Waitaki
DISTRICT COUNCIL
TE KAUNIHERA Ā ROHE O WAITAKI

Growing strong communities.

2021 Policy on

Development Contributions and Financial Contributions

and Detailed Supporting Document

Effective Date:	1 July 2021
Adopted by Council:	xx June 2021
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The overall document is split into four parts with Part 1 being the 2021 Policy on Development Contributions and Financial Contributions included within the Long Term Plan 2021-2031. Parts 2, 3 and 4 and the Appendices make up the Detailed Supporting Document.

- Part 2 provides the details of specific elements of the development contributions calculation model.
- Part 3 provides guidance and direction for assessing development contributions for specific developments.
- Part 4 show the detailed disclosure tables.

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PART 1: THE POLICY

1. INTRODUCTION

1.1 Overview

The Waitaki district continues to experience modest growth in the population (permanent and visitor) and economic activity. This growth is provided for by development and subdivision activity which places an increased demand on council infrastructure and reserves network.

Council believes development and financial contributions are the most appropriate funding tools to fund the additional costs they incur to provide for this growth. This policy seeks to balance fairness, with administrative efficiency, and with legal requirements.

This policy includes provisions for both development and financial contributions.

- Financial contributions - The Financial Contributions rules, policies and objectives under the provisions of Part 14 of the Waitaki District Plan (effective 31 May 2010) are operative. These will be used for open space and recreation (reserves) and services, where appropriate development contributions are not available.
- Development contributions are a funding mechanism available to councils. The purpose of Development Contributions is to enable Council to recover from those persons undertaking development, a fair, equitable, and proportionate portion of the total cost of capital expenditure necessary to service growth over the long term. Council uses development contributions to fund a portion of the water supply, wastewater and roading activities.

1.2 Transition between policies

This Policy on Development Contributions and Financial Contributions replaces the 2018 Policy. These changes will apply to applications for resource consent, building consent, certificate of acceptance or service connection as follows:

- For any application submitted, accompanied by all required information, after 1 July 2012 and before 1 July 2015, Council will apply the 2012 Policy.
- For any application submitted, accompanied by all required information, after 1 July 2015 and before 1 July 2018, Council will apply the 2015 Policy.
- For any application submitted, accompanied by all required information, after 1 July 2018 and before 1 July 2021, Council will apply the 2018 Policy.
- For any application submitted, accompanied by all required information, after 1 July 2021, Council will apply the 2021 Policy.

Where applications are submitted without all required information, Council will apply the policy in force at the time all required information is provided.

1.3 Updating the policy

It is anticipated that this policy will be reviewed, and if necessary amended, at least every three years as part of the LTP process. For the financial years in between LTPs, the contributions may be inflated based on the rate of increase (if any) in the Producers Price Index Outputs for Construction provided by Statistics New Zealand since the contributions were last set. Any increase will only apply to the proportion of the development contribution that does not relate to the interest component.

Before any increase takes effect, Council will make publicly available information setting out the amount of the newly adjusted development contribution and show how any increase was calculated.

1.4 Key changes

This policy is an update of the 2018 Policy. Key changes made to the policy are described below.

- The standard updates have been made to the policy including application of actual capital expenditure over the past three years and inclusion of the latest LTP capital budgets. In most areas these updates have resulted in increases in the development contribution. Most noticeably in water and wastewater due to the higher costs budgeted for treatment upgrades.
- The 50% remission on roading development contributions for residential developments have been removed.
- Apartments have been added to the land use categories for retirement villages to provide simpler administration of the policy.
- Council has reviewed development contributions to incentivise development of residential housing units where there are two or more units of 80m^2 (or less) per unit on a single site, to create more affordable homes.
- Council may seek to recover all reasonable costs incurred in debt recovery proceedings and interest on the outstanding development contributions.
- Council may require a fee for considering a request for reconsideration, and Council will require a deposit prior to responding to an objection to development contributions.

1.5 Future policy work

- There are proposed changes to 3Waters as part of Government Reforms, as well as proposed changes to the RMA. These changes may require an additional review of the Policy prior to 2024.

1.6 Policy guideline

From the reader's point of view, the policy is structured as follows:

Section 2 - Purpose and objectives – why WDC has a development and financial contributions policy. This is the why – why do I have to pay contributions?

Section 3 and 4 - how much will I have to pay for my development, and when will I have to pay it. What other unique considerations will be taken into account?

Section 5 and 6 - what are my options if I wish to proceed outside the provisions of the policy, or if I want to challenge the outcome of an assessment?

Section 7 – An overview of the calculation approach.

Section 8 – Appendix of detailed aspects of the policy mechanisms, calculations and structure.

2. PURPOSE AND OBJECTIVES

2.1 Purpose

Section 197AA of the LGA states that the purpose of development contributions is:

> "…*to enable territorial authorities to recover from those persons undertaking development a fair, equitable, and proportionate portion of the total cost of capital expenditure necessary to service growth over the long term.*"

Council intends to fund the portion of capital costs that are attributable to growth by development and/or financial contributions wherever it is legally, fairly, reasonably and practically possible to do so.

Council considers that development and financial contributions are the best mechanisms available to ensure the cost of growth sits with those who have created the need for that cost. Council considers it inappropriate to burden the community as a whole, by way of rating or other payment means, to meet the cost of providing for new growth.

2.2 Objectives

In developing this policy, the above purpose, and the principles in section 197AB of the LGA have also been taken into account. Accordingly, the objectives of this policy are:

(i) Fairness: ensure that those who create a need for new or additional assets, or assets of increased capacity fund their fair share of the cost. The proportional cost allocation takes into account those who benefit from the assets as well as those who create a need for the greater use of the assets.

(ii) Simplicity: ensure that the policy is easy to understand and administratively simple to apply.

(iii) Certainty and transparency: provide developers with a clear understanding of what will be funded from development contributions, what they will have to pay towards those costs, and when.

(iv) Consistency: ensure that like developments are treated in a like manner.

(v) Contribution to Waitaki's goals: support and facilitate the wider outcomes sought by WDC.

3. APPLICATION OF THE POLICY

3.1 Who is assessed?

Any development that creates additional demand or adverse environmental effects will be assessed for contributions. Any application for a resource consent, building consent, service connection or certificate for acceptance may be assessed.

3.2 What contributions are payable

The contributions payable include:

- Development contributions for network infrastructure - water supply, wastewater and roading.
- Financial contributions for open spaces and recreation, and where applicable other activities.

The Council will not require a development contribution for an asset or activity if it has required a financial contribution in relation to the same development for the same purpose.

3.3 How much is payable?

The development contributions and financial contributions payable within each area are shown in the following table.

The water supply development contributions for rural restricted schemes are shown per cubic meter (m^3 or 1,000L) of water. The actual contribution payable will be based on the quantity of a point for each scheme, typically 1,800L/day. All other development contributions are shown per household equivalent unit (HEU). One new residential lot or new residential dwelling is assessed as one HEU.

Where water and wastewater schemes have been merged, the contributions are standardised across the entire scheme. This includes:

- Oamaru water supply – all properties that connect to the Oamaru supply including Oamaru, Weston, Enfield, Kakanui, Herbert, Waianakarua, Hampden and Moeraki.
- Oamaru wastewater – all properties that connect to the Oamaru scheme including Oamaru, Weston and Kakanui.
- Waihemo water supply - all properties that connect to the Waihemo supply including Palmerston, Dunback and Goodwood.

Table 1: Standard Development and Financial Contributions Required (Ex GST)

Water Supply	Wastewater	Roading	Stormwater	Open Space and Recreation	Other Services/ Miscellaneous
DEVELOPMENT CONTRIBUTIONS **On-demand Zones** **per HEU** Kurow $2,095 Oamaru $5,235 Omarama $9,670 Otematata $7,655 Waihemo $3,430 **Restricted Zones** **per 1m³ of Water** Awamoko $3,780 Duntroon $270 Kauru Hill $5,135 Lake Ohau[2] $30,410 Lower Waitaki $2,570 Oamaru $2,910 Bushy Creek $7,080 Stoneburn $6,930 Tokarahi $3,125 Windsor $4,140 Waihemo $1,905 **FINANCIAL CONTRIBUTIONS** where appropriate. Environmental Effects – Chapter 14 District Plan. Environmental Considerations	**DEVELOPMENT CONTRIBUTIONS** **per HEU** Kurow $360 Oamaru $2,405 Omarama $5,700 Otematata $1,080 Palmerston $2,665 Lake Ohau Nil Moeraki $7,900 **FINANCIAL CONTRIBUTIONS** where appropriate. Environmental Effects – Chapter 14 of the Waitaki District Plan (effective 31 May 2010). Environmental Considerations	**DEVELOPMENT CONTRIBUTIONS** District Wide – all areas $965 per HEU **FINANCIAL CONTRIBUTIONS** where appropriate. Environmental Effects – Chapter 14 of the Waitaki District Plan (effective 31 May 2010). Environmental Considerations	**DEVELOPMENT CONTRIBUTIONS** Not applicable **FINANCIAL CONTRIBUTIONS** where appropriate. Environmental Effects – Chapter 14 of the Waitaki District Plan (effective 31 May 2010. Environmental Considerations	**DEVELOPMENT CONTRIBUTIONS** Not applicable **FINANCIAL CONTRIBUTIONS** District Wide – all areas <u>Subdivision</u>: 1) Residential and Township Zones - 7.5% of land value - Land, money, works or combination of all 2) Business Zones - 10% of land value - Land, money, works or combination of all <u>Developments</u> 1) Residential (In all zones) 7.5% of land value <u>Other Developments</u> 0.5% of value of development exceeding $200,000. [1]	**DEVELOPMENT CONTRIBUTIONS** Not applicable **FINANCIAL CONTRIBUTIONS** District Wide – all areas where appropriate. Environmental Effects – Chapter 14 District Plan. Environmental considerations. o Trade waste collection and disposal system, o Energy supply system, o Telecommunications system, o Works to avoid, remedy or mediate natural hazards, o Landscaping, including planting of vegetation, o Provision of access to land in the subdivision (including roads, cycleways, accessways, service ways, private access, street lighting and associated works). o Esplanade Strips

Oamaru Water supply includes Kakanui, Herbert/Waianakarua, Hampden and Moeraki. Waihemo Water supply includes Palmerston, Dunback, Goodwood.
Oamaru Wastewater includes Weston and Kakanui.

1. Refer to the Waitaki District Plan, and the Resource Management Act (1991) for more detail on the requirement for Financial Contributions.
2. As a 50% remission on Ohau water supply development contributions will be provided for any Ohau properties paying a water half-charge, and as Ohau has a smaller water unit of /600L (instead of /1000L) Ohau's actual Water development contributions will be $30,410 x 0.5 x 0.6 = $9,122.

3.4 Land use differentials

The following table summarises the differentials for each activity. These can be used to calculate the number of HEU's for residential and non-residential developments based on a standard measure of size.

Table 2: Land Use Differentials

Land Use Category	Household Equivalent Units per Measure of Size Shown		
	Water Supply [(i)]	**Wastewater [(ii)]**	**Roading**
Residential	1 HEU / dwelling or lot	1 HEU / dwelling or lot	1 HEU / dwelling or lot
Residential Unit in a multi-unit residential development of two or more units on a single site, of less than 80m^2 per unit:			
1 bedroom unit	0.5 HEU per unit	0.5 HEU per unit	0.5 HEU per unit
2 bedroom unit	0.75 HEU per unit	0.75 HEU per unit	0.75 HEU per unit
3 bedroom unit+	1 HEU per unit	1 HEU per unit	1 HEU per unit
Rural Residential	1 HEU / dwelling or lot	1 HEU / dwelling or lot	1.23 HEU / dwelling or lot
Commercial	0.17 HEU / 100m^2 + 1.17 HEU /property	0.43 HEU / 100m^2 GFA	2.97 HEU / 100m^2 GFA
Industrial	0.14 HEU / 100m^2 + 1.17 HEU /property	0.34 HEU / 100m^2 GFA	1.96 HEU / 100m^2 GFA
Accommodation	0.29 HEU / 100m^2 + 1.30 HEU /property	0.49 HEU / 100m^2 GFA	0.80 HEU / accomm unit
Primary Industry - Dairy	N/A - Assumed to be rural schemes only.		5.90 HEU / 100 Ha [(iii)]
Family flat where GFA is less than 60m^2	0.50 HEU / family flat	0.50 HEU / family flat	0.50 HEU / family flat
Family flat where GFA is equal or greater than 60m^2	1 HEU / family flat	1.0 HEU / family flat	1.0 HEU / family flat
Retirement Villages			
Care bed	0.28 / bed + 1.30 HEU / property	0.30 HEU / bed	0.5 HEU / bed
1 bed villa/house or apartment	0.50 / villa/house + 1.30 HEU / property	0.50 HEU / villa/house	0.34 HEU / villa/house
2 bed+ villa/house or apartment	0.66 / villa/house + 1.30 HEU / property	0.67 HEU / villa/house	0.50 HEU / villa/house
Campgrounds			
Tent sites	0.03 HEU / tent site +1.30 HEU / property	0.06 HEU / tent site	0.34 HEU / tent site
Caravan sites/cabins	0.06 HEU / site/cabin+1.30 HEU/property	0.10 HEU / site/cabin	0.34 HEU / site/cabin

[(i)] These water supply differentials are only used to assess urban unrestricted schemes. Rural restricted water supply schemes are based on a development contribution per cubic meter of water (as shown in Table 1).

[(ii)] These differentials are to be used to assess the demand on wastewater infrastructure for wastewater that does not fall within the definition of trade waste contained in the operative Waitaki District Trade Waste Bylaw applying at the time consent is granted. Development contributions payable for discharge of trade wastes will be the subject of an individual assessment.

(iii). The roading differential for Primary Industry – Dairy has already accounted for the existing pastoral use of a dairy conversion. The above differential also excludes any additional residential dwelling that may be developed as part of the dairy farm development. The dwelling shall be assessed separately as a standard residential dwelling.

(iv) Council recognises that there is a need to support and encourage development of residential housing units where there are two or more units on a single site of less than $80m^2$ per unit, to create more affordable homes. Council believe that using a model based on the number of bedrooms for new residential housing units of less than $80m^2$ may offer an incentive for developers.

Other – residential garages and farm implement sheds will not be assessed for development contributions if they are not being used for commercial purposes.

4. ASSESSMENT PROCESS

Development contributions will be assessed and may be required when an application for one of the following is made:

- Resource consent – subdivision or land use consent,
- Building consent, or when granting a certificate of acceptance under section 98 of the Building Act 2004 if a development contribution would have been required had a building consent been granted for the building work in respect of which the certificate is granted.
- Service connection.
- Certificate of acceptance.

If financial contributions are required as a condition of resource consent, these must be paid before the resource consent is uplifted.

4.1 Timing of assessment

The sequence of development is not always the same. However, Council shall aim to notify applicants of development contributions at the first available opportunity.

4.2 Timing of payment

Payment will be required for all development contributions (water supply, wastewater and roading) as follows. For the purpose of this section, the following definitions apply:

- Residential development includes the following land uses; residential, rural residential, family flat.
- Non-residential development includes the following land uses; accommodation, retirement village, campground, primary industry-dairy, commercial and industrial.

Residential development

- Resource consent (subdivision) at the time of applying for a s224(c) certificate.
- Where the full development contribution has not been paid at resource consent stage, then development contributions will be payable at building consent or service connection.

For subdivision consents the development contributions invoice will be sent at the time the certificate under s224(c) is applied for. For building consents or service connection, the development contribution invoice will be sent when these consents are granted.

Non-Residential development

- Where a building consent will be required for a development, no contribution will be sought at any initial resource consent stage. The full development contribution (water supply, wastewater and roading) will be required at building consent.
- Where a building consent will not be required (e.g. land use consent), then a development contribution will be assessed at resource consent stage.

For subdivision consents the development contributions invoice will be sent at the time the certificate under s224(c) is applied for. For land-use consent, building consents or service connection, the development contribution invoice will be sent when these consents are granted.

This approach is considered more efficient to administer as a single contribution is levied at a single stage. In the case of non-residential development, the information at building consent stage provides more certainty about the nature and size of the development. This provides developers and applicants with greater certainty.

