funding market. Local government in New Zealand has no current or forecast issues in accessing debt funding.
Overall Risk	Moderate (8)
Reasons & Financial Effect of Uncertainty	While it is likely Council will be able to secure loans, it cannot be guaranteed.
Mitigating Factors (if applicable)	The Council has access to finance through the New Zealand Local Government Funding Agency (LGFA), a dedicated financing vehicle for local government. The Council also enjoys access to an on-demand loan facility with its transactional banker. Active monitoring of Council's financial position enables Council to react quickly to changes in the ability to borrow.

Sources of Funds for Future Replacement of Significant Assets

Assumption: That the depreciation reserves will adequately fund the renewals of significant assets over the 10-year period and the longer term (to 2054), with the exception of roading, the Makino Aquatic Centre, the Community Hub and Libraries, medium and low-profile community halls, and parks, reserves and sportsgrounds for the reasons outlined in the Financial Strategy.

Alternative	That the depreciation reserves are insufficient to fund the renewals of significant assets over the life of this Long-term Plan, and the longer term.
Impact	Severe There would be a shortfall in funds available to replace assets. This would require Council to either seek third party funding, reduce service levels, increase debt and/or increase rates.
Likelihood	Unlikely The depreciation reserves have been depleted by the level of replacement of assets over the past three years. This recent investment in renewals is expected to reduce the demand on the fund over the early years of the Long-term Plan, however, it is possible that there will be insufficient depreciation reserves available to fund all renewal projects.
Overall Risk	High (16)
Reasons & Financial Effect of Uncertainty	Since 2009 Council has built depreciation reserves to fund the long-term renewals of assets, however many assets were nearing the end of their life at that time so recent renewals have depleted the fund.
Mitigating Factors (if applicable)	Council will be carefully considering the demand on depreciation reserves within the Long-term Plan budget planning process. If required, Council can seek third party funding, or access borrowings to supplement depreciation reserves at levels forecast within the Long-term Plan.

Technological Change – Assumption 1

Assumption: That Council will be able to take advantage of improvements in technology and asset management practices, resulting in continued efficiency gains and longer asset lives.

Alternative	That technology progresses slower than anticipated.
Impact	Minor Advances in digital technology over the past 10 years have enabled more efficient linkages between condition assessments in the field and asset management systems in the Council. If current rates of technological advancement were to slow, Council would continue to manage, maintain, renew and replace assets using current technologies and best practice.
Likelihood	Unlikely Given recent trends in technological advancement it is considered unlikely that there will not be further advancements over the life of the plan (to 2034).
Overall Risk	Low (2)
Reasons & Financial Effect of Uncertainty	Maintenance and renewals programmes are based on current information and best practice and therefore should be able to be completed to budget. Any advances in technology that make projects more or less viable would be considered at the time and taken into account within Council's forecasting of future programmes and budget estimates.
Mitigating Factors (if applicable)	Through their professional memberships and ongoing training, Council officers keep pace with technological advancements that could result in greater efficiencies for Council. It is therefore unlikely that Council will fail to take advantage of new technologies as they become available.

Technological Change – Assumption 2

Assumption: That demands on Council to improve or replace technology to align with national direction on emissions reduction will increase.

Alternative	That the requirement for Council to improve energy efficiency and reduce emissions from operations is staggered
Impact	Minor If requirements to improve or replace technology that improves Council's energy efficiency and reduce emissions are staggered, this will enable Council to plan for these advancements as part of its asset management planning. By staging any necessary upgrades, Council can spread the cost over more years, reducing the financial impact.
Likelihood	Likely The incoming Government has signaled its intention to deliver net zero by 2050. It is considered likely that some of the emissions reduction requirements linked to net zero will be the responsibility of local authorities.
Overall Risk	Guarded (4)

Reasons & Financial Effect of Uncertainty	If Council is mandated to improve energy efficiency and reduce emissions, there will be increased costs to replace infrastructure and equipment, and this will impact rates and our service delivery. However, if the requirements are progressive, Council can have sufficient time to prepare for equipment and infrastructural replacements.
Mitigating Factors (if applicable)	Continued infrastructure asset monitoring will enable prompt identification of inefficiencies and maintenance to ensure operability. Council has adequately invested in its wastewater and stormwater assets which are expected to run efficiently for a long time. Council is utilising the services of a carbon management company to monitor energy consumption and expenses, aiming to enhance energy efficiency and outcomes in its operational activities.

Technological Change – Assumption 3

Assumption: That the cost of technology will increase as we migrate from traditional on-premise business systems to the cloud-based business systems (Software as a Service - SaaS). Council will have to budget for an annual increase of 10%-20% in software-related operational costs.

Alternative	The current budget for software-related operational costs will remain static
Impact	Moderate Council has no direct control over price increases from software providers. Council is therefore allowing a buffer in terms of budget and time commitments to enable change on demand in case we need to switch providers. If prices remain static, this will mean that Council will have overbudgeted for future years.
Likelihood	Unlikely Given the recent trends in SaaS cost increases, it is very unlikely that software-related costs will not continue to increase over the life of the Long-term Plan.
Overall Risk	Guarded (4)
Reasons & Financial Effect of Uncertainty	SaaS products are not owned by the council and migrating from an on-premises system to a cloud-based system surrenders the control over lifecycle management as well as the cost, to the SaaS provider. The provider plans their own roadmaps and the rate of investment into technology advances are out of Council control. The cost of improvements is passed to the customer. Software-related operational costs have been increasing between 10 and 20% per annum in recent years. It is more financially prudent for Council to absorb any future cost increases from the current SaaS provider, as migrating to a different provider can cost significantly more and would require significant resourcing.
Mitigating Factors (if applicable)	Council minimises the annual cost increases through having extended contracts with SaaS providers, e.g. signing 3-year support agreements instead of 1-year support agreements to secure favorable pricing will help control the cost increase. Council plans for continuous business systems improvement (both in terms of time and budgets) and anticipates continuous change that is consistent with previous trends.