4.3 Enforcement of payment

If payment of development contributions is not received the Council may (under section 208 of the LGA):

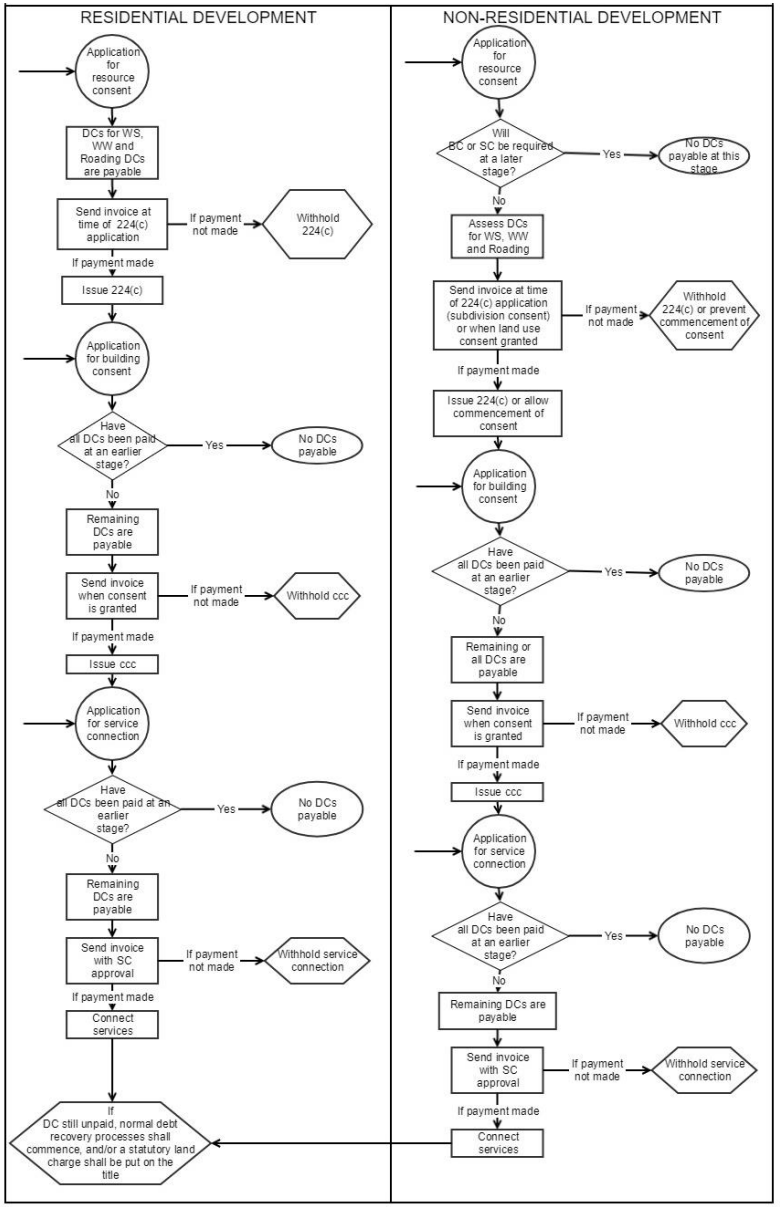
- Withhold s224c Certificate on a subdivision;
- Prevent the commencement of a resource consent for a development;
- Withhold a code of compliance certificate under the Building Act;
- Withhold a service connection to a development;
- register the Development Contribution under Subpart 5 of Part 3 of the Land Transfer Act 2017 as a charge on the title of the land for which the development contribution was required.

In addition to the above enforcement mechanisms, where invoices remain unpaid under Council's payment terms by the 20th day of the month following issue of invoice, or in the case of a deferred payment, are not paid by the specific date, normal debt collection practices to recover outstanding debts may be invoked.

Council may seek to recover all reasonable costs incurred in recovery proceedings and interest on the outstanding development contributions at the Council's base borrowing rate plus 5% per annum. All interest covered in respect of overdue development contributions will be paid to the relevant development contributions account.

A flow chart of the development contributions assessment, invoicing and payment process is shown in Figure 1.

Figure 1 : DCs – assessment, invoicing and payment process



4.4 Remissions

Council will provide the following remissions:

- A 50% remission on Ohau water supply development contributions will be provided for any Ohau properties paying a water half-charge.
- A 50% remission on Moeraki wastewater development contributions will be provided for any Moeraki properties paying a wastewater half-charge.

Council will also consider requests for remissions on a case-by-case basis where it is satisfied that such a remission will promote the economic, environmental, social or cultural wellbeing of the district. These remissions may be on the basis of activity, land use or location.

4.5 Refund policy

Where Council required and received a development/financial contribution for a development and where the documentation (resource consent, building consent, certificate of acceptance or connection authorisation) permitting that subdivision or development has lapsed, Council will refund the contribution. This does not prevent Council from requiring development/financial contributions in the future. Council may retain a portion of the contribution of a value equivalent to the costs incurred by the Council in processing/assessing the contribution required by the subdivision or development.

All applications for Refunds must be made in writing to the Chief Executive Officer of the Council.

4.6 Unusual developments

Council reserves the right to individually assess contributions on any development or activity that it deems to create a significantly different demand on infrastructure than could usually be expected under their relevant land use category (an unusual development).

Wherever the total of development contributions assessed for a development is likely to generate an appeal or objection, the Chief Executive Officer or a nominee of, will proactively seek a special assessment of those contributions in order to enable the prompt resolution of any request for reconsideration or objection.

4.7 Deferral of Payment

Council will consider requests for deferral of contribution payments on a case-by-case basis.

When considering deferred payment arrangements, Council will have regard to tools including, but not limited to, bank guaranteed bonds, bonds as first charge, statutory land charges, and the use of the normal debtor recoveries systems. A targeted rate for payment of development contributions may be considered.

When considering deferred payment arrangements, Council will also have regard to matters including, but not limited to, application of interest on deferred revenue, cost recovery via administrative charges, and maximum periods of deferral. Council reserves the discretion to waive or reduce charges and/or extend a deferral period where it is satisfied that the exercise of such discretion promotes the economic, environmental, social or cultural wellbeing of the district.

Council may enter into a preferential mortgage arrangement by agreement with the developer to enable payment of development contributions for multi-lot subdivisions to be made as each section sells.

4.8 Credits

There are two types of credits anticipated:

1. Actual credits will apply to those subdivisions or developments where contributions have been paid under this, or a previous policy.
2. Existing activities will be given credit based on the HEU's assessed in terms of the relevant unit (i.e. GFA, dwelling, accommodation units) prior to redevelopment. A development contribution will only be levied if the redevelopment creates additional demand.

Where the Chief Executive Officer or a nominee of the Chief Executive Officer considers there is a special case to be considered for granting of a credit, this matter will be referred to Council's Development Contributions Committee for decision.

Credits for relocation of activities or dwellings

Where a business activity or dwelling relocates from one site in the district to another site in the district, credits are not transferable to the new site. Any credit will remain with the original site until such time as service connections are removed.

4.9 Delegations

Council will determine where a development or financial contribution will be sought in accordance with this policy. Council has the authority to set the quantum of those contributions. If Council so wishes, it may delegate this authority, wholly or in part to a Development Contributions Committee, by resolution of Council. The Chief Executive Officer will ensure the policy is implemented.

The Development Contributions Committee may consider a request for remission or deferral of payment on the grounds of hardship under their delegated authority.

5. RECONSIDERATIONS AND OBJECTIONS

5.1 Reconsideration

An applicant may request Council to reconsider the requirement for development contributions under s199A of the Local Government Act 2002, if the applicant has grounds to believe that:

- the development contribution was incorrectly calculated or assessed under the Council's Development Contributions Policy; or
- Council incorrectly applied its Development Contributions Policy; or
- the information used to assess the person's development against the Development Contributions Policy, or the way Council has recorded or used it when requiring a development contribution, was incomplete or contained errors.

A Reconsideration Request form may be found on the Council's website www.waitaki.govt.nz, or from Council offices at 20 Thames St, Oamaru.

If a reconsideration is applied for in relation to grounds a) or b), no fee will be charged. In the case of the third ground, if any error in recording of information, or the manner in which it has been used is proven to be the fault of Council, no fee will be charged. If the information used to assess the person's development against the Development Contribution Policy is incomplete or contains errors and these errors or omissions are attributable to the applicant, a fee of $255+GST will be charged. A request for reconsideration will be considered when any applicable fee has been paid.

How a Reconsideration is lodged

The request for reconsideration must be made:

a) within ten working days after the date on which the person lodging the request receives notice from Council of the level of development contribution that Council requires.; and
b) by completing the form and sending it together with any relevant supporting information by email to: service@waitaki.govt.nz, or by posting it to: Chief Executive, C/- Waitaki District Council, Private Bag 50058, Oamaru.

Steps in the Reconsideration Process

The steps that Council will apply when reconsidering the requirement to make a development contribution are:

- The appropriate Council officer shall review the reconsideration request.
- If the Reconsideration Request meets one or more grounds for reconsideration, Council will reconsider its development contributions assessment.
- The Council officer may request further relevant information from the applicant.
- The Council officer will make a recommendation in a report for consideration by the delegated authority.
- Council will, within 15 working days after the date on which it receives all required relevant information relating to a request, give written notice of the outcome of its reconsideration to the person who made the request.

A reconsideration cannot be requested if the applicant has already lodged an objection.

5.2 Objection

If the applicant is not satisfied with the outcome of the reconsideration, they may lodge an objection as specified in the Local Government Act 2002, s199C to s199N. The right to object does not apply to challenges to the content of the policy, and can only be made on the ground that Council has:

(a) failed to properly take into account features of the objector's development that, on their own or cumulatively with those of other developments, would substantially reduce the impact of the development on requirements for community facilities; or

(b) required a development contribution for community facilities not required by, or related to, the objector's development, whether on its own or cumulatively with other developments; or

(c) required a development contribution in breach of section 200; or

(d) incorrectly applied its development contributions policy to the objector's development.

An Objection Form may be found on the Council's website www.waitaki.govt.nz, or from the Council offices at 20 Thames Street, Oamaru.

How an Objection is Lodged

a) Any objection must be lodged with the Council within 15 working days of receiving notice to pay a development contribution, or, in the case where a request for reconsideration has been considered, within 15 working days of receiving the outcome of any request for reconsideration; and
b) By completing the objection form and sending it with any relevant supporting information by email to: service@waitaki.govt.nz, or by posting it to: Chief Executive, C/- Waitaki District Council, Private Bag 50058, Oamaru. Objectors must pay a deposit of $2,750+GST and are liable for costs incurred in the objection process.

Objectors must pay a deposit of $2,750+GST prior to the commissioners being selected, and objectors are liable for costs incurred in the objection process.

Steps in the Objection Process

Once the objection is lodged and grounds for objection are met, Council is then responsible for administering the objections process and selecting and supporting the development contributions commissioners.

Council may appoint up to three development contributions commissioners to hear the objection. Objectors are liable for the following costs that may be incurred in the objection process:

(a) selection, engagement, and employment of the development contributions commissioners; and

(b) secretarial and administrative support of the objection process; and

(c) preparing for, organising, and holding the hearing.

When considering a development contribution objection and any evidence provided in relation to that objection, development contributions commissioners must give due consideration to the following:

(a) the grounds on which the development contribution objection was made:

(b) the purpose and principles of development contributions under sections 197AA and 197AB:

(c) the provisions of the development contributions policy under which the development contribution that is the subject of the objection was, or is, required:

(d) the cumulative effects of the objector's development in combination with the other developments in a district or parts of a district, on the requirement to provide the community facilities that the development contribution is to be used for or toward:

(e) any other relevant factor associated with the relationship between the objector's development and the development contribution to which the objection relates.

6. DEVELOPMENT AGREEMENTS

Sections 207A to 207F of the Local Government Act 2002 provides for the Council and a developer to enter into specific arrangements for the provision of particular infrastructure to meet the special needs of a development.

A development agreement may be entered into after being requested in writing by either the developer, or the Council. Regardless of which party requests the Agreement, the request may be accepted in whole or in part, subject to any amendments agreed by the Council and the developer, or may be declined by the Council. Council will provide the developer who made the request with a written notice of its decision and the reasons for its decision.

A development agreement is a legally enforceable contract, and comes into force when all parties that will be bound by the agreement have signed it.

A development agreement does not oblige Council to grant a resource consent, building consent, service authorisation, or to issue certification. Council may not refuse to grant or issue a consent, certificate, or authorisation on the basis that a development agreement has not been entered into.

7. CALCULATION METHODOLOGY

A brief introduction to the development contributions calculation method is presented. A full disclosure of the methodology and calculations is in the detailed supporting document and is available from Council for public inspection at:

- Waitaki District Council, 20 Thames Street, Oamaru.
- Palmerston Service Centre, 54 Tiverton Street, Oamaru.
- Website - www.waitaki.govt.nz

7.1 Overview of calculation methodology

The key concept of the approach is to define the total growth related capital expenditure (CAPEX) consumed by the growth population over a period of time. The consumption of the growth costs is then apportioned among the increased number of household equivalent units over the same time period. This defines the long run average cost of growth per a common unit of demand, defined as the standard contribution ($/HEU).

The development contributions are based on the long-term average cost of growth across each contributing area and reflect the average cost of infrastructure required to service new development for each activity. This includes those growth-related projects planned for in the 2021-2031 LTP and also those growth-related projects that have already been completed.

The calculation method uses the capacity life of each asset to fairly apportion the growth costs across the capacity life of the asset created. This ensures that all developments that benefit from the growth-related capital expenditure contribute an equitable portion. This also ensures that the rate at which the capacity is consumed is considered in the calculation so that early and late developers do not pay an unfairly high proportion of the growth costs. This also means that not all growth costs incurred in the LTP period will be funded over that period.

This can be represented by the following formula.

$$\text{Standard Development Contribution} = \frac{\text{Sum of growth costs consumed in analysis period}}{\text{Sum of new HEUs in analysis period}}$$

The calculation method uses the 10 year LTP timeframe as the analysis period and can be summarised by the following steps:

Step 1: Assess capital expenditure for growth on an asset by asset basis using financial reports (past expenditure) and projected expenditure LTP budgets.

Step 2: Apportion capital expenditure for growth by the growth population (HEU) over the design life of the asset.

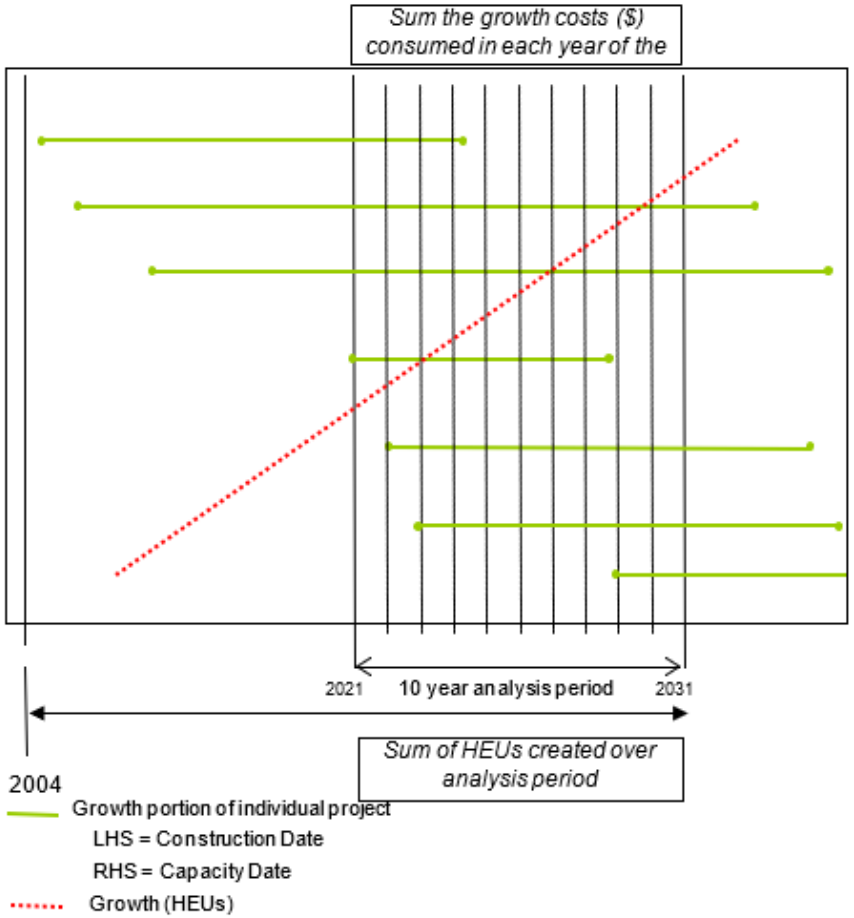
Step 3: For each year in the analysis period determine the total consumption of asset capacity for each asset identified, namely – $/HEU x the number of new HEUs.

Step 4: Sum for all assets in each year in the analysis period, namely total capacity consumed in that year, measured in dollars ($).

Step 5: Sum each year in the ten year analysis period divided by the growth in population (new household equivalent units) projected over the analysis period to determine the standard contribution ($/HEU).

This assessment method is also summarised in the following diagram.

Figure 2 : Long run average cost of growth



7.2 Growth costs

Capital expenditure may be attributable to one or more factors: growth, changes to levels of service, statutory requirements, or asset renewal. Under this policy all projects have been assessed to calculate a fair, equitable and proportionate portion of council's infrastructure costs that can be attributed to growth. The growth costs reflect the cost that council has or will incur because of growth. The growth-related costs are solely those required to meet the additional demand created by the effects (including cumulative effects) of all development.

This includes capacity in all up and downstream areas of the network, and not just the capacity in the locality of a given development. For example, the growth costs include the capacity in the headwork's assets such as treatment plants and storage assets.

Projects that were/are completed solely to address the demands of, and the benefits to development, are considered to be 100% growth. Projects that were/are solely to replace existing assets or change levels of service are considered to be 0% growth. Projects that benefit both the existing community and the future community are apportioned using the following formula:

$$Growth\ \% = (Demand\ at\ capacity - Demand\ at\ construction) / Demand\ at\ capacity$$

This approach can be used on projects where growth is not the main driver. For example, an upgrade to a wastewater treatment plant may be a combination of both level of service change for the existing community and provision of capacity for the future community.

7.3 Significant assumptions

Financial Considerations

The following are key financial considerations applied in the model:

- All figures are in current New Zealand dollars – effective 1 July 2021.
- Inflation is applied to past capital projects only.
- Interest costs are included in development contributions. These have been assessed based on the weighted average cost of capital (WACC) over the first 10 year period from 1 July 2021. The cumulative net deficit between the contributions anticipated to be collected and the growth costs over the 10 year period are used to determine the proportion of the growth cost that will be funded by debt. An average interest rate of 3.2% has been applied.

Growth Projections

Council's latest growth projections forecast that the district is projected to increase by around 1,700 people over the next 10 years, with an increase in residential dwellings of around 900 dwellings over the same period. A portion of this increase in residential dwellings is due to the trend for smaller household sizes. Continued growth in business related, accommodation and dairy farm properties is also forecast.

7.4 Risks

The risks relating to the policy are listed below. The steps required to mitigate these risks are also shown. This ensures that the correct contributions are collected by Council.

Subsidies: The future portion of the development contributions are based on Council's 10 year Long Term Plan capital budget. There are a number of projects in the budget that may be fully or partial subsidised by non-council entities. e.g. NZTA. Any change to budgeted third party funding may affect the development contributions in the future.

Legislative Improvements: The policy and calculation model needs to be updated to incorporate any legislation changes.

Growth lower or higher than anticipated: If the growth in the district is more or less than projected, Council risk under or over collecting contributions. The growth projections need to be reviewed regularly to ensure they are as accurate as possible.

Growth Apportionment: Any changes in the growth rates may affect the apportionment of some capital projects and hence the growth costs to be recovered via contributions.

Inflation: If actual inflation is significantly different to the figures used in the calculation model.

The above variables can be reviewed every year via the annual plan update process or via the three yearly Long Term Plan review process. This ensures that the contributions are based on the most up to date information possible.

8. APPENDIX

8.1 Definitions

Accommodation units - defined in the LGA as: *"…units, apartments, rooms in 1 or more buildings, or cabins or sites in camping grounds and holiday parks, for the purpose of providing overnight, temporary, or rental accommodation."*

Activity Management Plans (AMP) - A plan for the management of one or more asset types that combines multidisciplinary management techniques (including technical and financial) over the lifecycle of the asset in the most cost-effective manner to provide a specified level of service.

Applicant - The person(s) applying for a resource consent, building consent, certificate of acceptance or service connection.

Capital Expenditure - Expenditure used to create new assets or to increase the capacity of existing assets beyond their original design capacity or service potential.

Community facilities – is defined in the LGA as

> *Reserves, network infrastructure, or community infrastructure for which development contributions may be required*.

Community infrastructure - Defined in the LGA as the following assets when *owned, operated, or controlled by a territorial authority:*

(a) community centres or halls for the use of a local community or neighbourhood, and the land on which they are or will be situated:

(b) play equipment that is located on a neighbourhood reserve:

(c) toilets for use by the public.

Contributing Area - A defined geographic area where development contributions are to be calculated by the method described and delivering a standard development contribution in terms of $/Household Equivalent Unit. Contributing areas take an integrated approach to the effects of land subdivision/development and associated physical resources and assesses the overall requirements of an identified geographic area. Contributing areas enable standard development contributions to be determined efficiently and equitably.

Development - Defined in the LGA as:

(a) any subdivision, building (as defined in section 8 of the Building Act 2004), land use, or work that generates a demand for reserves, network infrastructure, or community infrastructure; but

(b) does not include the pipes or lines of a network utility operator.

Development Contributions - Defined in the LGA as *a contribution that is:*

a) provided for in a Development Contributions Policy included in the Council's Long Term Plan; and

b) calculated in accordance with the methodology; and

c) comprising (i) money; or (ii) land, including a reserve or esplanade reserve other than in relation to a subdivision consent, but excluding Maori land within the meaning of Te Ture Whenua Maori Act 1993, unless that Act provides otherwise; or (iii) both.

District - The district of a territorial authority, in this case, the Waitaki district.

Effective Date - Date at which the development contributions are assessed.

Financial Contribution - Defined by Section 108 of the Resource Management Act 1991 and collected using the provisions of the District Plan. Financial Contributions are assessed based on the environmental effects of growth.

Gross Floor Area (GFA) - The sum of the gross area of all floors and all buildings on a site, measured from the exterior faces of the exterior walls, or from the centre lines of walls separating two buildings. For the purpose of this policy this definition of GFA, excluding car parking areas, will be used.

Household Equivalent Unit (HEU) – This is the demand created by a typical residential dwelling for each activity. This common unit of demand enables non-residential activities to be converted into household equivalent units using land use differentials.

In simple terms one HEU equates to:

- Water supply 1,800 L per day, with suitable fire fighting
- Wastewater 1,200 L per day
- Roading 6 vehicle trips per day, with 1% being heavy vehicle movements

Land Use Categories - The land use activities are defined below.

Residential – means the use of land and buildings by people for the purpose of permanent living accommodation, including all associated accessory buildings, recreational activities and the keeping of domestic livestock. For the purposes of this definition, residential activity shall include emergency and refuge accommodation but excludes visitor accommodation and the non-commercial use of holiday homes.

Rural Residential - The Rural Residential Zone covers areas adjoining the towns of Oamaru, Weston, Otematata, Omarama and Kurow. The zone provides for very low density residential opportunities in association with these towns as an alternative to the suburban living areas typical of the District. The zones are concentrated in close proximity to the towns in order to encourage energy conservation and to enable convenient access to the employment, services and facilities in those towns. The purpose of the zone is to maintain very low density residential areas with ample open space, tree and garden plantings and with minimal adverse environmental effects experienced by residents. However, farming is likely to remain a widespread use of land in the zone and an integral part of the rural residential environment.

Accommodation – means the use of land and/or buildings for short-term, fee paying, living accommodation where the length of stay for any one visitor is not greater than 3 months at any one time, provided that this definition does not exclude the letting of individually-owned residential units. Visitor accommodation may include some centralised services or facilities, such as food preparation, dining and sanitary facilities, conference, bar and recreation facilities. Visitor accommodation includes such accommodation as hotels, motels, boarding houses, guesthouses, backpackers accommodation, bunkhouses, tourist houses and lodges.

Family Flat - A family flat or 'granny flat' means self-contained living accommodation, whether contained within a residential unit or located separately to a residential unit on the same site, which is occupied by a family member who is dependent in some way on the household living in the residence.

Self-contained means a residential unit which has cooking, toilet, and bathroom facilities.

Cooking facilities means a room or part thereof where and the equipment by which meals may be prepared.

Retirement village - means a commercial entity that provides a range of long-term accommodation options for elderly residents. This may include smaller residential dwellings or villas, apartments and aged care beds.

Campground - means any over-night accommodation facility that provides for tents, caravans, campervans and/or cabins.

Primary Industry – means any activity within the Rural general or Rural Scenic Zone as per the district plan that involves Arable Farming, Forestry, market Gardens/Orchards, Mineral Extraction, Specialist Livestock, Stock Fattening, Store Sheep or a multiple use of any of the above.

Primary Industry Diary – means any activity within the Rural General or Rural Scenic Zone that involves Dairying, Grazing of Dairy Livestock, Milking Sheds for Town or Factory Supply or a multiple use of any of the above.

Commercial - means the use of land and buildings for the display, offering, provision, sale or hire of goods, equipment, or services, and includes shops, markets, showrooms, restaurants, takeaway food bars, professional, commercial and administrative offices, postal services, service stations, motor vehicle sales, the sale of liquor and associated parking areas; but excludes recreational, community and service activities, home occupations or visitor accommodation.

Industrial - means the use of land and buildings for the primary purpose of manufacturing, fabricating, processing, packing, or associated storage of goods.

Land Use Differentials - Factors which are used to convert non-residential developments into household equivalent units. Impact on, benefit from and demand created by different land uses can be converted into and described as household equivalent units.

LGA - The Local Government Act 2002 and amendments.

Network Infrastructure - Defined in the LGA as:

> *The provision of roads and other transport, water supply, wastewater, and stormwater collection and management.*

RMA - The Resource Management Act 1991.

Service Connection - A physical connection to a service provided by, or on behalf of, Waitaki District Council.

Standard Contribution - The amount of a development contribution payable for the addition of one household equivalent unit ($/HEU).

Trip rate - the number of daily vehicle movements to or from a property. The trips are broken down into light (car) and heavy (>3.5Tonne) vehicle movements.

8.2 Consideration of activity funding

Section 101(3) of the LGA 2002 requires that the following be considered:

The funding needs of the local authority must be met from those sources that the local authority determines to be appropriate, following consideration of:

a) in relation to each activity to be funded,-

(i) the community outcomes to which the activity primarily contributes; and

(ii) the distribution of benefits between the community as a whole, any identifiable part of the community, and individuals; and

(iii) the period in or over which those benefits are expected to occur; and

(iv) the extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity; and

(v) the costs and benefits, including consequences for transparency and accountability, of funding the activity distinctly from other activities; and

b) the overall impact of any allocation of liability for revenue needs on the community.

Responses to these requirements in relation to the Development Contributions and Financial Contributions Policy are:

Community outcomes

This policy contributes to the following outcomes:

- Our infrastructure enables and responds to economic growth.
- We have affordable, reliable and accessible transport services that meet the needs of the community.
- Our local and central governments demonstrate efficient and effective use of resources.

Distribution of benefits

Council apportions all capital expenditure into the classifications of growth, renewal, level of service and statutory obligations, by the geographic areas of benefit. This apportionment represents the distribution of benefit to the community as a whole, to identifiable parts of the community and to individuals.

Period over which the benefits are expected to occur

Once a Development or Financial contribution has been paid in relation to a subdivision or development, the benefits of the asset, service, or environmental enhancement shall occur indefinitely (at a set level of service for that asset, service, or environmental enhancement as defined at any one time).

Action or inaction that contributes to the need for this activity

The provision of assets, services, or environmental standards that promote the community outcomes may not be willingly provided by the development community. In addition Council is often the only viable supplier (often legally required to provide services) of these services and therefore Council has a moral and legal obligation to supply additional assets and services to meet the new community needs.

Costs and benefits of funding this activity (Development and Financial Contributions)

The benefits to the existing community are significantly greater than the cost of policymaking, calculations, collection, accounting and distribution of funding for development and financial contributions.

Allocation of liability for revenue needs

The liability for revenue falls directly with the development community. At the effective date of this policy, Council does not perceive any impact on the social, economic, environmental and cultural well-being of this particular sector of the community. At any stage in the future where there may be impacts of this nature, Council may revisit this policy.

8.3 Disclosure tables

The following tables show a summary of each contributing area. The tables demonstrate the nature and level of expected capital expenditure required by Council and the portion that is attributable to growth. The tables included in the following section are summarised. The full tables can be found in the appendices of the detailed supporting document.

Water Supply

Table 3: Restricted Supplies - Water Supply Capital Expenditure for Development Contributions (Excluding GST)

Water Supply Contributing Area	Historical (2021/22 $)		2021 - 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of Cubic Meters of Water Apportioning Growth Cost 2021-2031	Development Contribution Per Cubic Meter of Water ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
Awamoko	274,048	46,567	2,170,000	615,000	1,555,000	175,637	46	3,779
Duntroon	172,800	49,596	70,000	0	70,000	24,454	90	271
Kauru	283,749	56,457	2,120,000	615,000	1,505,000	177,561	35	5,134
Lower Waitaki	1,265,968	147,164	1,070,000	1,000,000	70,000	243,407	95	2,571
Ohau	44,295	25,401	1,570,000	450,000	1,120,000	226,443	7	30,408
Bushy Creek	26,565	4,308	1,570,000	450,000	1,120,000	98,794	14	7,078
Stoneburn	227,725	45,051	2,120,000	615,000	1,505,000	182,219	26	6,928
Tokarahi	885,737	231,746	3,215,000	915,000	2,300,000	342,641	110	3,125
Windsor	66,444	5,567	2,120,000	615,000	1,505,000	187,207	45	4,138
TOTAL	**3,247,331**	**611,857**	**16,025,000**	**5,275,000**	**10,750,000**	**1,658,364**	**468**	

Table 4: Mixed Supplies - Water Supply Capital Expenditure for Development Contributions (Excluding GST)

Water Supply Contributing Area	Historical (2021/22 $)		2021 - 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of HEUs Apportioning Growth Cost 2021-2031	Development Contribution Per Household Equivalent Unit ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
Kurow	1,109,123	155,242	120,000	0	120,000	59,121	28	2,094
Omarama	1,325,057	364,997	2,570,000	750,000	1,820,000	302,384	31	9,671
Otematata	2,384,373	592,450	5,570,000	1,200,000	4,370,000	324,066	42	7,655
TOTAL	**4,818,553**	**1,112,689**	**8,260,000**	**1,950,000**	**6,310,000**	**685,571**	**102**	

Table 5: Mixed Supplies - Water Supply Capital Expenditure for Development Contributions (Excluding GST)

Water Supply Contributing Area	Historical (2021/22 $)		2021 - 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of HEUs Apportioning Growth Cost 2021-2031	Development Contribution Per Household Equivalent Unit/Point ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
Oamaru	57,902,478	10,188,196	49,875,000	4,300,000	45,575,000	3,714,779	709	5,236
Waihemo	3,978,758	898,463	8,920,000	0	8,920,000	219,557	64	3,430
TOTAL	**61,881,237**	**11,086,659**	**58,795,000**	**4,300,000**	**54,495,000**	**3,934,336**	**773**	
DISTRICT TOTAL	**69,947,121**	**12,811,205**	**83,080,000**	**11,525,000**	**71,555,000**	**6,278,272**		

Wastewater

Table 6: Wastewater Capital Expenditure for Development Contributions (Excluding GST)

Wastewater Contributing Area	Historical (2021/22 $s)		2021 - 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No of HEUs Apportioning Growth Cost 2021-2031	Development Contribution Per Household Equivalent ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
Oamaru	18,372,054	796,085	16,800,000	1,900,000	14,900,000	785,617	327	2,406
Kurow	133,201	20,333	635,000	0	635,000	8,602	24	360
Moeraki	4,485,889	1,038,296	570,000	0	570,000	141,857	18	7,902
Omarama	1,467,557	225,470	285,000	0	285,000	96,160	17	5,702
Otematata	927,188	172,753	35,000	0	35,000	21,790	20	1,079
Palmerston	1,754,566	200,550	1,670,000	0	1,670,000	61,233	23	2,667
DISTRICT TOTAL	**27,143,836**	**2,455,346**	**20,030,000**	**1,900,000**	**18,130,000**	**1,115,260**	**443**	

Roading

Table 7: Roading - Capital Expenditure for Development Contributions (Excluding GST)

Roading Contributing Area	Historical (2021/22 $s)		2021 - 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No of HEUs Apportioning Growth Cost 2021-2031	Development Contribution Per Household Equivalent ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
District Wide	65,757,434	2,839,794	43,055,992	2,416,814	40,639,179	1,396,910	1,451	963

8.4 Schedule of assets

Table 8 : Water Supply – Schedule of Assets

Contributing Area	Project Name	Capital Expenditure (nominal $s)	Proportion of Capital Cost proposed to be recovered through DCs	Proportion of Capital Cost proposed to be recovered through other sources
Waihemo	District Hydraulic Analysis	4,256	100%	0%
	Waitaki Coastal Township Water Scheme	766	100%	0%
	Dunback Drinking Standard Compliance	10,671	40%	60%
	Goodwood Drinking Standard Compliance	43,288	30%	70%
	Waihemo Drinking Standard Compliance	1,806,322	25%	75%
	Waihemo Drinking Standard Upgrade	17,241	25%	75%
	Water Asset Capital Works	12,000	25%	75%
	Waitaki Coastal Headworks Zone	1,092	14%	86%
	Palmerston Chlorinator	10,798	14%	86%
	Palmerston Consent	13,943	13%	87%
	Palmerston Main	98,767	12%	88%
	Palmerston Telemetry	27,422	1%	99%
	Palmerston Turbidity Meter	5,415	15%	85%
	Treatment Plant Upgrade	130,396	21%	79%
	Dunback Main	2,842	20%	80%
	Dunback Pump	4,679	20%	80%
	Dunback Consent	5,472	21%	79%
	Goodwood Main	23,234	13%	87%
	Goodwood Consent	5,472	12%	88%
	Goodwood Main Renewal	46,534	27%	73%
	Waihemo Main	834,867	25%	75%
	Waihemo Drinking Standard Upgrade Blue Mountain Tanks	42,213	25%	75%
Waihemo Total		**3,147,691**	**24%**	**76%**
Oamaru	Pipeline Renewals	225,310	30%	70%
	Hampden/Moeraki Drinking Standard Compliance	51,476	34%	66%
	Hampden/Moeraki Treated Reticulation	10,087	30%	70%
	Hampden Water New Capital	24,371	30%	70%
	Kakanui Drinking Standard Compliance	1,104,195	30%	70%
	Kakanui Treated Reticulation	126,154	30%	70%
	Oamaru Tunnel Pipe	244,795	15%	85%
	Oamaru Main	777,634	20%	80%
	Oamaru (Enfield-Weston) Drinking Standard Compliance	568,246	13%	87%
	Oamaru Pump Stations	27,248	17%	83%
	Oamaru Treatment Plant	13,276,525	26%	74%
	Oamaru Intake	111,464	16%	84%
	Oamaru Water Supply Planned Capacity Improvements	668,825	100%	0%
	Herbert Water New Capital	8,269	30%	70%
	South Hill Microzone Pump Station	122,857	30%	70%
	Oamaru Water and Wastewater Capacity Study Stage 2	203,400	100%	0%
	Oamaru Urban Water Main Renewals/Upgrades	9,048,359	20%	80%
	Oamaru Rural Water Main Renewals/Upgrades	2,262,090	20%	80%

Contributing Area	Project Name	Capital Expenditure (nominal $s)	Proportion of Capital Cost proposed to be recovered through DCs	Proportion of Capital Cost proposed to be recovered through other sources
	Oamaru Water Additional Storage	3,239,986	70%	30%
	Waitaki Coastal Headworks Zone	10,846	14%	86%
	Moeraki Chlorination	6,874	47%	53%
	Kakanui Main	59,876	34%	66%
	Oamaru Chlorine System	114,733	13%	87%
	Oamaru Other	45,821	15%	85%
	Oamaru Reservoir Bypass Line	22,000	11%	89%
	Oamaru Submersible Pump	45,368	11%	89%
	Weston Pump	9,370	26%	74%
	Weston Telemetry	11,664	26%	74%
	Weston Upgrade	193,403	26%	74%
	Enfield Renewal	25,967	24%	76%
	Treatment Plant Upgrade	930,636	26%	74%
	Hampden/Moeraki Water Main	5,389	27%	73%
	Herbert/Waianakarua Chlorine Dosing Pump Spare	1,006	29%	71%
	Herbert/Waianakarua Renewals	156,858	11%	89%
	Herbert/Waianakarua Drinking Standard Compliance	68,058	20%	80%
	Herbert/Waianakarua Treated Reticulation	20,130	22%	78%
	Herbert/Waianakarua Reservoirs	3,031	20%	80%
	Herbert Treatment Drinking Water Standards Upgrade	55,370	30%	70%
	Kakanui Pumps	12,014	24%	76%
	Avon St Pumping Station	223,263	18%	82%
	Oamaru Water Main	175,165	15%	85%
	Oamaru Renew Main	94,560	16%	84%
	Oamaru Treatment Plant Upgrade	65,260	14%	86%
	Oamaru Water Treated Reticulation New	462,126	30%	70%
	Oamaru Treatment Plant New	9,732	100%	0%
	Oamaru Drinking Water Standards Pipeline to Hampden/Herbert New	7,554,748	30%	70%
	Oamaru Treatment Plant Extra Reservoir	209	100%	0%
	Water Asset Capital Works Reticulation	75,000	20%	80%
	Water Asset Capital Works Supply	133,929	20%	80%
	Weston Main	118,656	27%	73%
	Weston Renewal	33,143	26%	74%
	Enfield Main	26,507	21%	79%
	Oamaru to Weston/Enfield Pipe	270,777	30%	70%
Oamaru Total		**43,142,778**	**30%**	**70%**
Awamoko	Pipeline Renewals	17,032	30%	70%
	Awamoko Drinking Standard Compliance	1,711	25%	75%
	Awamoko Treated Reticulation	5,812	30%	70%
	Awamoko Water New Capital	6,342	25%	75%
	Awamoko Renewals	37,528	18%	82%
	Awamoko Warning System	2,182	18%	82%
	Waitaki Coastal Headworks Zone	342	19%	81%
	Awamoko Replace Sand	4,282	27%	73%

Contributing Area	Project Name	Capital Expenditure (nominal $s)	Proportion of Capital Cost proposed to be recovered through DCs	Proportion of Capital Cost proposed to be recovered through other sources
	Awamoko Value	245	18%	82%
	Awamoko Pump Station	70,386	19%	81%
	Awamoko Renewals Pipe	5,105	30%	70%
	Awamoko Drinking Water Standards Upgrade Issues and Options	50,000	30%	70%
	Awamoko Drinking Water Standards Upgrade	2,111,428	30%	70%
Awamoko Total		**2,312,394**	**29%**	**71%**
Duntroon	Pipeline Renewals	603	30%	70%
	Duntroon Treatment Plant/Intake	3,093	30%	70%
	Duntroon Drinking Standard Compliance	11,785	30%	70%
	Duntroon Treatment Reticulation	204	30%	70%
	Duntroon Water New Capital	19,021	22%	78%
	Duntroon Treatment Drinking Water Standards Upgrade	112,591	30%	70%
Duntroon Total		**147,298**	**29%**	**71%**
Kauru Hill	District Hydraulic Analysis	1,018	100%	0%
	Waitaki Coastal Township Water Scheme	183	100%	0%
	Pipeline Renewals	8,012	30%	70%
	Intake Upgrade	115,750	24%	76%
	Kauru Hill Treated Reticulation	3,781	30%	70%
	Waitaki Coastal Headworks Zone	261	24%	76%
	Kauru Hill Intake & Pump	5,865	21%	79%
	Kauru Hill Main	22,389	24%	76%
	Kauru Hill Pressure Vessel	4,367	21%	79%
	Kauru Hill Reservoir Roof	386	22%	78%
	Kauru Hill Drinking Standard Compliance	9,520	30%	70%
	Kauru Hill Treatment Drinking Water Standards Upgrade	1,832	30%	70%
	Kauru Hill Water New Capital	1,809	30%	70%
	Kauru Hill Drinking Water Standards Upgrade Issues and Options	50,000	30%	70%
	Kauru Hill Drinking Water Standards Upgrade	2,111,428	30%	70%
Kauru Hill Total		**2,336,602**	**30%**	**70%**
Kurow	District Hydraulic Analysis	1,342	100%	0%
	Pipeline Renewals	55,737	30%	70%
	Kurow Drinking Standard Compliance	126,112	18%	82%
	Kurow Treated Reticulation	84,294	15%	85%
	Kurow Treatment Plant/Intake	76,492	18%	82%
	Kurow Water New Capital	115,585	30%	70%
	Water Asset Capital Works	8,000	30%	70%
	Kurow Main	7	12%	88%
	Kurow Other Renewals	11,780	12%	88%
	Kurow Pump	7,958	12%	88%
	Treatment Plant Upgrade	42,583	17%	83%
	Kurow Renew Main	63,434	13%	87%
	Kurow Ultraviolet	45,313	30%	70%
Kurow Total		**638,638**	**21%**	**79%**
Ohau	District Hydraulic Analysis	78	100%	0%

Contributing Area	Project Name	Capital Expenditure (nominal $s)	Proportion of Capital Cost proposed to be recovered through DCs	Proportion of Capital Cost proposed to be recovered through other sources
	Lake Ohau Drinking Standard Compliance	13,199	67%	33%
	Lake Ohau Treated Reticulation	888	67%	33%
	Ohau Water New Capital	10,353	67%	33%
	Ohau Intake	1,772	38%	62%
	Ohau Treatment Drinking Water Standards Upgrade	5,045	67%	33%
	Lake Ohau Drinking Water Standards Upgrade	1,500,000	10%	90%
Ohau Total		**1,531,335**	**11%**	**89%**
Lower Waitaki	Pipeline Renewals	11,638	30%	70%
	Lower Waitaki Drinking Standard Compliance	345,240	10%	90%
	Lower Waitaki Treated Reticulation	40,601	30%	70%
	Lower Waitaki Treatment Plant/Intake	4,560	11%	89%
	Lower Waitaki Water New Capital	26,354	30%	70%
	Lower Waitaki Capacity Upgrade	1,055,714	100%	0%
	Waitaki Coastal Headworks Zone	606	12%	88%
	Treatment Plant Upgrade	410,560	10%	90%
	Lower Waitaki Other Improvements	3,346	13%	87%
	Lower Waitaki Sand Filter	8,761	28%	72%
	Lower Waitaki Replace Sand	10,347	30%	70%
	Lower Waitaki Water Drinking Water Standards Upgrade	5,797	30%	70%
	Lower Waitaki Ultraviolet	45,313	30%	70%
Lower Waitaki Total		**1,968,838**	**60%**	**40%**
Bushy Creek	Pipeline Renewals	4,718	30%	70%
	Bushy Creek Consent	6,491	19%	81%
	Treatment Plant Upgrade	540	20%	80%
	Bushy Creek Drinking Water Standards Upgrade	1,583,571	30%	70%
Bushy Creek Total		**1,595,320**	**30%**	**70%**
Omarama	District Hydraulic Analysis	1,187	30%	70%
	Omarama Upgrade	181,987	30%	70%
	Omarama Drinking Standard Compliance	94,587	30%	70%
	Omarama Treated Reticulation	12,733	30%	70%
	Omarama Water New Capital	28,082	30%	70%
	Water Asset Capital Works	5,000	30%	70%
	Omarama Main	78,029	30%	70%
	Omarama Telemetry Alarm	11,704	30%	70%
	Omarama Main Renewal/Upgrade	32,781	30%	70%
	Omarama Reticulation Upgrade	13,603	30%	70%
	Treatment Plant Upgrade	20,053	30%	70%
	Omarama Main Extension to Prohibition Road	16,507	30%	70%
	Omarama Treatment Drinking Water Standards Upgrade	444,764	30%	70%
	Omarama Water Treated Reticulation Renewals	107,508	1%	99%
	Omarama Drinking Water Standards Upgrade	2,500,000	30%	70%
Omarama Total		**3,548,526**	**29%**	**71%**
Otematata	District Hydraulic Analysis	2,254	100%	0%
	Otematata Drinking Standard Compliance	1,059,578	34%	66%

Contributing Area	Project Name	Capital Expenditure (nominal $s)	Proportion of Capital Cost proposed to be recovered through DCs	Proportion of Capital Cost proposed to be recovered through other sources
	Otematata Renewals	48,409	30%	70%
	Otematata Treated Reticulation	24,884	30%	70%
	Otematata Water New Capital	55,824	18%	82%
	Water Asset Capital Works	10,000	18%	82%
	Otematata Water Main Renewals/Upgrades	5,757,921	20%	80%
	Otematata Consent	6,733	8%	92%
	Treatment Plant Upgrade	24,307	35%	65%
	Otematata Gallery Intake	18,040	9%	91%
	Otematata Treatment Drinking Water Standards Upgrade	513,980	18%	82%
	Otematata Ultraviolet	31,851	18%	82%
	Otematata Drinking Water Standards Upgrade Install Filters	1,000,000	30%	70%
Otematata Total		**8,553,781**	**23%**	**77%**
Stoneburn	Pipeline Renewals	1,681	30%	70%
	Stoneburn Treated Reticulation	7,825	30%	70%
	Stoneburn Water New Capital	28,367	40%	60%
	Waitaki Coastal Headworks Zone	236	29%	71%
	Stoneburn Pump	6,726	29%	71%
	Treatment Plant Upgrade	3,263	40%	60%
	Stoneburn Main	56,136	29%	71%
	Stoneburn Renewals Pump	2,177	30%	70%
	Stoneburn Treatment Drinking Water Standards Upgrade	3,257	40%	60%
	Stoneburn Drinking Water Standards Upgrade Issues and Options	50,000	30%	70%
	Stoneburn Drinking Water Standards Upgrade	2,068,000	30%	70%
Stoneburn Total		**2,227,667**	**30%**	**70%**
Tokarahi	District Hydraulic Analysis	3,162	100%	0%
	Waitaki Coastal Township Water Scheme	569	100%	0%
	Tokarahi Drinking Standard Compliance	481	36%	64%
	Tokarahi Pump	9,213	34%	66%
	Tokarahi Pump Stations	3,902	40%	60%
	Tokarahi Treated Reticulation	152,689	30%	70%
	Tokarahi Treatment Plant/Intake	17,345	30%	70%
	Tokarahi Water Pipeline Upgrade	25,134	40%	60%
	Tokarahi Water New Capital	5,029	24%	76%
	Waitaki Coastal Headworks Zone	811	33%	67%
	Tokarahi Header Tank	10,372	34%	66%
	Tokarahi Main & VSD's	38,029	33%	67%
	Treatment Plant Upgrade	989	40%	60%
	Tokarahi Pipe	410	24%	76%
	Tokarahi Renewals/Improvements	62,331	39%	61%
	Tokarahi Main	128,178	31%	69%
	Tokarahi Main Peaks/Conlans Road	28,829	35%	65%
	Tokarahi Main Smilies Rd	6,713	35%	65%
	Tokarahi Main Stage 2	35,769	35%	65%
	Tokarahi Drinking Water Standards Upgrade Issues and Options	50,000	30%	70%

Contributing Area	Project Name	Capital Expenditure (nominal $s)	Proportion of Capital Cost proposed to be recovered through DCs	Proportion of Capital Cost proposed to be recovered through other sources
	Tokarahi Drinking Water Standards Upgrade	3,102,000	30%	70%
Tokarahi Total		**3,681,955**	**30%**	**70%**
Windsor	Pipeline Renewals	1,154	30%	70%
	Windsor Water New Capital	5,016	8%	92%
	Waitaki Coastal Headworks Zone	233	20%	80%
	Windsor Pump	3,230	20%	80%
	Windsor Renewals Pump	6,450	21%	79%
	Windsor Drinking Water Standards Upgrade Issues and Options	50,000	30%	70%
	Windsor Drinking Water Standards Upgrade	2,111,428	30%	70%
Windsor Total		**2,177,511**	**30%**	**70%**
District		**77,010,334**	**29%**	**71%**

Table 9: Wastewater Supply – Schedule of Assets

Contributing Area	Project Name	Capital Expenditure (nominal $s)	Proportion of Capital Cost proposed to be recovered through DCs	Proportion of Capital Cost proposed to be recovered through other sources
Oamaru	Oamaru Wastewater Main Renewals/Upgrades	10,810,448	20%	80%
	Oamaru Sewerage New Capital	289,683	100%	0%
	Oamaru Septage Pond Capital Upgrades	67,478	100%	0%
	Oamaru Main	794,355	6%	94%
	Chelmer Street Sewer Main Renewal Capacity Improvement	333,181	12%	88%
	Humber Street Pump Station	236,362	10%	90%
	Kakanui Pump Station	95,660	24%	76%
	Oamaru Sewer Other Renewals	320,283	7%	93%
	Weston Sewer Connection	125,878	11%	89%
	Harbour Sewer Extension	121,628	11%	89%
	Wansbeck St Reticulation Extension	17,919	100%	0%
	Oamaru Orwell Stn Starters	102,973	10%	90%
	Kakanui Line Pond	37,826	24%	76%
	Oamaru / Weston Trunk	80,225	11%	89%
	Oamaru TY Duncan Bypass	71,465	10%	90%
	Oamaru Pump Station Starters	56,728	10%	90%
	Oamaru Orwell Stn Pumps	56,952	10%	90%
	Kakanui Treatment Plant	44,620	25%	75%
	Kakanui Sewer Renewals	38,198	9%	91%
	Oamaru Step Screen	32,471	10%	90%
	Oamaru Septage Pond Capital Upgrades New Capital	5,800	100%	0%
	Pipework Humber Bridge	27,648	11%	89%
	Y2K Scada Upgrade	26,648	11%	89%
	Oamaru Sewer Outfall	17,886	10%	90%
	Oamaru Gravity Reticulation	23,316	7%	93%
	Oamaru Consent	80,762	8%	92%
	Oamaru Renewals	21,380	8%	92%
	Oamaru Treatment Plant	5,238	10%	90%
	Kakanui Gravity Reticulation	620	9%	91%
	Oamaru Wastewater Treatment Plant Renewals/Upgrades	406,800	0%	100%
	Oamaru Wastewater Treatment Plant	4,592,139	13%	87%
	Oamaru Sewer Beach Rd Pump Station Pump #1	33,877	0%	100%
	Oamaru Pump Stations	2,870	0%	100%
	Beach Road Wastewater Pump Station	392,730	11%	89%
	Risk Management Plan Oamaru Wastewater	116,295	0%	100%
	Oamaru Sewer Gravity Reticulation Renewals	466,624	0%	100%
	Oamaru Wastewater New Monitoring Equipment	200,000	0%	100%
	Oamaru Sewer Pressure Reticulation Renewals	35,594	0%	100%
	Oamaru Sewer Main Replacement	109,504	0%	100%
	Oamaru Treatment Plant Renewals	646,762	0%	100%
	Oamaru Sewer TY Duncan Rd	27,977	0%	100%
	Oamaru Sewer Pump Stations Renewals	391,768	0%	100%
	Orwell St Wastewater Pump Station	1,341,381	13%	87%

Contributing Area	Project Name	Capital Expenditure (nominal $s)	Proportion of Capital Cost proposed to be recovered through DCs	Proportion of Capital Cost proposed to be recovered through other sources
	Satellite Wastewater Pump Stations x 4	132,000	11%	89%
	Regina Lane Wastewater Pump Station	441,533	11%	89%
	Wastewater Overflow Mitigation Oamaru	5,998,034	0%	100%
	Oamaru Wastewater Pumpstation Renewals/Upgrades	1,131,045	0%	100%
	Oamaru Treatment Plant Resource Consent Application	105,571	0%	100%
	Sewer Capital Works	15,000	0%	100%
	Sewer System Renewals	387,400	0%	100%
Oamaru Total		**30,918,535**	**12%**	**88%**
Kurow	Kurow Sewer Consent	92,267	14%	86%
	Kurow Sewerage New Capital	9,754	28%	72%
	Kurow Sewerage Ponds	3,398	21%	79%
Kurow Total		**105,419**	**15%**	**85%**
Moeraki	Moeraki Sewerage New Capital	1,531,286	18%	82%
	Moeraki Consent	119,531	18%	82%
	Moeraki Renewals Pumps at Pump Stations	14,262	15%	85%
	Moeraki Gravity Reticulation	8,337	17%	83%
	Moeraki Renewals	7,127	16%	84%
	Moeraki Treatment Plant Wetlands	3,375	22%	78%
	Moeraki Pump Stations	500	17%	83%
Moeraki Total		**1,684,418**	**18%**	**82%**
Omarama	Omamara Sewerage Treatment Plant upgrade disposal field	1,134,638	16%	84%
	Omarama Consent	161,507	12%	88%
	Omarama Renewals	9,584	24%	76%
	Omarama Gravity Reticulation	15,805	10%	90%
	Omamara Pumps (x2)	5,142	24%	76%
	Omamara Sewerage New Capital	1,778	14%	86%
Omarama Total		**1,328,454**	**16%**	**84%**
Otematata	Otematata Treatment Upgrade	417,676	23%	77%
	Otematata Consent	224,571	11%	89%
	Otematata Treatment Plant	17,197	10%	90%
Otematata Total		**659,444**	**19%**	**81%**
Palmerston	Palmerston Treatment Plant Upgrade	537,278	13%	87%
	Palmerston Treatment Plant	292,209	14%	86%
	Palmerston Pump Stations	276,152	16%	84%
	Palmerston Consent	143,739	8%	92%
	Palmerston Aerator	40,881	10%	90%
	Palmerston Sewerage New Capital	6,409	7%	93%
	Palmerston Gravity Reticulation	4,385	7%	93%
	Palmerston Renewals	3,334	8%	92%
	Palmerston Horse Range Pump	900	10%	90%
Palmerston Total		**1,305,289**	**13%**	**87%**
District		**36,001,559**	**13%**	**87%**

Table 10 : Roading – Schedule of Assets

RCAM Work Category	Capital Expenditure (nominal $)	Sum of Proportion of Capital Cost proposed to be recovered through DCs	Sum of Proportion of Capital Cost proposed to be recovered through other sources
Amenity/Safety Maintenance	39,410,176	1.5%	98.5%
Bridge Renewals	15,430,630	9.3%	90.7%
Carriageway Lighting	1,827,146	5.7%	94.3%
Cycleway Construction	10,309,073	5.5%	94.5%
Maintenance Chip Seals and Thin Asphalt Surfacing	43,644,126	1.4%	98.6%
Major Drainage Control	13,645,566	0.3%	99.7%
Minor Safety Projects	1,012,284	3.9%	96.1%
New Roads and Bridges (roads)	1,159,865	4.7%	95.3%
Pavement Maintenance	14,203,443	0.6%	99.4%
Pavement Smoothing	33,414,614	2.4%	97.6%
Professional Services	1,192,653	0.7%	99.3%
Road Reconstruction	7,415,560	3.5%	96.5%
Seal Extension	2,159,636	6.4%	93.6%
Strategy Studies	15,509	7.3%	92.7%
Traffic Services	3,473,132	1.7%	98.3%
Grand Total	**188,313,413**	**2.5%**	**97.5%**

DETAILED SUPPORTING DOCUMENT

PART 2 DETAILED MODEL ELEMENTS

9. DETAILED MODEL ELEMENTS

The more detailed aspects of the development contribution calculations are identified below. These are relevant to water, wastewater and roading.

- Growth related capital costs;
- Interest Costs;
- Inflation;
- Land Use Differentials;

9.1 Growth related capital expenditure

The capital expenditure can be apportioned into three cost drivers. These being:

- Growth,
- Renewal,
- Level of Service, including statutory requirements.

The growth apportionment is the only cost driver used for assessing development contributions. The growth costs reflect the cost that council has or will incur because of growth. The growth-related costs are solely those required to meet the additional demand created by the effects (including cumulative effects) of all development.

Projects that were/are completed solely to address the demands of, and/or for the benefits of development, are considered to be 100% growth. Projects that were/are solely to replace existing assets are considered to be 0% growth. Projects that benefit both the existing community and the future community are apportioned using the following formula:

The growth portion of growth related projects has been assessed using the following methods:

1. Benefits Approach - using asset design life to approximate the growth percentage.
2. Vehicle activity and roading projects characteristics

Projects that benefit both the existing community and the future community are apportioned using the following benefits formula:

$$Growth\ \% = (Demand\ at\ capacity - Demand\ at\ construction) / Demand\ at\ capacity$$

The number of household equivalent units (HEU) at capacity is compared to the number of household equivalent units at construction.:

This approach provides a systematic allocation of the growth component and a very good approximation of the growth related capital expenditure. For a longer design life, the percentage attributable to growth is higher, however the growth costs are consumed over a greater number of years. The converse of this can be said for applying a shorter design life, namely a low growth percentage, with the growth cost being consumed over a shorter period.

Roading

For Roading projects, the existing and future vehicle activity is used instead of household equivalent units to apportion the benefit to the future community.

The vehicle activity is quantified using the vehicle characteristics described in a 2001 review of the Cost Allocation Model. The Cost Allocation Model supports the Road Users Charges used by Central Government. The vehicle characteristics are:

1. Power Vehicle (PV): measures the drivers imposed costs resulting from the need to provide resources for motorists themselves. These include signs, road markings and landscaping;

2. Equivalent Standard Axles (ESA): measures vehicle road wear costs resulting from the fourth power of the axle weights of vehicles;
3. Gross Vehicle Weight (GVW): measures vehicle strength imposed road costs, such as bridge strength;
4. Passenger Car Equivalent (PCE): measures the vehicles space related road costs, such as the additional road space (i.e. construction of additional traffic lanes) required to alleviate traffic congestion;
5. Residual: not all transport expenditure is directly caused by a vehicle characteristic so in some cases a portion is allocated to Residual, e.g. environmental damage.

Each vehicle characteristics has a different growth rate. The typical vehicle activity and the property growth for each land use category are detailed in the Land Use Differentials section.

The driver for each type of Roading project is split across the above vehicle characteristics. This method therefore considers both the project driver and the rate of growth in vehicle characteristics to calculate the overall growth portion.

The residual portion of traffic related projects are not included in the growth portion. These costs are non-traffic related therefore they are not linked to additional demand, and therefore not passed onto the future community.

The assumed design life and resulting growth % for WDC's Roading programme are summarised in the following table.

Table 11 : Roading Growth Portion

RCAM Work Category	Capacity Design	Growth Portion
Amenity/Safety Maintenance	20	3.3%
Bridge Renewals	75	22.4%
Carriageway Lighting	20	12.1%
Cycleway Construction	10	6.8%
Maintenance Chip Seals and Thin Asphalt Surfacing	10	2.6%
Major Drainage Control	20	1.2%
Minor Safety Projects	10	4.8%
New Roads and Bridges (roads)	20	8.6%
Pavement Maintenance	10	1.4%
Pavement Smoothing	20	5.7%
Professional Services	20	2.9%
Road Reconstruction	20	8.2%
Traffic Services	10	4.6%

9.2 Interest

Council intends to recover the interest costs associated with debt funding any growth related capital expenditure using development contributions. The weighted average cost of capital (WACC) methodology is used to estimate the interest considerations.

The method uses a net present value approach to improve intergenerational equity and therefore improve on the overarching principles of dealing with both present and future communities.

The growth cost (expenditure + interest) is determined using the following formula:

Growth Cost (including interest) = Growth Capital Expenditure + WACC

Where WACC= Interest Factor x Debt Funding Ratio x Growth Related Capital Expenditure

Debt Funding Ratio - Not all projects will require debt funding. This ratio is an estimate of the percentage that will require debt funding. The debt funding analysis

considers whether the development contributions account is either in surplus or deficit depending on existing balances, growth costs incurred and development contributions income received. The analysis considers the existing debt, future growth costs (10 years) and the anticipated future development contributions income (10 years). The weighted average of the debt percentages over 10 years gives the debt funding ratio.

The interest factor is based on the net present value of future interest payments made over the life of the loan. The net present value is applicable because the development contribution model converts all costs into real (current day) dollars.

9.3 Inflation

Inflation is applied to all historical growth related capital costs. This converts all historical costs into real (today's) dollars, namely 1 July 2021.

Inflation is applied using the following formula and Statistics NZ indices:

Escalation = 0.5 x (L-L')/L' + 0.5 x (C-C')/C'

Where:

L = Labour Cost Index: Private Sector: Industry Group – Construction: All Salary and Wage Rates. Published by Statistics New Zealand: (Series ref LC1Q: SA49P1)
C = Producers Price Index: Inputs: Industry Group – Construction: Published by Statistics New Zealand: (Series ref PP1Q: SNE)
' = represents the base year index.

9.4 Land use differentials

Land use differentials enable all development and subdivision types (residential and non-residential) to be considered in the calculations. Non-residential activities can be described using a common unit of demand, which in this case is the household equivalent unit. Land use differentials are used to convert non-residential activities into household equivalent units.

The detailed methodologies and formulas used to develop the above land use differentials are explained in the following section for water supply, wastewater and roading.

Additional land use categories

In the update of the 2021 policy, the following land uses were included in the policy:

- Residential Unit in a multi-unit residential development of two or more units on a single site, of less than 80m^2 per unit:
    - 1, 2, and 3+ bedroom unit

The purpose of including these is to simplify the administration of the policy. These differentials reflect the lower demand created by smaller, multi-unit residential developments.

Table 12 : Additional land use categories

Land Use Category	Household Equivalent Units per Measure of Size Shown		
	Water Supply	Wastewater	Roading
Multi-unit residential development			
1 bedroom unit	0.5 HEU per unit	0.5 HEU per unit	0.5 HEU per unit
2 bedroom unit	0.75 HEU per unit	0.75 HEU per unit	0.75 HEU per unit
3 bedroom unit +	1.0 HEU per unit	1.0 HEU per unit	1.0 HEU per unit

Water Supply Land Use Differential

The water supply differentials for each land use category are designed to assess the growth impact on the water supply network for both the type (land use) and the size of a development.

The methodology calculates the household equivalent units for a typical property and then converts this to a differential for each land use.

The equation used to calculate the water supply differential consists of two components. The working charge and the network charge.

Equation 1: Water Supply Differential

Water Supply Differential = Working Charge + Network Charge

The working charge is to mitigate the effects on the water network from additional consumption. The objective here is to recognise the marginal cost of the additional development in terms of water consumption i.e. it recognises the type of land use and the size of that development.

The network charge is a fixed charge by land use category. This component of the charge is based on the additional capacity required for fire-fighting.

The combination of the working and network charge are summarised in the following equation.

Equation 2 : Water Supply Differential Formula

WS = [WCF x WCIF] + [NCF x NCIF]

The derivation of the separate factors, are described in the following section.

Working Charge Factor (WCF)

The working charge factor is the demand of each land use relative to a residential property.

A sample of metered households and businesses were analysed over a two year period to calculate the estimated average daily usage for each land use. The total usage over a period of time was converted to a daily usage per square metre of gross floor area (GFA). The median property size was used to compare properties within each land use. A peak day factor of 2 was applied.

The estimated working charge factors using this method are shown in the following table. The figures represent the usage relative to that of a residential dwelling.

Table 13: Water Supply Estimated Working Charge Factor

Land Use	Average Daily Use ($L/m^2/day$	Median Gross Floor Area	Peak Daily Usage (L/day)	WCF of a Typical Property
Residential	7.6	$120m^2$	1,820	1.0
Commercial	2.6	$260m^2$	1,310	0.7
Industrial	2.2	$220m^2$	910	0.5
Accommodation	4.6	$530m^2$	4,790	2.8

Network Charge Factor (NCF)

The network charge is to cover the provision for fire flows. Fire flows demand greater infrastructure capacity than that needed for consumption (working charge).

The Network Charge Factor has been calculated considering the requirements of the New Zealand Fire Service Fire Fighting Water Supplies Code of Practice. The basis for this cost calculation is described below.

Fire risk classifications, including relative proportions of that fire risk have been applied to each land use category. The calculation of NCF considers two separate components of a networks fire-fighting capabilities:

1. Pipes and Hydrants
2. Storage

The portion of the seven General Fire Code Rating and Mixes was allocated for each land use category.

Table 14 : Fire Codes by Land Use

Land Use Category	General Fire Code Rating and Mix					
	FW1	FW2	FW3	FW4	FW5	FW6
Residential	0%	90%	10%	0%	0%	0%
Commercial	0%	0%	48%	52%	0%	0%
Industrial	0%	0%	48%	52%	0%	0%
Accommodation	0%	0%	29%	71%	0%	0%

The pipe cost calculation is shown in the following table. The pipe costs assume Code FW2 is a 100mm pipe and that each step up in risk classification is an increase in pipe capacity of 100%.

Table 15: Pipe Cost Calculation

Fire Risk Classification	Water Flow (L/s)	Pipe Diameter (mm)	Pipe Diameter Required (mm)	Unit Cost per Metre ($/m)
FW2	25	103	100	$84
FW3	50	146	150	$140
FW4	100	206	200	$210
FW5	150	252	250	$250
FW6	200	**291**	300	$300

The hydrant costs are calculated based on the figures extracted from a recent valuation. The hydrant distances are based on the requirements of the New Zealand Fire Service Fire Fighting Water Supplies Code of Practice.

Table 16 : Hydrant Cost Calculation

Fire Risk Classification	Max. no. of Fire Hydrants to Provide Flow	Hydrant Cost ($)	Unit Cost per Metre ($/m)	Pipe & Hydrant Cost ($/m)
FW2	2	$1,000	$4.94	$88.94
FW3	3	$1,500	$8.33	$148.33
FW4	4	$2,000	$9.88	$219.88
FW5	6	$2,500	$12.35	$262.35
FW6	8	$3,000	$14.81	$314.81

The pipe and hydrant costs are converted to a combined differential for each land use using Table 14.

Table 17: Pipe and Hydrant Cost Differential

Land Use Category	Relative Pipe + Hydrant Costs ($/m)	Pipe + Hydrant Differentials
Residential	$95	1.0
Commercial	$186	2.0
Industrial	$186	2.0
Accommodation	$199	2.1

The storage cost calculations are based on the volume required for each of the classification categories as per the New Zealand Fire Service Fire Fighting Water Supplies Code of Practice.

Table 18: Storage Calculation

Fire Risk Classification	Volume (m^3)	Cost ($/$m^3$)	Storage Cost ($)	Storage Differential
FW2	45	750	$33,750	1.0
FW3	180	500	$90,000	2.7
FW4	540	350	$189,000	5.6
FW5	1,080	300	$324,000	9.6
FW6	2,160	290	$626,400	18.6

These are converted to a storage differential for each land use using Table 14.

Table 19 : Storage Differentials

Land Use Category	Relative Storage Differentials	Storage Differentials
Residential	1.17	1.00
Commercial	4.21	3.61
Industrial	4.21	3.61
Accommodation	4.75	4.07

The NCF calculation assumes 50:50 allocation of the pipe/hydrant costs and the storage costs. The combination of the two components and the final Network Charge Factors is shown in the following table.

Table 20 : Final Network Charge Factors by Land Use

Land Use Category	Pipe + Hydrant Differentials	Storage Differentials	Network Charge Factor (NCF)
Residential	1.00	1.00	1.00
Commercial	1.96	3.61	2.92
Industrial	1.96	3.61	2.92
Accommodation	2.10	4.07	3.25

Impact Factors

The working charge and network charge are combined using an impact factor for each component. These recognise the relative infrastructure costs of the working charge (consumption) and the network charge components of the water supply.

The impact factors are based on the valuation of the four main components of a water supply network; treatment, storage, reticulation, and pumping.

The table below summarises the calculation of the Impact Factors. The Working Charge % represents the portion of each asset component that is driven by water consumption.

Table 21 : Impact Factor Calculations

Asset Component	Percentage of Network Value	Working Charge % (WCIF)	Network Charge % (NCIF)
Reticulation	32%	30%	70%
Treatment	20%	100%	0%
Pumping	5%	30%	70%
Storage	44%	75%	25%
TOTAL	**100%**	**0.6**	**0.4**

The combination of the working and network charge factors, and the impact factors provides the number of household equivalent units for a typical property.

Equation 3 : Water Supply HEU Formula

HEU's = [WCF x WCIF] + [NCF x NCIF]

Table 22 : Total HEU of Typical Property by Land Use

Land Use Category	WCF	WCIF	NCF	NCIF	HEU's of Typical Property
Residential	1.0	60%	1.0	40%	1.00
Commercial	0.72	60%	2.92	40%	1.60
Industrial	0.50	60%	2.92	40%	1.47
Accommodation	2.60	60%	3.25	40%	2.86

The above figures can be converted to land use differentials based on the typical GFA. Note the water supply land use differentials are separated into the two components as only the WCF component is dependent on the size of the development. The differentials enable a property of any size to be assessed for water supply contributions.

Table 23 : Water Supply Differentials

Land Use Category	Typical GFA	Working Charge	Network Charge
Residential	120 m^2	1.0 HEU per dwelling	
Commercial	260 m^2	0.17 HEU / 100m^2	1.17 HEU per property
Industrial	220 m^2	0.14 HEU / 100m^2	1.17 HEU per property
Accommodation	530 m^2	0.29 HEU / 100m^2	1.30 HEU per property

Part 3 shows how the water supply differentials can be used to assess the total household equivalent units for a non-residential subdivision or development.

Wastewater Land Use Differential

The wastewater differential does not have the same difficulties as the water supply differential. The network charge component of the water differential equation can be removed, as wastewater assets do not have the requirement for additional facilities such as fire-fighting.

The working charge factor of a typical property represents the demand on the wastewater network relative to a residential dwelling. These are based on the water supply demand with allowance for consumed water and irrigation water not entering the wastewater network.

Table 24: Wastewater Estimated Working Charge Factor

Land Use	WS Peak Daily Usage (L/day)	Median Gross Floor Area	Irrigation/ consumption factor	WW Peak Daily Usage (L/day)	WCF of a Typical Property
Residential	1,820	120 m^2	35%	1,820	1.0
Commercial	1,310	260 m^2	5%	1,310	1.1
Industrial	910	220 m^2	5%	910	0.7
Accommodation	4,790	530 m^2	35%	4,790	2.6

The above figures are converted to land use differentials based on the typical GFA.

Table 25 : Water Supply Differentials

Land Use Category	WCF	Typical GFA	Differential
Residential	1.0	120 m^2	1.0 HEU per dwelling
Commercial	1.1	260 m^2	0.43 HEU per 100m^2
Industrial	0.7	220 m^2	0.7 HEU per 100m^2
Accommodation	2.6	530 m^2	2.6 HEU per 100m^2

Roading Land Use Differential

The model is based on trip generation and therefore asset utilisation by each land use category. The land use categories considered for roading development contributions are:

- Residential
- Rural Residential
- Commercial
- Industrial
- Accommodation
- Primary Industry
- Primary Industry – Dairy

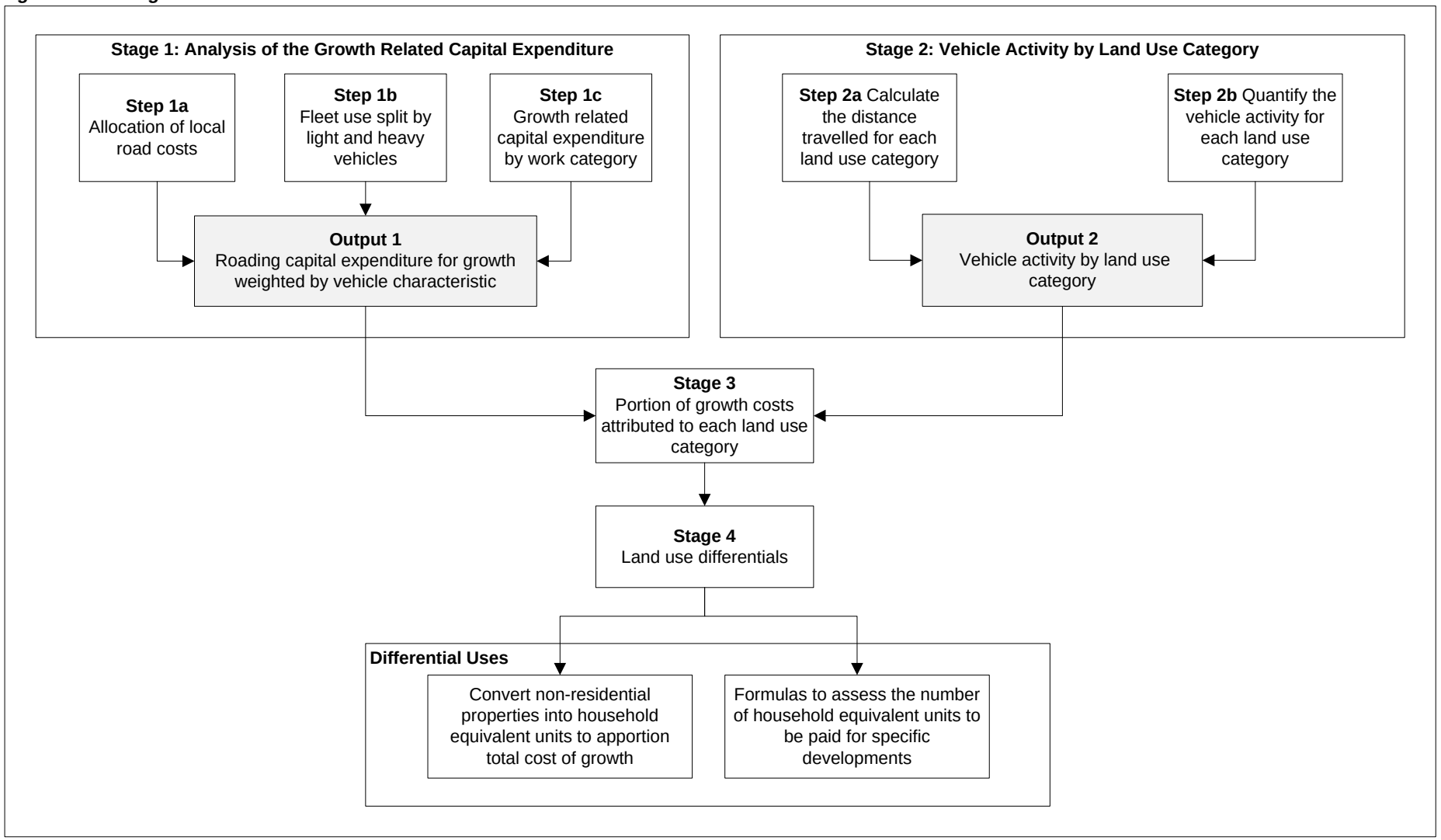
Note the Primary Industry land use category is used solely to calculate the credit applicable to a land use conversion from pastoral farming to a dairy farm.

The model uses the findings of a study carried out by a Ministry of Transport working group in 2001, referenced as the Review of the Cost Allocation Model (RCAM).

The model was prepared with assistance from Abley Transportation Engineers Ltd.

The methodology and the use of the differentials are shown in the diagram over leaf. A detailed explanation of the steps within each stage of the process is provided in the following section.

Figure 3: Roading Differential Calculation Process



Stage 1: Analysis of the Growth Related Capital Costs

The aim of the first stage is to identify and quantify the drivers of the growth related costs (capital expenditure + interest) for roading.

Step 1a – Allocation of Local Road Costs

All projects within the roading capital programme can be allocated to one of the 18 RCAM work categories shown below. Each category of work is then split across specific drivers identified by RCAM, namely vehicle characteristics. The vehicle characteristics define the key drivers requiring roading capital expenditure, they are described below:

1. Power Vehicle (PV): measures the drivers imposed costs resulting from the need to provide resources for motorists themselves. These include signs, road markings and landscaping;
2. Equivalent Standard Axles (ESA): measures vehicle road wear costs resulting from the fourth power of the axle weights of vehicles;
3. Gross Vehicle Weight (GVW): measures vehicle strength imposed road costs, such as bridge strength;
4. Passenger Car Equivalent (PCE): measures the vehicles space related road costs, such as the additional road space (i.e. construction of additional traffic lanes) required to alleviate traffic congestion;
5. Residual: not all road expenditure is directly caused by a vehicle characteristic so in some cases a portion is allocated to Residual, e.g. environmental damage.

A portion of each work category can be attributed to one, some or all of the vehicle characteristics. RCAM has defined the specific proportions in each work category related to each vehicle characteristic. These are shown below.

Table 26 Allocation of Local Road Costs

RCAM Work Category	Allocation of Local Road Costs					
	PV.km	ESA.km	GVW.km	PCE.km	Residual	TOTAL
Amenity/Safety Maintenance	37%	0%	0%	0%	63%	100%
Bridge Renewals	51%	3%	27%	0%	19%	100%
Carriageway Lighting	0%	0%	0%	0%	100%	100%
Cycleway Construction	0%	0%	0%	0%	100%	100%
Maintenance Chip Seals and Thin Asphalt Surfacing	2%	31%	28%	0%	39%	100%
Major Drainage Control	0%	20%	0%	0%	80%	100%
Minor Safety Projects	70%	0%	0%	30%	0%	100%
New Roads and Bridges (roads)	15%	15%	0%	70%	0%	100%
Pavement Maintenance	11%	22%	2%	0%	65%	100%
Pavement Smoothing	10%	80%	0%	0%	10%	100%
Professional Services	12%	20%	7%	0%	61%	100%
Road Reconstruction	76%	24%	0%	0%	0%	100%
Seal Extension	28%	72%	0%	0%	0%	100%
Strategy Studies	36%	43%	1%	16%	4%	100%
Traffic Services	63%	0%	0%	0%	37%	100%

Step 1b – Fleet Use Split by Light and Heavy Vehicles

RCAM also considers the type of vehicle for each vehicle characteristic. The fleet can be split into light and heavy vehicles, heavy being any vehicle over 3.5 tonnes. These percentages are shown below.

Table 27: Split of Fleet by Light and Heavy Vehicles

Vehicle Characteristics	PV.km		ESA.km		GVW.km		PCE.km	
Light/Heavy	**Light**	**Heavy**	**Light**	**Heavy**	**Light**	**Heavy**	**Light**	**Heavy**
Fleet Use	95.0%	5.0%	7.8%	92.2%	46.0%	54.0%	80.7%	19.3%

Step 1c –Growth Related Capital Costs by Work Category

All growth related projects are attributed to a RCAM work category. The growth costs consumed is used as a weighting to define the portion attributed to each RCAM work category. The 10 year total of the growth costs for each of the work categories is shown below. All non growth costs and third party funding (FAR – Financial Assistance Rat) have been excluded from the calculation.

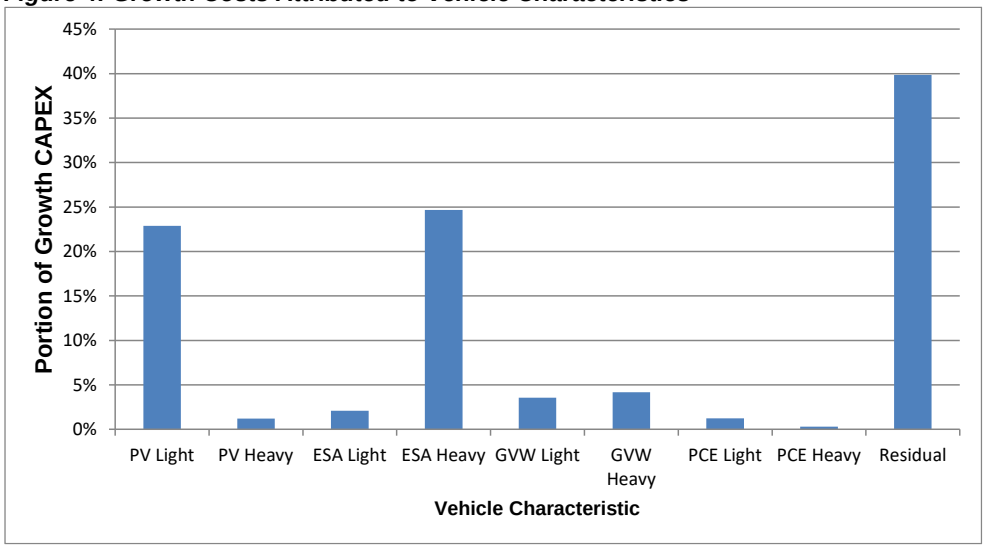
Table 28*: *Growth Related Capital Costs by Work Category

RCAM Work Category	Portion of Growth Costs by Work Category
Amenity/Safety Maintenance	14.3%
Bridge Renewals	10.9%
Carriageway Lighting	3.3%
Cycleway Construction	12.9%
Maintenance Chip Seals and Thin Asphalt Surfacing	16.9%
Major Drainage Control	1.4%
Minor Safety Projects	1.2%
New Roads and Bridges (roads)	1.7%
Pavement Maintenance	2.9%
Pavement Smoothing	18.9%
Professional Services	0.3%
Road Reconstruction	9.5%
Seal Extension	3.5%
Strategy Studies	0.0%
Traffic Services	2.1%
TOTAL	**100%**

Output 1 - Roading Capital Costs for Growth Weighted by Vehicle Characteristic

The above three tables can be combined to apportion the growth costs to each vehicle characteristic. The percentage for each work category is then summed to provide a total for each vehicle characteristic. This total represents the portion of the growth costs related to each vehicle characteristic. The result of combining steps 1a, 1b and 1c is shown in the following graph.

Figure 4: Growth Costs Attributed to Vehicle Characteristics



For example 22.9% of the future growth related expenditure is caused by the impact from the increase in light powered vehicles.

Stage 2: Vehicle Activity by Land Use Category

The aim of the second stage is to quantify the vehicle activity generated by each land use.

Step 2a – Calculate the Distance Travelled for each Land Use Category

Using daily vehicle trip generation rates and an average vehicle trip length, the total vehicle kilometres travelled by each land use can be calculated. The average trip length and daily trip generation rates were provided by Abley Transportation Engineers. The commercial, industrial and accommodation trip rates have been amended to better reflect the local roading network. These amendments are based on recent special assessments of non-residential developments and the trip rates used in the QLDC development contributions policy. The property growth in each land use category and the median sized property were determined using the growth projections, WDC Rates Database and the Commercial Accommodation Monitor.

Table 29: Estimation of Total Distance Travelled by Land Use

Land use	Unit of Measure	WDC 10 Year Property Growth	Daily Vehicle Trip Generation (trips /day/unit)	Typical Property	Trips per Day of a Typical Property	Average Trip Length (km)	Total Daily Distance by Land Use (km)
Residential	Dwelling	721	5.5 trips per dwelling.	1 dwelling	5.5	8.7	34,520
Accommodation	Unit	1	3.8 trips per unit.	11 units	52.8	13.6	387
Commercial	GFA m^2	28	0.22 trips per m^2 GFA.	260m^2	130.0	8.7	12,826
Industrial	GFA m^2	17	0.07 trips per m^2 GFA.	220m^2	39.8	8.7	2,276
Primary Industry	Hectares	1	0.4 farm trips + 4.9 trips.	400ha	5.3	43.5	231
Primary Industry - Dairy	Hectares	33	1.3 farm trips + 0.1 trips.	200ha	1.4	43.5	2,070
Rural Residential	Dwelling	30	4.9 trips per dwelling.	1 dwelling	4.9	13.6	2,029

Step 2b – Quantify the Vehicle Activity for each Land Use Category

The weighting factors used to convert the daily distance travelled into vehicle characteristics are shown below. The split of the fleet into light and heavy vehicles for each land use is also shown. These factors were provided by Abley Transportation Engineers.

Table 30: Weighting Factors and Fleet Use Portions

Land use	Fleet Use		ESA factor per trip		GVW factor per trip (t)	
	% Light	% Heavy	Light	Heavy	Light	Heavy
Residential	98.8%	1.2%	0.00	1.0	1.4	25
Accommodation	99.0%	1.0%	0.02	1.0	1.4	25
Commercial	99.0%	1.0%	0.02	1.0	1.4	25
Industrial	89.3%	10.7%	0.02	1.0	1.4	25
Primary Industry	92.5%	7.5%	0.02	1.0	1.6	25
Primary Industry - Dairy	6.5%	93.5%	0.02	1.6	1.6	34
Rural Residential	98.8%	1.2%	0.00	1.0	1.4	25

The formulas used to convert the daily distance travelled into vehicle activity are shown below:

PV = annual kilometres x fleet use %

ESA = annual kilometres x ESA factor x fleet use %

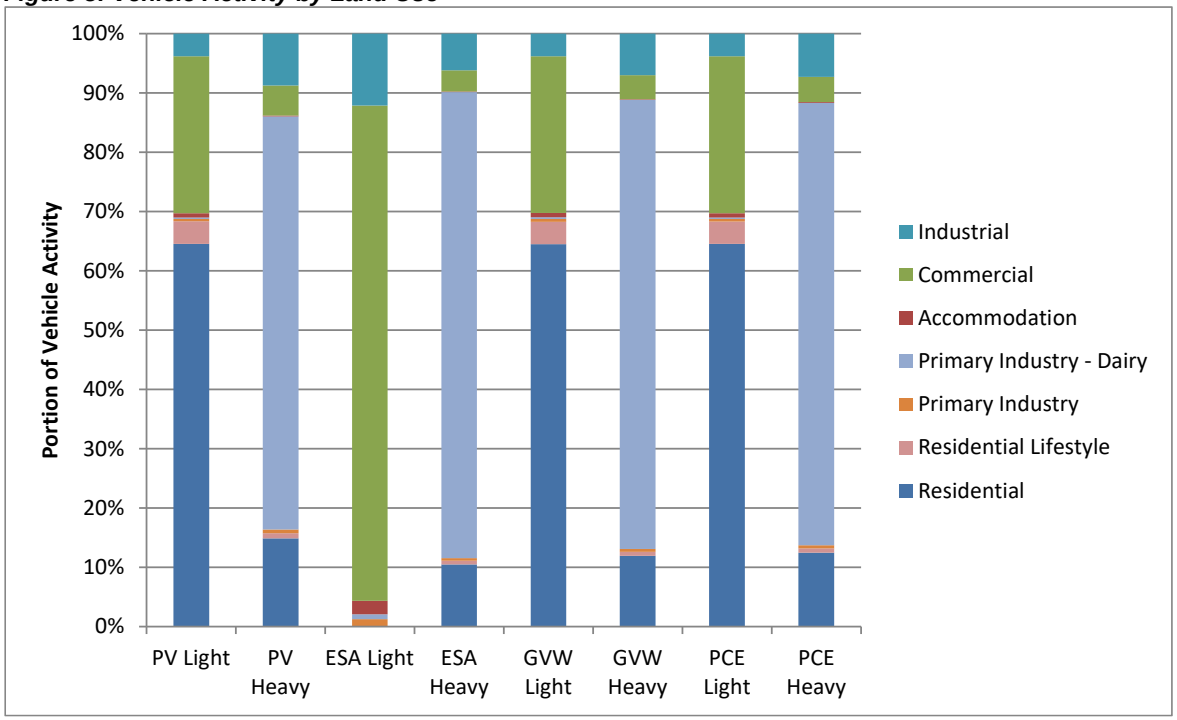
GVW = annual kilometres x GVW factor x fleet use %

PCE = 7/8 x PV.km + 1/8 x GVW.km

Output 2 - Vehicle Activity by Land Use

The combination of Table 29 and Table 30 is shown in the following graph. The percentages represent the portion of each vehicle characteristic that can be attributed to each land use. For example, 35.5% of the light powered vehicle activity is created by the residential sector.

Figure 5: Vehicle Activity by Land Use



Stage 3: Cost of Growth by Land Use

The two outputs can be combined to provide the portion of growth costs that should be funded from each land use category. The growth costs allocated to each land use category are a function of both the number of new properties and the relative vehicle impact created by a typical property. An exception to this are the residual costs, which are apportioned based on the portion of property growth in each land use category.

The results are shown in the following pie chart graphs. The property growth by land use category is also shown to highlight the impact of vehicle activity considerations. For example the growth in commercial properties is less than 3% of the total property growth however the vehicle activity created by commercial growth is 14% of the growth costs. This is due to the high trip generation rates and heavy vehicles activity generated by a commercial development.

Figure 6: Growth Costs to be Funded by each Land Use Category

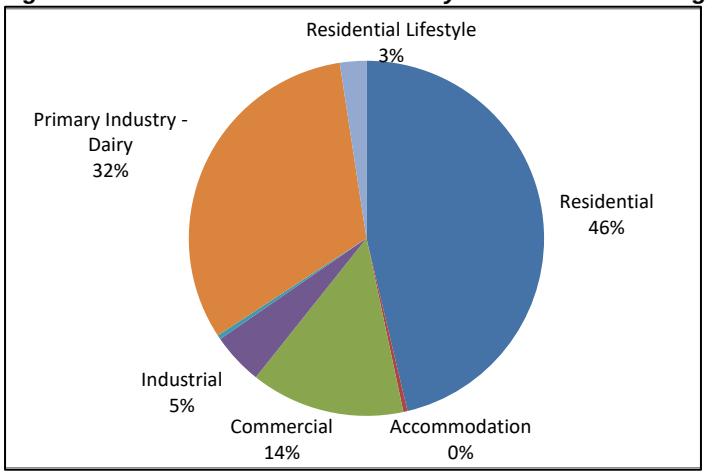
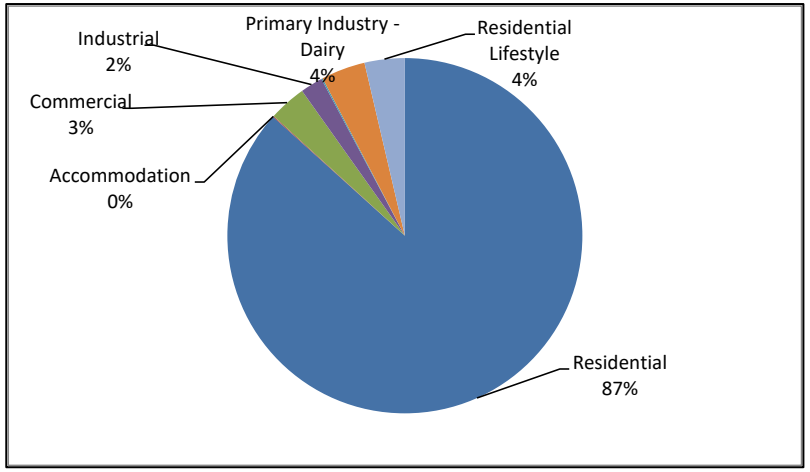


Figure 7: Total 10 Year Property Growth by Land Use Category



Stage 4: Land Use Differentials

The cost of growth for each land use category is shared over all future properties within each land use based on the projected 10 year growth. The non-residential land use categories are normalised relative to residential, based on a residential dwelling being equal to 1 HEU. The normalised figures represent the impact of a typical property in household equivalent units for each land use. This can then be converted to a land use differential based on the median sized property.

Table 31: Land Use Roading Differentials

Land Use	Portion of Growth Costs	Property Growth (2021 – 2031)	Cost of Growth per Property	HEU's of a Typical Property	Median Size Property	Differential per Unit of Measure	Unit of Measure
Residential	35.5%	721	0.05%	1.00	1 dwelling	1	per dwelling
Accommodation	0.3%	1	0.43%	8.76	11 accomm units	0.80	per accomm unit
Commercial	10.8%	28	0.38%	7.72	260m^2	2.97	per 100m^2
Industrial	3.6%	17	0.21%	4.31	220m^2	1.96	per 100m^2
Primary Industry	0.3%	1	0.30%	6.07	400ha	1.52	per 100 Ha
Primary Industry - Dairy	24.4%	33	0.73%	14.84	200ha	7.42	per 100 Ha
Rural Residential	1.8%	30	0.06%	1.23	1 dwelling	1.23	per dwelling

Note: The differential for Primary Industry - Dairy is 5.90 per 100Ha, this being the difference between Primary Industry and Primary Industry - Dairy (7.42-1.52 = 5.90).

PART 3 ASSESSING DEVELOPMENTS

10. ASSESSING DEVELOPMENTS

The primary objective of this section is to show how development contributions are assessed for a residential or non-residential development of any type and size.

10.1 Assessment

The two key tables to assess developments are Table 1 and Table 2 in the policy. These show:

1. Table 1 the standard development contribution ($/HEU) for each activity and area, and
2. Table 2 – the land use differentials for each activity and land use.

The formula to calculate the development contribution is:

Equation 4: Calculating development contributions

Development Contribution = Differential x Size x Standard Contribution

To quantify the size of each development, the unit of measure may be different for each land use category or type of development. The unit of measure includes; dwelling, lot, family flat, gross floor area, accommodation unit, campground site/cabin, retirement care bed or unit (villa, house), family flat and hectares. These units of measure are based on variables that are easily defined at the time of development.

10.2 Examples

Example calculations are shown overleaf. These demonstrate how the above equation can be used to calculate development contributions for any development. They also show how water supply contributions are calculated for the restricted water schemes.

Example 1. A residential subdivision - Creation of a new residential section in Kurow.

Activity	Unit of Measure	Differential Equation	No. of HEU's	Remission	DC / HEU	Development Contribution
Water HEU's	per dwelling	= 1 x 1 =	1.00	0.0	$2,095	$2,095
Wastewater HEU's	per dwelling	= 1 x 1 =	1.00	0.0	$360	$360
Roading HEU's	per dwelling	= 1 x 1 =	1.00	0.0	$965	$965
Total Development Contributions						**$3,420**

Example 2. A commercial development - Creation of a commercial building in Oamaru with a gross floor area of 200m^2.

Activity	Unit of Measure	Differential Equation	No. of HEU's	Remission	DC / HEU	Development Contribution
Water HEU's	per 100m^2 GFA	= 0.17 x 200m^2 / 100m^2 + 1.17 / property =	1.51	0.0	$5,235	$7,905
Wastewater HEU's	per 100m^2 GFA	= 0.43 x 200m^2 / 100m^2 =	0.86	0.0	$2,405	$2,068
Roading HEU's	per 100m^2 GFA	= 2.97 x 200m^2 / 100m^2 =	5.94	0.0	$965	$5,732
Total Development Contributions						**$15,705**

Example 3. Increased volume of water to an existing consumer - A property in Stoneburn requires an additional 10 points of water per day. A point of water in Stoneburn equals 1,000L or 1.0m^3.

Activity	Unit of Measure	No. of Points	No. of m^3	Remission	DC / m^3	Development Contribution
Water HEU's	per point of water	10	10	0.0	$6,930	$69,300
Wastewater HEU's	n/a			0.0		n/a
Roading HEU's	n/a			0.0		n/a
Total Development Contributions						**$69,300**

Example 4. A dairy farm development - An existing pastoral piece of land in Tokarahi is being converted to a 150 hectare dairy farm. The farm requires 15 points of water per day. A point of water in Tokarahi equals 1,800L or 1.8m^3.

Activity	Unit of Measure	No. of Points	No. of m^3	Remission	DC / m^3	Development Contribution
Water HEU's	per point of water	15	27	0.0	$3,125	$84,375
Wastewater HEU's	n/a			0.0		n/a
		Differential Equation	**No. of HEU's**		**DC / HEU**	**Development Contribution**
Roading HEU's	per 100 Hectares	= 5.90 x 150 Ha / 100 Ha =	8.85	0.0	$965	$8,540
Total Development Contributions						**$46,806**

PART 4 DETAILED DISCLOSURE TABLES

The following tables show the capital expenditure, growth related capital expenditure, growth costs consumed, growth projections and standard contribution of each contributing area. The tables demonstrate the nature and level of expected capital expenditure required by Council and the portion that is attributable to growth. The tables also show the debt funding ration for each contributing area.

11. DETAILED DISCLOSURE TABLES

11.1 Water Supply

Table 32: Restricted Water Supply Schemes

Water Supply Contributing Area	Historical (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of Cubic Metres of Water Apportioning Growth Cost 2021-2031	Development Contribution Per Cubic Metre of Water ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
WATER SUPPLY - Awamoko								**DFR = 81%**
Reticulation	6,656	1,997	0	0	0	729	46	$16
Pump Stations	142,073	19,275	0	0	0	9,060	46	$195
Intakes	0	0	0	0	0	0	46	$0
Storage	0	0	0	0	0	0	46	$0
Consents	0	0	50,000	0	50,000	0	46	$0
Conveyance	0	0	0	0	0	0	46	$0
Treatment Facilities	34,789	4,176	2,050,000	615,000	1,435,000	160,254	46	$3,448
Forward Design	0	0	70,000	0	70,000	0	46	$0
Flow Metering	0	0	0	0	0	0	46	$0
Asset Management Systems	2,083	2,083	0	0	0	0	46	$0
New Scheme	0	0	0	0	0	0	46	$0
Renewals/Upgrades	84,290	18,280	0	0	0	5,478	46	$118
Unspecified Expenditure	4,156	756	0	0	0	116	46	$3
Total - Awamoko	**274,048**	**46,567**	**2,170,000**	**615,000**	**1,555,000**	**175,637**	**46**	**$3,779**
WATER SUPPLY - Duntroon								**DFR = 77%**
Reticulation	267	83	0	0	0	43	90	$0
Pump Stations	0	0	0	0	0	0	90	$0
Intakes	3,565	1,070	0	0	0	122	90	$1
Storage	0	0	0	0	0	0	90	$0
Consents	0	0	0	0	0	0	90	$0
Conveyance	0	0	0	0	0	0	90	$0
Treatment Facilities	159,503	46,005	0	0	0	24,208	90	$269

Water Supply Contributing Area	Historical (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of Cubic Metres of Water Apportioning Growth Cost 2021-2031	Development Contribution Per Cubic Metre of Water ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
Forward Design	0	0	70,000	0	70,000	0	90	$0
Flow Metering	0	0	0	0	0	0	90	$0
Asset Management Systems	516	516	0	0	0	0	90	$0
New Scheme	0	0	0	0	0	0	90	$0
Renewals/Upgrades	8,948	1,922	0	0	0	81	90	$1
Unspecified Expenditure	0	0	0	0	0	0	90	$0
Total - Duntroon	**172,800**	**49,596**	**70,000**	**0**	**70,000**	**24,454**	**90**	**$271**
WATER SUPPLY – Kauru Hill								**DFR = 80%**
Reticulation	35,497	8,624	0	0	0	3,897	35	$113
Pump Stations	5,378	1,278	0	0	0	595	35	$17
Intakes	143,495	34,959	0	0	0	14,089	35	$407
Storage	7,378	1,583	0	0	0	767	35	$22
Consents	0	0	0	0	0	0	35	$0
Conveyance	0	0	0	0	0	0	35	$0
Treatment Facilities	20,897	4,579	2,050,000	615,000	1,435,000	156,293	35	$4,519
Forward Design	0	0	70,000	0	70,000	0	35	$0
Flow Metering	0	0	0	0	0	0	35	$0
Asset Management Systems	7,922	2,017	0	0	0	589	35	$17
New Scheme	0	0	0	0	0	0	35	$0
Renewals/Upgrades	62,828	3,334	0	0	0	1,291	35	$37
Unspecified Expenditure	354	84	0	0	0	39	35	$1
Total – Kauru Hill	**283,749**	**56,457**	**2,120,000**	**615,000**	**1,505,000**	**177,561**	**35**	**$5,134**
WATER SUPPLY - Lower Waitaki								**DFR = 86%**
Reticulation	46,346	13,904	0	0	0	5,212	95	$55
Pump Stations	0	0	0	0	0	0	95	$0
Intakes	5,288	587	1,000,000	1,000,000	0	212,589	95	$2,246
Storage	0	0	0	0	0	0	95	$0
Consents	0	0	0	0	0	0	95	$0
Conveyance	0	0	0	0	0	0	95	$0
Treatment Facilities	1,087,190	123,938	0	0	0	23,858	95	$252
Forward Design	0	0	70,000	0	70,000	0	95	$0
Flow Metering	0	0	0	0	0	0	95	$0
Asset Management Systems	3,697	3,697	0	0	0	0	95	$0
New Scheme	0	0	0	0	0	0	95	$0
Renewals/Upgrades	117,535	4,305	0	0	0	1,630	95	$17

Water Supply Contributing Area	Historical (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of Cubic Metres of Water Apportioning Growth Cost 2021-2031	Development Contribution Per Cubic Metre of Water ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
Unspecified Expenditure	5,913	733	0	0	0	118	95	$1
Total - Lower Waitaki	**1,265,968**	**147,164**	**1,070,000**	**1,000,000**	**70,000**	**243,407**	**95**	**$2,571**
WATER SUPPLY – Lake Ohau								**DFR = 86%**
Reticulation	4,548	680	0	0	0	137	7	$18
Pump Stations	0	0	0	0	0	0	7	$0
Intakes	2,696	1,035	0	0	0	97	7	$13
Storage	0	0	0	0	0	0	7	$0
Consents	4,451	1,940	0	0	0	0	7	$0
Conveyance	0	0	0	0	0	0	7	$0
Treatment Facilities	26,452	17,616	1,500,000	450,000	1,050,000	225,247	7	$30,247
Forward Design	0	0	70,000	0	70,000	0	7	$0
Flow Metering	0	0	0	0	0	0	7	$0
Asset Management Systems	6,148	4,129	0	0	0	962	7	$129
New Scheme	0	0	0	0	0	0	7	$0
Renewals/Upgrades	0	0	0	0	0	0	7	$0
Unspecified Expenditure	0	0	0	0	0	0	7	$0
Total - Lake Ohau	**44,295**	**25,401**	**1,570,000**	**450,000**	**1,120,000**	**226,443**	**7**	**$30,408**
WATER SUPPLY – Bushy Creek								**DFR = 85%**
Reticulation	0	0	0	0	0	0	14	$0
Pump Stations	0	0	0	0	0	0	14	$0
Intakes	0	0	0	0	0	0	14	$0
Storage	0	0	0	0	0	0	14	$0
Consents	19,474	1,744	0	0	0	793	14	$57
Conveyance	0	0	0	0	0	0	14	$0
Treatment Facilities	655	131	1,500,000	450,000	1,050,000	97,221	14	$6,965
Forward Design	0	0	70,000	0	70,000	0	14	$0
Flow Metering	0	0	0	0	0	0	14	$0
Asset Management Systems	718	718	0	0	0	0	14	$0
New Scheme	0	0	0	0	0	0	14	$0
Renewals/Upgrades	5,719	1,716	0	0	0	780	14	$56
Unspecified Expenditure	0	0	0	0	0	0	14	$0
Total - Bushy Creek	**26,565**	**4,308**	**1,570,000**	**450,000**	**1,120,000**	**98,794**	**14**	**$7,078**
WATER SUPPLY - Stoneburn								**DFR = 85%**
Reticulation	82,322	24,044	0	0	0	8,148	26	$310
Pump Stations	9,205	2,639	0	0	0	952	26	$36

Water Supply Contributing Area	Historical (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of Cubic Metres of Water Apportioning Growth Cost 2021-2031	Development Contribution Per Cubic Metre of Water ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
Intakes	29,102	0	0	0	0	0	26	$0
Storage	0	0	0	0	0	0	26	$0
Consents	0	0	0	0	0	0	26	$0
Conveyance	0	0	0	0	0	0	26	$0
Treatment Facilities	68,013	15,420	2,050,000	615,000	1,435,000	172,615	26	$6,562
Forward Design	0	0	70,000	0	70,000	0	26	$0
Flow Metering	0	0	0	0	0	0	26	$0
Asset Management Systems	1,438	1,438	0	0	0	0	26	$0
New Scheme	0	0	0	0	0	0	26	$0
Renewals/Upgrades	37,326	1,417	0	0	0	470	26	$18
Unspecified Expenditure	319	93	0	0	0	33	26	$1
Total - Stoneburn	**227,725**	**45,051**	**2,120,000**	**615,000**	**1,505,000**	**182,219**	**26**	**$6,928**
WATER SUPPLY - Tokarahi								**DFR = 77%**
Reticulation	451,376	142,463	0	0	0	53,286	110	$486
Pump Stations	21,810	6,013	0	0	0	2,338	110	$21
Intakes	27,108	5,937	0	0	0	1,309	110	$12
Storage	13,910	4,711	0	0	0	2,184	110	$20
Consents	0	0	50,000	0	50,000	0	110	$0
Conveyance	0	0	0	0	0	0	110	$0
Treatment Facilities	6,106	1,555	3,050,000	915,000	2,135,000	255,333	110	$2,328
Forward Design	0	0	115,000	0	115,000	0	110	$0
Flow Metering	0	0	0	0	0	0	110	$0
Asset Management Systems	36,845	8,542	0	0	0	1,916	110	$17
New Scheme	0	0	0	0	0	0	110	$0
Renewals/Upgrades	327,482	62,161	0	0	0	26,105	110	$238
Unspecified Expenditure	1,099	365	0	0	0	171	110	$2
Total - Tokarahi	**885,737**	**231,746**	**3,215,000**	**915,000**	**2,300,000**	**342,641**	**110**	**$3,125**
WATER SUPPLY - Windsor								**DFR = 79%**
Reticulation	3,280	0	0	0	0	0	45	$0
Pump Stations	7,935	1,554	0	0	0	355	45	$8
Intakes	8,240	0	0	0	0	0	45	$0
Storage	0	0	0	0	0	0	45	$0
Consents	0	0	0	0	0	0	45	$0
Conveyance	0	0	0	0	0	0	45	$0
Treatment Facilities	1,824	456	2,050,000	615,000	1,435,000	185,779	45	$4,106

Water Supply Contributing Area	Historical (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of Cubic Metres of Water Apportioning Growth Cost 2021-2031	Development Contribution Per Cubic Metre of Water ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
Forward Design	0	0	70,000	0	70,000	0	45	$0
Flow Metering	0	0	0	0	0	0	45	$0
Asset Management Systems	1,423	1,423	0	0	0	0	45	$0
New Scheme	0	0	0	0	0	0	45	$0
Renewals/Upgrades	43,427	2,070	0	0	0	1,048	45	$23
Unspecified Expenditure	316	64	0	0	0	25	45	$1
Total - Windsor	**66,444**	**5,567**	**2,120,000**	**615,000**	**1,505,000**	**187,207**	**45**	**$4,138**

Table 33: On-demand Water Supply Schemes

Water Supply Contributing Area	Historical (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of HEUs Apportioning Growth Cost 2021-2031	Development Contribution Per Household Equivalent Unit ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
WATER SUPPLY - Kurow								**DFR = 0%**
Reticulation	97,397	14,974	0	0	0	8,528	28	$302
Pump Stations	10,891	1,305	0	0	0	506	28	$18
Intakes	88,333	16,235	0	0	0	7,458	28	$264
Storage	0	0	0	0	0	0	28	$0
Consents	0	0	50,000	0	50,000	0	28	$0
Conveyance	0	0	0	0	0	0	28	$0
Treatment Facilities	460,758	85,995	0	0	0	29,173	28	$1,033
Forward Design	0	0	70,000	0	70,000	0	28	$0
Flow Metering	0	0	0	0	0	0	28	$0
Asset Management Systems	12,769	1,976	0	0	0	597	28	$21
New Scheme	0	0	0	0	0	0	28	$0
Renewals/Upgrades	399,424	32,302	0	0	0	12,166	28	$431
Unspecified Expenditure	39,551	2,455	0	0	0	695	28	$25
Total - Kurow	**1,109,123**	**155,242**	**120,000**	**0**	**120,000**	**59,121**	**28**	**$2,094**
WATER SUPPLY - Omarama								**DFR = 86%**
Reticulation	141,195	41,203	0	0	0	8,759	31	$280
Pump Stations	0	0	0	0	0	0	31	$0
Intakes	0	0	0	0	0	0	31	$0
Storage	0	0	0	0	0	0	31	$0
Consents	0	0	0	0	0	0	31	$0

Water Supply Contributing Area	Historical (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of HEUs Apportioning Growth Cost 2021-2031	Development Contribution Per Household Equivalent Unit ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
Conveyance	0	0	0	0	0	0	31	$0
Treatment Facilities	770,539	199,797	2,500,000	750,000	1,750,000	267,706	31	$8,562
Forward Design	0	0	70,000	0	70,000	0	31	$0
Flow Metering	0	0	0	0	0	0	31	$0
Asset Management Systems	19,733	5,920	0	0	0	1,254	31	$40
New Scheme	0	0	0	0	0	0	31	$0
Renewals/Upgrades	388,476	116,543	0	0	0	24,311	31	$778
Unspecified Expenditure	5,114	1,534	0	0	0	353	31	$11
Total - Omarama	**1,325,057**	**364,997**	**2,570,000**	**750,000**	**1,820,000**	**302,384**	**31**	**$9,671**
WATER SUPPLY - Otematata								**DFR = 70%**
Reticulation	37,153	8,708	4,500,000	900,000	3,600,000	48,773	42	$1,152
Pump Stations	0	0	0	0	0	0	42	$0
Intakes	26,859	2,285	0	0	0	954	42	$23
Storage	0	0	0	0	0	0	42	$0
Consents	66,576	809	0	0	0	326	42	$8
Conveyance	0	0	0	0	0	0	42	$0
Treatment Facilities	1,974,743	557,512	1,000,000	300,000	700,000	265,073	42	$6,261
Forward Design	0	0	70,000	0	70,000	0	42	$0
Flow Metering	0	0	0	0	0	0	42	$0
Asset Management Systems	19,303	3,407	0	0	0	942	42	$22
New Scheme	0	0	0	0	0	0	42	$0
Renewals/Upgrades	249,510	17,841	0	0	0	7,111	42	$168
Unspecified Expenditure	10,228	1,888	0	0	0	887	42	$21
Total - Otematata	**2,384,373**	**592,450**	**5,570,000**	**1,200,000**	**4,370,000**	**324,066**	**42**	**$7,655**

Table 34: Amalgamated Water Supply Schemes

Water Supply Contributing Area	Historical (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of HEUs Apportioning Growth Cost 2021-2031	Development Contribution Per Household Equivalent Unit/Point ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
WATER SUPPLY - Greater Oamaru								**DFR = 71%**
Reticulation	12,909,772	2,937,176	18,600,000	2,000,000	16,600,000	1,045,038	709	$1,473
Pump Stations	967,627	122,809	2,000,000	0	2,000,000	37,887	709	$53
Intakes	266,579	20,139	0	0	0	7,563	709	$11
Storage	975,616	725,150	20,500,000	2,100,000	18,400,000	609,944	709	$860
Consents	0	0	0	0	0	0	709	$0
Conveyance	0	0	0	0	0	0	709	$0
Treatment Facilities	26,782,969	5,909,609	8,575,000	0	8,575,000	1,809,351	709	$2,551
Forward Design	0	0	200,000	200,000	0	47,822	709	$67
Flow Metering	0	0	0	0	0	0	709	$0
Asset Management Systems	112,625	18,551	0	0	0	722	709	$1
New Scheme	0	0	0	0	0	0	709	$0
Renewals/Upgrades	14,353,530	391,794	0	0	0	140,710	709	$198
Unspecified Expenditure	1,533,759	62,967	0	0	0	15,743	709	$22
Total - Greater Oamaru	**57,902,478**	**10,188,196**	**49,875,000**	**4,300,000**	**45,575,000**	**3,714,779**	**709**	**$5,236**
WATER SUPPLY - Waihemo								**DFR = 75%**
Reticulation	1,242,177	264,802	8,800,000	0	8,800,000	63,766	64	$996
Pump Stations	6,966	1,423	0	0	0	343	64	$5
Intakes	0	0	0	0	0	0	64	$0
Storage	4,329	0	50,000	0	50,000	0	64	$0
Consents	36,863	4,861	0	0	0	1,848	64	$29
Conveyance	0	0	0	0	0	0	64	$0
Treatment Facilities	2,426,218	601,911	0	0	0	145,052	64	$2,266
Forward Design	0	0	70,000	0	70,000	0	64	$0
Flow Metering	0	0	0	0	0	0	64	$0
Asset Management Systems	47,953	7,077	0	0	0	2,790	64	$44
New Scheme	0	0	0	0	0	0	64	$0
Renewals/Upgrades	150,818	15,113	0	0	0	4,559	64	$71
Unspecified Expenditure	63,434	3,274	0	0	0	1,198	64	$19
Total - Waihemo	**3,978,758**	**898,463**	**8,920,000**	**0**	**8,920,000**	**219,557**	**64**	**$3,430**
District Totals	**69,947,121**	**12,811,205**	**83,080,000**	**11,525,000**	**71,555,000**	**6,278,272**		

11.2 Wastewater

Table 35: Wastewater Schemes

Wastewater Contributing Area	Historical costs (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No of HEUs Apportioning Growth Cost 2021-2031	Development Contribution Per Household Equivalent ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
WASTEWATER – Greater Oamaru								**DFR = 34%**
Reticulation	2,031,432	222,702	9,500,000	1,900,000	7,600,000	555,677	327	$1,702
Pump Stations	6,184,836	126,827	6,500,000	0	6,500,000	44,900	327	$138
Intakes	0	0	0	0	0	0	327	$0
Storage	61,638	15,087	0	0	0	4,419	327	$14
Consents	123,001	9,475	0	0	0	483	327	$1
Conveyance	0	0	0	0	0	0	327	$0
Treatment Facilities	9,299,931	408,898	700,000	0	700,000	175,106	327	$536
Forward Design	0	0	0	0	0	0	327	$0
Flow Metering	45,033	4,732	0	0	0	1,415	327	$4
Asset Management Systems	0	0	100,000	0	100,000	0	327	$0
New Scheme	0	0	0	0	0	0	327	$0
Renewals/Upgrades	626,184	8,364	0	0	0	3,617	327	$11
Unspecified Expenditure	0	0	0	0	0	0	327	$0
Total - Greater Oamaru	**18,372,054**	**796,085**	**16,800,000**	**1,900,000**	**14,900,000**	**785,617**	**327**	**$2,406**
WASTEWATER - Kurow								**DFR = 0%**
Reticulation	0	0	0	0	0	0	24	$0
Pump Stations	0	0	0	0	0	0	24	$0
Intakes	0	0	0	0	0	0	24	$0
Storage	5,742	1,195	0	0	0	442	24	$19
Consents	116,746	16,117	0	0	0	7,283	24	$305
Conveyance	0	0	0	0	0	0	24	$0
Treatment Facilities	10,713	3,021	600,000	0	600,000	877	24	$37
Forward Design	0	0	0	0	0	0	24	$0
Flow Metering	0	0	0	0	0	0	24	$0
Asset Management Systems	0	0	0	0	0	0	24	$0
New Scheme	0	0	0	0	0	0	24	$0
Renewals/Upgrades	0	0	0	0	0	0	24	$0
Unspecified Expenditure	0	0	35,000	0	35,000	0	24	$0
Total - Kurow	**133,201**	**20,333**	**635,000**	**0**	**635,000**	**8,602**	**24**	**$360**

Wastewater Contributing Area	Historical costs (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No of HEUs Apportioning Growth Cost 2021-2031	Development Contribution Per Household Equivalent ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
WASTEWATER - Moeraki								**DFR = 79%**
Reticulation	25,530	1,618	500,000	0	500,000	970	18	$54
Pump Stations	89,003	97	0	0	0	58	18	$3
Intakes	0	0	0	0	0	0	18	$0
Storage	0	0	0	0	0	0	18	$0
Consents	56,055	10,254	0	0	0	3,796	18	$211
Conveyance	87,918	15,743	0	0	0	8,629	18	$481
Treatment Facilities	1,910,157	288,598	0	0	0	126,210	18	$7,030
Forward Design	0	0	0	0	0	0	18	$0
Flow Metering	0	0	0	0	0	0	18	$0
Asset Management Systems	0	0	0	0	0	0	18	$0
New Scheme	2,290,989	717,995	0	0	0	0	18	$0
Renewals/Upgrades	26,237	3,991	0	0	0	2,195	18	$122
Unspecified Expenditure	0	0	70,000	0	70,000	0	18	$0
Total - Moeraki	**4,485,889**	**1,038,296**	**570,000**	**0**	**570,000**	**141,857**	**18**	**$7,902**
WASTEWATER - Omarama								**DFR = 62%**
Reticulation	23,811	3,359	0	0	0	1,004	17	$60
Pump Stations	27,513	1,710	0	0	0	592	17	$35
Intakes	0	0	0	0	0	0	17	$0
Storage	0	0	0	0	0	0	17	$0
Consents	150,815	19,967	0	0	0	8,089	17	$480
Conveyance	0	0	0	0	0	0	17	$0
Treatment Facilities	1,182,635	190,746	0	0	0	85,236	17	$5,054
Forward Design	0	0	0	0	0	0	17	$0
Flow Metering	0	0	0	0	0	0	17	$0
Asset Management Systems	82,783	9,688	0	0	0	1,240	17	$74
New Scheme	0	0	0	0	0	0	17	$0
Renewals/Upgrades	0	0	0	0	0	0	17	$0
Unspecified Expenditure	0	0	285,000	0	285,000	0	17	$0
Total - Omarama	**1,467,557**	**225,470**	**285,000**	**0**	**285,000**	**96,160**	**17**	**$5,702**
WASTEWATER - Otematata								**DFR = 0%**
Reticulation	0	0	0	0	0	0	20	$0
Pump Stations	0	0	0	0	0	0	20	$0

Wastewater Contributing Area	Historical costs (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No of HEUs Apportioning Growth Cost 2021-2031	Development Contribution Per Household Equivalent ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
Intakes	0	0	0	0	0	0	20	$0
Storage	0	0	0	0	0	0	20	$0
Consents	110,413	12,979	0	0	0	1,284	20	$64
Conveyance	0	0	0	0	0	0	20	$0
Treatment Facilities	816,776	159,774	0	0	0	20,506	20	$1,015
Forward Design	0	0	0	0	0	0	20	$0
Flow Metering	0	0	0	0	0	0	20	$0
Asset Management Systems	0	0	0	0	0	0	20	$0
New Scheme	0	0	0	0	0	0	20	$0
Renewals/Upgrades	0	0	0	0	0	0	20	$0
Unspecified Expenditure	0	0	35,000	0	35,000	0	20	$0
Total - Otematata	**927,188**	**172,753**	**35,000**	**0**	**35,000**	**21,790**	**20**	**$1,079**
WASTEWATER - Palmerston								**DFR = 47%**
Reticulation	0	0	0	0	0	0	23	$0
Pump Stations	467,667	52,020	0	0	0	13,343	23	$581
Intakes	0	0	0	0	0	0	23	$0
Storage	51,042	5,526	0	0	0	1,998	23	$87
Consents	192,531	14,924	0	0	0	4,427	23	$193
Conveyance	0	0	0	0	0	0	23	$0
Treatment Facilities	967,863	125,779	300,000	0	300,000	41,172	23	$1,793
Forward Design	0	0	0	0	0	0	23	$0
Flow Metering	0	0	0	0	0	0	23	$0
Asset Management Systems	0	0	0	0	0	0	23	$0
New Scheme	0	0	0	0	0	0	23	$0
Renewals/Upgrades	26,894	678	900,000	0	900,000	294	23	$13
Unspecified Expenditure	48,568	1,623	470,000	0	470,000	0	23	$0
Total - Palmerston	**1,754,566**	**200,550**	**1,670,000**	**0**	**1,670,000**	**61,233**	**23**	**$2,667**
District Total	**27,140,456**	**2,453,486**	**19,995,000**	**1,900,000**	**18,095,000**	**1,115,260**		

11.3 Roading

Table 36: Roading network

Roading	Historical (2021/22 $)		2021 – 2031 LTP (2021/22 $)			TOTAL Growth Cost (Capacity) Consumed 2021-2031	Weighted Average No. of HEUs Apportioning Growth Cost 2021-2031	Development Contribution Per Household Equivalent Unit/Point ($)
	Total Capital Expenditure	Growth Related Capital Expenditure	Total Capital Expenditure	Growth Related Capital Expenditure	Capital Expenditure Funded by Other Sources			
ROADING – District-Wide								**DFR = 40%**
Amenity/Safety Maintenance	3,850,209	105,516	13,910,991	429,522	13,481,469	199,956	1,451	$138
Bridge Renewals	1,929,424	378,495	4,427,834	956,707	3,471,127	151,823	1,451	$105
Carriageway Lighting	1,054,157	122,555	0	0	0	46,695	1,451	$32
Cycleway Construction	8,234,665	508,167	2,260,554	273,467	1,987,087	180,658	1,451	$124
Maintenance Chip Seals	20,779,583	616,354	7,586,412	195,279	7,391,133	235,771	1,451	$162
Major Drainage Control	6,322,713	45,423	2,164,640	14,135	2,150,505	20,185	1,451	$14
Minor Safety Projects	802,398	61,560	0	0	0	16,987	1,451	$12
New Roads and Bridges	843,944	72,522	0	0	0	23,091	1,451	$16
Pavement Maintenance	6,493,876	79,154	2,946,569	39,813	2,906,756	41,047	1,451	$28
Pavement Smoothing	7,672,745	389,646	7,461,994	424,073	7,037,920	263,710	1,451	$182
Minor Safety Projects	664,763	0	0	0	0	0	1,451	$0
Professional Services	462,823	5,373	424,685	6,776	417,908	4,575	1,451	$3
Road Reconstruction	3,856,012	302,127	0	0	0	133,401	1,451	$92
Seal Extension	1,834,616	123,941	540,849	36,766	504,083	49,441	1,451	$34
Strategy Studies	18,891	1,383	0	0	0	556	1,451	$0
Traffic Services	936,615	27,580	1,331,466	40,276	1,291,190	29,016	1,451	$20
District-wide	**65,757,434**	**2,839,794**	**43,055,992**	**2,416,814**	**40,639,179**	**1,396,910**	**1,451**	**$963**